**UPDATES**

**MANUAL UPDATES:** The table below is included to identify any course descriptions that may have changed since the last time you may have looked at the manual.

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<td>MDR 905</td>
<td>Psychiatry Emergency Service</td>
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<td>MDR 828</td>
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<td></td>
<td>MDR 811, 886, and 806</td>
<td>Dermatology, Pediatric Dermatology, and Wound Healing</td>
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# TABLE OF COURSES

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### RMC

| MDR 807     | Advanced Gross Anatomy | 2/4 | None | 6 | RMSB |

### Cell Biology & Anatomy

| MDR 811     | Dermatology            | 2   | ALL CORES | 2-3 | JMH, UHT |
| MDR 886     | Pediatric Dermatology (also listed in Pediatrics) | 2 | None, PED preferred | 1 | JMH |
| MDR 806     | Wound Healing (also listed in Surgery) | 2 | None, MED & PED preferred | 1 | UMH, JMH |

### Emergency Medicine

| MDR 812     | Emergency Medicine Clerkship | REQ | 4 | IM | 16-18 | JMH |
| MDR 1037    | Emergency Medicine Boot Camp – Transition to Residency | 2 | ALL CORES | 15 | UMMSM / JMH |
| MDR 1036    | Point of Care Ultrasound Elective | 2/4 | ALL CORES | 1-2 | JMH |

### RMC

| MDR 1027    | RMC Venous Vascular Disease | 2/4 | None | 2 | RMC |

### Family Medicine

| MDR 816     | Family Medicine in the Florida Keys | 2/4 | FM | 1 | Community |
| MDR 817     | Family Medicine Preceptorship | 2 | FM | 2 | Community |
| MDR 819     | Family Medicine Sub-I | 4 | ALL CORES | 2 | JMH |

### RMC

### Human Genetics

| MDR 890     | Genetics and Metabolic Diseases | 2/4 | None | 2 | Mailman, SCCC, JMH, UM clinics |

### Medical Education / Interdisciplinary

<p>| MDR 949     | Caring for the Community: Free Clinics Elective | 2** | None | 40 | SJB / UMMSM |
| MDR 837     | Hospitals, Health Care Services, and Access: An Interdisciplinary Inquiry | 2** | None | 8 | Law School / UMMSM |</p>
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**Orthopedics**

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**Otolaryngology**

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<td>Pediatric Cardiology</td>
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<td>Pediatric Endocrinology</td>
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<td>Pediatric Mobile Clinic</td>
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<td>Pediatric Pulmonary</td>
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<td>Poison Center Toxicology</td>
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**RMC**

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**Physical Medicine & Rehabilitation**

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<td>Brain Injury Neurorehab</td>
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<td>MDR 900</td>
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**Psychiatry**

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<td>MIA VAMC Military Related Mental Health &amp; General Psychiatry</td>
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<td>Consultation-Liaison Psychiatry</td>
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<td>Psychiatry Emergency Service – ON HOLD NOVEMBER 2017</td>
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<td>Addiction Psychiatry Elective @ Wellington Retreat</td>
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**Public Health**

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<td>Nuclear Medicine</td>
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<td>Mt. Sinai Diagnostic Radiology</td>
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<td>IM, SURG (RMC) or RADIOLOGY (Miami)</td>
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**Radiation Oncology**

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**RMC**

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**Surgery**

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<td>General Surgery El Sub-I</td>
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**RMC**

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### Urology

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<td>Female Pelvic Medicine and Surgery</td>
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### MISCELLANEOUS

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### CORE CLERKSHIPS (Refer to Syllabi)

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<tr>
<td>MDR 764</td>
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<tr>
<td>MDR 765</td>
<td>Community and Public Health Practicum</td>
<td>CORE</td>
<td>2</td>
<td>None</td>
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</tr>
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</table>

** - does not fall into the usual two week block on the calendar (see description)

### Sub-internships in Medicine

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Credits</th>
<th>Core Class</th>
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<tr>
<td>MDR 819</td>
<td>Family Medicine Sub-I</td>
<td>4</td>
<td>ALL CORES</td>
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<td>MDR 847</td>
<td>JMH Medicine Sub-I</td>
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<td>MDR 958</td>
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<td>Maternal Fetal Medicine Sub-I</td>
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<td>MDR 892</td>
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<td>ALL CORES</td>
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<td>JFK Medicine Sub-I</td>
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<td>ALL CORES</td>
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</table>

### Sub-Internships in Surgery

| MDR 852 | Neurosurgery Sub-I | 4 | ALL CORES (Neurology) | 4 | JMH |
| MDR 856 | Gynecologic Oncology Sub-I | 4 | ALL CORES | 2 | JMH, SCCC |
| MDR 863 | Orthopedic Trauma Sub-I | 4 | ALL CORES | 1-2 | JMH |
| MDR 875 | Otolaryngology Sub-I | 4 | ALL CORES | 2 | JMH |
| MDR 917 | Burn Unit Sub-I | 4 | ALL CORES | 2 | JMH |
| MDR 919 | Cardiothoracic Surgery Sub-I | 4 | ALL CORES | 2 | JMH |
| MDR 920 | General Surgery E I Sub-I | 4 | ALL CORES | 2 | JMH, UHT, SCCC |
| MDR 921 | General Surgery E II Sub-I | 4 | ALL CORES | 2 | JMH, UHT, SCCC |
| MDR 922 | General Surgery E III Sub-I | 4 | ALL CORES | 2 | JMH, UHT, SCCC |
| MDR 943 | General Surgery E IV Sub-I | 4 | ALL CORES | 2 | UHT, JMH, SCCC |
| MDR 944 | General Surgery (VAMC) Sub-I | 4 | ALL CORES | 2 | VAMC |
| MDR 927 | Pediatric Surgery Sub-I | 4 | ALL CORES | 2 | JMH |
| MDR 1029 | Plastic Surgery Sub-I | 4 | ALL CORES | 4 | JMH, UHT |
| MDR 937 | Urology Sub-I | 4 | ALL CORES | 2 | JMH, VAMC, UMHC |
| RMC | HCH Cardiothoracic Surgery Sub-I | 4 | ALL CORES | 1 | HCH |
REQUIREMENTS FOR GRADUATION

GENERAL RULES: A student MUST complete a total of 79 weeks of satisfactory third & fourth year clinical work to fulfill the requirements for graduation. The breakdown per campus is described below:

CLINICAL COURSEWORK REQUIREMENTS – MD PROGRAM – MIAMI CAMPUS:

- **CORE Clerkships (43 weeks)**
  - Patient Safety Week (1 week)
  - Internal Medicine (12 weeks)
  - Surgery (8 weeks)
  - Family Medicine (4 weeks)
  - Obstetrics & Gynecology (6 weeks)
  - Pediatrics (6 weeks)
  - Psychiatry (6 weeks)

- **REQUIRED Clerkships (18 weeks)**
  - Anesthesiology (2 weeks)
  - Emergency Medicine (4 weeks)
  - Geriatrics (2 weeks)
  - Neurology (4 weeks)
  - Radiology (2 weeks)
  - Subinternship (4 weeks)

- **Electives (16 weeks)**

CLINICAL COURSEWORK REQUIREMENTS – MD/MPH PROGRAM – RMC:

- **CORE Clerkships (49 weeks)**
  - Transition to Clinical Rotations (1 week)
  - Integrated Internal Medicine (12 weeks)
  - Includes Radiology (1 week)
  - Includes Geriatrics / Palliative Med (2 wks)
  - Integrated Surgery (12 weeks)
  - Includes Radiology (1 week)
  - Includes Anesthesiology (2 weeks)
  - Family Medicine (6 weeks)
  - Obstetrics & Gynecology (6 weeks)
  - Pediatrics (6 weeks)
  - Psychiatry (6 weeks)

- **REQUIRED Clerkships (16 weeks)**
  - Community & Publ Hlth Practicum (2 wks)
  - Emergency Medicine (4 weeks)
  - Neurology (4 weeks)
  - Public Health Sub-internship (2 weeks)
  - Subinternship (4 weeks)
  - Physicianship Skills (0 weeks)

- **Electives (12 weeks)**

Each core and required clerkship must be taken at a University of Miami Miller School of Medicine (UMMSM) teaching facility.

All students must pass the USMLE Step 1 exam and must complete the required clinical course work before graduation. The USMLE Step 2 CS and CK exams must be taken before graduation, though passing scores are not required. Students must sit for the exams by December 31st of the year of graduation.
SPECIFICS REGARDING SCHEDULING

EXTERNSHIP POLICY / PROCEDURE: A maximum of 12 weeks may be spent in elective time away from UMMSM. Externship time in excess of the allowable 12 weeks will not be counted for credit unless a student obtains prior written approval from the Senior Associate Dean for Undergraduate Medical Education. Externship experiences must be described in the course catalog of the host institution. No externships with physicians in private practice will be approved.

A rapidly increasing number of schools are now using the Visiting Student Learning Opportunities (VSLO) (formerly Visiting Student Application Service VSAS) to offer and accept applications for externships. The procedure for applying to programs for both, externships at schools who use VSLO and at schools that do not, are posted on the UMMSM medical education website under the section “Important Administrative Documents for Students” – Applying for Externships. Also located there is information on obtaining Immunization records, BLS certification and other required documents needed for your application. You will also find online “Contact Information for Seniors on Externships” form which needs to be filled out and handed in to the Office of Student Affairs prior to your leaving.

All documents must be submitted to the Administrative Assistant for Scheduling at the Office of Student Affairs prior to one’s departure, especially the letter of acceptance. A grading/evaluation form will be sent to the host institution once the Office of Student Affairs receives the acceptance letter. The Administrative Assistant for Scheduling at the Office of Student Affairs must be notified immediately if any changes/cancellations regarding an externship occur. An Externship Placeholder will be placed on the senior schedule, and it will be changed to Externship when it has been officially accepted. Failure to comply with this procedure will result in no credit for the externship.

RESEARCH: UMMSM encourages all medical students to participate in research during their medical education. Students can receive either Research Credits, graduate with Research Distinction or both as a result of their efforts. The Medical Student Research Committee has the responsibility to review and approve a student’s request for Research Credits and Research Distinction. Guidelines for the awarding of Research Credits and Research Distinction are located at the end of this document and are posted on the UMMSM medical education website under the section “Important Administrative Documents for Students”.

Please note: The number of credits awarded by the Medical Student Research Committee may differ from the number requested by the student. Therefore, students are required to schedule electives as a backup, to insure they will have enough credits to graduate on time.

For graduating seniors who are requesting Research Credit and/or Graduation with Research Distinction, the deadline for submitting all the required research documents is February 1 of the year of graduation.

INTERVIEW TIME: Residency Interviews should be scheduled during unscheduled time. If an interview must be scheduled during course time, PRIOR permission from the course coordinator MUST be obtained. Each course description lists whether interview time is allowed and the number of days a student may be absent from the rotation. No student can be absent from a scheduled course without prior approval. If a student does not obtain prior approval for interviews, he/she may receive a failing grade for the course, and a physicianship incident report will be submitted.
ABSENCES: From the Student Handbook:
Students must request excused absences from required curricular activities and examinations from the Office of Student Affairs and course coordinators. Such requests must be submitted by official e-mail to both the Associate/Assistant Dean for Student Affairs (Miami) or the Assistant Regional Dean for Student Affairs (RMC) and the appropriate course coordinator. Requests should be made well in advance of the scheduled activity (preferably before the start of the course). Final approval will be conveyed to the student via e-mail by the Office of Student Affairs.

UNSCHEDULED TIME: Unscheduled time should be planned carefully. Unscheduled time should be used to prepare for and take the USMLE Step 2 CS and CK and to participate in residency interviews. Students may also use unscheduled time for vacation and not-for-credit educational activities.

MINIMUM NUMBER OF STUDENTS: Please be aware that a few required courses and electives have a MINIMUM number of students required. If the minimum number of students is not met, the course may be cancelled. Please keep this in mind, especially if you decide to schedule a required course late in your senior year.

CHANGE OF SCHEDULES:
Rotations may be changed during the designated “add/drop” periods that occur one week per month. Changes must be made at least four weeks prior to the start of the rotation. Any requested changes must be submitted in writing on an Add/Drop Form and given to the Administrative Assistant for Scheduling in the Office of Student Affairs. Changes in core clerkships must be authorized by the Associate Dean for Clinical Curriculum. Certain Departments require prior approval of the coordinator even if prior to the four week deadline. Refer to the Course Descriptions for which Departments require this. No rotation may be dropped once it has begun without the expressed permission by the Office of Student Affairs. One must always have scheduled all credits required for graduation. If a rotation is dropped, an equivalent number of credits must be simultaneously added. Drops will not occur without concomitant additions. The deadline for all senior schedule changes is January 15 of the year of graduation.

CONTACTING THE COURSE COORDINATOR: Students should contact the course coordinator for every elective two weeks prior to starting the elective. This is to make sure they are aware that you will be coming, something particularly important for those electives that have very few students signing up during the year. This will also allow them to let you know of any requirements you may need to complete prior to starting, such as credentialing at the hospital, access to the EMR, or required readings.

WAIVER GUIDELINES: Requirements as listed in this Elective Manual must be adhered to fully. Any deviation from this policy must be approved through the Office of Student Affairs. Any student wishing a waiver of the above stated guidelines must present his/her request in writing to the Office of Student Affairs for action prior to making any changes in schedule.
SCHEDULING AND CAREER PLANNING

The clinical years at the University of Miami Miller School of Medicine (UMMSM) will present you with opportunities to accomplish many important personal goals. The ability to tailor a portion of your schedule will allow you to become well-rounded, to explore individual interests in more depth, and to identify areas that you wish to strengthen in anticipation of moving forward to your graduate training. During this time, you will gain a greater sense of responsibility for your education.

Although there is a good degree of flexibility in choosing your schedules, certain requirements exist in order to assure a fundamental and appropriately broad experience in clinical medicine for each student. The philosophy of the school is that a well-balanced and wide-ranging experience will provide the basic building blocks for future self-learning and scholarly pursuit in any specialty.

When choosing electives, externships, or research, you should seek advice from faculty members knowledgeable in the field in which you intend to concentrate. The advising deans and members of the Office of Professional Development and Career Guidance can assist you in identifying faculty and community mentors who can assist you in achieving your professional career goals.

OFFICE OF PROFESSIONAL DEVELOPMENT AND CAREER GUIDANCE

Hilit F. Mechaber, MD
Director
305-243-7978
RMSB #2155
hmechabe@med.miami.edu

Joyce Biederman, M.S.
Assistant Director
305-243-7485
RMSB #2155
JBiederman@med.miami.edu
ACADEMIC CALENDAR
2020-2021

Mon. June 22, 2020.......................... Senior Registration
........................................ (online Orientation)

Mon. June 22, 2020.......................... Senior Rotations begin

Wed. Nov. 25 @5pm – Sun. Nov. 29, 2020 ............ Thanksgiving


Mon. Jan. 4, 2021.............................. Clinical Rotations Resume

TBD ........................................ Rank Order List Input Deadline

TBD ........................................ MATCH DAY

Sat. May 8, 2021 ................................ Miller School of Medicine
.................................. Commencement Ceremony

No Guaranteed Holidays – Please check with your clerkship Director/Coordinator
# Senior Block Schedule 2020-2021

<table>
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<th>DATES</th>
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<tr>
<td>June 08 – June 21</td>
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<tr>
<td>June 22 – July 05</td>
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<tr>
<td>December 07 – December 20</td>
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<td>January 18 – January 31</td>
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<td>March 15 – March 28</td>
<td>10A</td>
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<td>March 29 – April 11</td>
<td>10B</td>
</tr>
<tr>
<td>April 12 – April 25</td>
<td>11A</td>
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<td>11B</td>
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<td>Saturday May 08, 2021</td>
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<td>12B</td>
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ANESTHESIOLOGY
# ANESTHESIOLOGY CLerkship (Required)

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<td>CLERKSHIP DIRECTOR:</td>
<td>Christian Diez, M.D. MBA</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1191</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:CDiez@med.miami.edu">CDiez@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Yokasta Cruz (<a href="mailto:ycruz@med.miami.edu">ycruz@med.miami.edu</a>); 305-585-1191</td>
</tr>
<tr>
<td>Ryder Trauma Center Room T-215</td>
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| LENGTH OF ELECTIVE: | 2 weeks                  |
| PREREQUISITE:      | None                     |
| NUMBER OF STUDENTS: | 8 students Block 3A-4B; 10 students starting Block 5A |
| Minimum 3          |
| AVAILABLE:         | All year (EXCEPT Blocks 1AB and 2AB) |
|                   | Block 00 is available only to students interested in Anesthesiology |
|                   | with approval from the clerkship director/coordinator |
| U.S. VISITING STUDENTS: | None |
| INTERVIEWING TIME: | 2 days with MANDATORY PRIOR approval |
|                   | None allowed during block containing the Thanksgiving holiday |
| TYPE:             | Required Clinical         |

**Overview / Goals:**
During your two-week rotation in Anesthesia you experience either:

1) **Anesthesia as a Career**
   This will be useful for students contemplating anesthesia as a career.

2) **The Interaction of Anesthesia with other Medical Specialties**
   This will be essential for students planning to follow other medical careers; however, will be interacting with the specialty from the vantage point of their chosen specialty.

No matter what the career choice of the student we aim to give them the same core didactic teaching and teach them some basic clinical skills.

**Course Design / Objectives:**

**Clinical Skills**
All students on completing their two-week rotation will be able to demonstrate competency in:

A) Insertion of an intravenous line.
B) Basic airway management.
   1) Mask ventilate the patient.
   2) On at least two occasions, perform straight forward laryngoscopy and intubation.

Students will be assessed for each of these skills, and this will form part of the final evaluation.

These clinical skills will be taught in the operating room on a one-to-one basis. Therefore, it is essential that the student attend operating room sessions. Each student will be assigned to a resident at the beginning of his or her rotation, and they will be expected to work with the resident during this period. Each student will be given an attendance sheet that will be signed off by the resident responsible for the student. In addition, the resident will be responsible for evaluating the participation of the student in the operating room portion of this rotation. Students must have a resident/attending sign-off on a physical examination of a patient.

**Didactic Teaching**


During the two-week clerkship, students will receive didactic teaching covering the following areas:

A) Basic pharmacology of the anesthetic agents  
B) Anatomy of the airway, basic skills used to maintain ventilation, and an outline of intubation techniques  
C) The role of the anesthesiologist as a perioperative physician, and the interaction of anesthesiology with other medical specialties

In addition, students will be expected to attend the conference at the anesthetizing location that they are assigned to. They will have to get the lecturer to sign their attendance sheet, in order to obtain credit. Attendance will be taken at each conference. There will be a multiple-choice test at the end of the clerkship to test the individual’s basic grasp of these concepts.

**Prerequisite:**
None

**Location:**
Ryder Trauma Center OR’s  
Jackson Memorial Hospital (JMH) Main OR’s  
UMH (Univ. of Miami Hospital)  
VA (Veteran Affairs Healthcare System)

**Student Evaluation and Grading:**
This will have three components:
I) Attendance (2 components: Lecture & Clinical) – 20% of final grade.
II) Evaluation from faculty and residents with whom the student has worked – 40% of final grade.
III) The final exam – 40% of final grade.

Students are expected to master Basic Airway Management and IV insertion. The students are evaluated/judged on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds, and/or presentations.

Each component carries equal weight. Failure to obtain an overall satisfactory will result in a failing grade being assigned to the student. Since this is a mandatory rotation, failure will result in the student having to take the rotation again, and the inability to graduate from medical school.

Deadline for adding and/or dropping this course is 2 weeks prior to its start.

**Interview Time:**
Only two days will be allowed for interviews. No additional time will be granted for any other request. The interviews must be approved two weeks before the start of the rotation with a copy of the invitation sent via email to ycruz@med.miami.edu.

Orientation and Exam dates that are in each rotation are mandatory with no exception.

Reviewed November 2019
**ADVANCED ANESTHESIOLOGY**

<table>
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<tr>
<th>COURSE CODE:</th>
<th>MDR 809</th>
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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Christian Diez, MD, MBA (<a href="mailto:cdiez@miami.edu">cdiez@miami.edu</a>)</td>
</tr>
<tr>
<td>ASSOCIATE DIRECTOR:</td>
<td>Jack Louro, MD (<a href="mailto:jlouro1@miami.edu">jlouro1@miami.edu</a>)</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1191</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Yokasta Cruz (<a href="mailto:ycruz@med.miami.edu">ycruz@med.miami.edu</a>); 305-585-1191 ext 0</td>
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<tr>
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</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Anesthesiology Clerkship, Surgery &amp; Internal Medicine</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME:</td>
<td>Yes – 4 days with MANDATORY PRIOR approval</td>
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<tr>
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<td>None allowed during Block containing the Thanksgiving holiday</td>
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</table>

**Overview / Goals:**
The Senior Elective rotation program is consistent with the guidelines of the American Society of Anesthesiology. However, few additions and modifications are included in order to make this rotation a more meaningful one for a student who has been exposed to anesthesiology during his junior year. By the end of the rotation, the student is expected to be proficient in airway management, pharmacology of general and local anesthetics, drug interactions, and the medical evaluation of surgical patients as it pertains to anesthesia.

**Course Design:**
The student will meet with the course coordinator prior to beginning the rotation. Together they will decide upon a 4 week rotation that may involve the operating room, the ICU, regional anesthesia, and the obstetric suite. The time schedule is from 7:00 a.m. to 4:00 p.m. One night or weekend call is required; however, students may take more.

Students are encouraged to attend the residents lecture series and departmental conferences.

Each student will be required to write a four page essay typed in a 12-point font on an anesthesia topic of choice and must be completed at the end of the rotation.

**Objectives:**
The following objectives should be met by the student:

1. Develop the ability and the skill to elicit important information from both the patient and physician that may prove essential for the safe administration of an anesthetic. The student will perform preoperative evaluation rounds with a senior resident and plan preoperative preparation and anesthetic agents to be used in the operating room for surgery.

2. Understand the pharmacology, advantages, and disadvantages of the commonly employed anesthetic agents as they apply to a particular patient, and the ability to properly monitor patients and their side effects in the operating room.
3. Learn, and perhaps practice, the essentials of regional anesthesia techniques, such as spinal or epidural anesthesia. Nerve blocks for diagnostic, therapeutic or surgical procedures will be demonstrated both in the Pain clinic and in the operating room.

4. Recognize, and appropriately manage a failing circulation via proper monitoring, various catheterization techniques, and the sound administration of necessary vasopressors or other pharmacological agents needed to support an inadequately functioning cardiovascular system.

5. Develop the necessary knowledge and skill to manage an obstructed airway via positioning of the head, use of face mask ventilation with or without the utilization of oral or nasal airways, or via endotracheal intubation, and proper use of mechanical ventilators.

6. Obtain experience in the management of post-anesthetic problems in the recovery room and/or Intensive Care Unit.

**Participating Faculty:**
The student will work under the supervision of a resident, serving as tutor, and attendings that will instruct and share in the teaching. The course coordinator will be responsible for supervising and follow-up of the student’s performance. Frequent contact will be of vital importance to both the supervisor and the student if a rewarding experience is desired.

**Location:**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Percentage of Student Time Spent at each setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ryder Trauma Center OR’s</td>
<td>25%</td>
</tr>
<tr>
<td>Ryder Trauma Center TICU</td>
<td>25%</td>
</tr>
<tr>
<td>Jackson Memorial Hospital (JMH) OR’s</td>
<td>25%</td>
</tr>
<tr>
<td>OB Holtz Children Center 4th Floor</td>
<td>25%</td>
</tr>
</tbody>
</table>

**Interview Time:**
Only four days will be allow for interviews no additional time will be granted for any other request. Only two days allowed during the block encompassing Thanksgiving week. The interviews must be approved two weeks before the start of the rotation with a copy of the invitation sent via email to ycruz@med.miami.edu

**Prerequisite:**
Anesthesiology Clerkship (Required), Surgery, Internal Medicine

Reviewed November 2019
CARDIAC ANESTHESIOLOGY

COURSE CODE: MDR 953
CLERKSHIP DIRECTOR: Christian Diez, MD, MBA
TELEPHONE/FAX: 305-585-1191
EMAIL: CDiez@med.miami.edu
CONTACT: Yokasta Cruz (ycruz@med.miami.edu); 305-585-1191
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Anesthesiology, Surgery and Internal Medicine
NUMBER OF STUDENTS: 2
AVAILABLE: All year (except Blocks 1AB, 2AB)
U.S VISITING STUDENTS: None
INTERVIEWING TIME: Yes – 2 days with MANDATORY PRIOR approval
None allowed during Block containing Thanksgiving
TYPE: Clinical

Overview:
- During this rotation, the student will be exposed to the principles and the practice of cardiothoracic anesthesia, applied cardiovascular physiology and pharmacology.
- The course will provide the student exposure to and experience performing the preoperative assessment and intraoperative management of cardiothoracic surgical patients from the perspective of the cardiac anesthesiologist. The student will work with faculty, fellows, and residents delivering anesthetic care to adult patients undergoing cardiothoracic and vascular procedures.

Course Design:
- The student will spend four weeks in the OR participating in the preoperative and intraoperative care of at least one CT surgery patient per day.

Didactics:
- Several Core Topics (listed below) will be covered during this rotation. These topics will be discussed during the existing departmental lecture series, journal club sessions, departmental Grand Rounds and M&M conferences, all of which the student will be required to attend. Core Topics not covered within these sessions will be discussed with the students in small group settings by either the cardiac anesthesia fellows or attendings.
- Core Topics/Learning Seminars:
  1. Pre-Op Evaluation of CT patient (OR)
  2. General Cardio-pulmonary Physiology (OR/ICU)
  3. Hemodynamics (OR/ICU)
  4. Cardiac-pulmonary Bypass (OR)
  5. Invasive Monitoring/TEE (OR/ICU)
  6. Ventilation (OR/ICU)
  7. General Support of patient in the ICU (Fluids/Hemodynamics/Electrolytes/Nutrition/etc.)
- Pharmacology (w/ focus on intra-op cardiac pharmacology)
- Weekly presentations given by the students will cover the basics of Cardiovascular Anesthesiology including devices used in the perioperative setting (i.e. IABP, ECMO, VAD’s).
- Weekly hands-on Anesthesiology sessions in the Simulation Lab.
Goals/Objectives:
• The goal of this course is to educate students on the anesthetic considerations related to cardiothoracic surgery.
• The student will participate in preoperative evaluations and be involved with the intra-operative management of the patient.

Location:
• The rotation will take place in several venues including, but not limited to the JMH Operating Rooms designated for CT surgery, the pre-op holding area, the Simulation lab in the JMH Rehabilitation Center.

Participating faculty:
This course will be taught by a multidisciplinary team of faculty from the Dept. of Anesthesiology consisting of intensivists, fellowship trained cardiac anesthesiologists, experts in medical simulation training.

• There will be two Cardiac Anesthesiology Fellows who will mentor one medical student during the OR portion of the course and will also be responsible for covering core lecture topics not otherwise covered in the exiting departmental lecture series.

Prerequisites:
Anesthesiology Clerkship (Required), Internal Medicine, and Surgery

Expectations:
• Upon completion of this elective the student will be expected to:
  • Perform pre-operative assessment of a CT surgery patient in preparation for anesthesia.
    ▪ Predict perioperative risk based on pre-existing disease and the surgical procedure proposed for CT surgery patients (i.e. coronary artery disease, congestive heart failure, valvular heart disease, arrhythmias).
  • List the sequence of events performed in the perioperative course.
    ▪ Describe the components of anesthesia: amnesia, analgesia, muscle relaxation, control of ANS, sedation, etc.
    ▪ Assess emergence from anesthesia - Assess criteria for tracheal extubation.
    ▪ Understand common problems in the ICU in the immediate post-operative setting
    ▪ Learn about oxygen therapy and the equipment used to deliver it.
  • Discuss and outline the basic management of a CT surgery patient in the OR and post-op ICU settings.
    ▪ Appropriately follow and present an ICU patient to the attending/fellow.
    ▪ Special monitoring/technical procedures (i.e. Starting iv's, measuring bp, a-line, capnography, oximetry).
    ▪ Blood therapy and maintaining appropriate fluid balance - Understand the difference between different types of iv solutions and the indications for each. - During blood loss, appreciate the difference between anemia and hypovolemia and the associated pathophysiology that results.
    ▪ CPR/ACLS: to review the principles behind basic and advanced cardiopulmonary life support with regard to: - Time of institution, organization, airway management, hemodynamic support and arrhythmia management in the Operating room and ICU.

Student evaluations and grading:
• Students will be subjectively evaluated by the course coordinator and assisting faculty and fellows.
• Grading will be Pass/Fail and based on:
  • Attendance to all scheduled sessions
  • Motivation and involvement with patient management
- Patient evaluation and presentation skills
- Evaluations by Faculty and Fellows.

**Interview Time:**
Only four days will be allowed for interviews no additional time will be granted for any other request. During Block 6B (Thanksgiving) only two interview days will be allowed. The interviews must be approved two weeks before the start of the rotation with a copy of the invitation sent via email to ycruz@med.miami.edu.

Reviewed November 2019
PEDIATRIC ANESTHESIOLOGY

COURSE CODE: MDR 954
CLERKSHIP DIRECTOR: Alecia L. Stein, MD and Neil Masters, MD
EMAIL: ASabartinelli@med.miami.edu and NHMasters@med.miami.edu
CONTACT: Yokasta Cruz (ycruz@med.miami.edu); 305-585-1191
Ryder Trauma Center Room T-215
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Anesthesiology, Surgery, Pediatrics, & Internal Medicine
NUMBER OF STUDENTS: 2
AVAILABLE: All year
U.S VISITING STUDENTS: None
INTERVIEWING TIME: Yes – 1 day with MANDATORY PRIOR approval
None allowed during Block with Thanksgiving
TYPE: Clinical

Overview:
- This elective will introduce the subspecialty of pediatric anesthesiology to medical students interested in careers in anesthesiology who seek to gain exposure to the anesthetic care of neonates, infants and children. This 2-week rotation consists of clinical exposure to the varied clinical practice of pediatric anesthesia, including ambulatory and inpatient pediatric cases, regional techniques, and congenital cardiac anesthesia. This practice spans multiple settings, including the OR, NICU/PICU bedside cases, Bascom Palmer ambulatory surgical center, pediatric sedation suites, and more. Didactics cover topics such as pediatric physiology, pharmacology and anatomy, as well as a review of basic procedural skills pertinent to pediatric perioperative care.
- The course will provide the student clinical exposure to the preoperative assessment, intraoperative, and postoperative management of pediatric surgical patients from the perspective of the pediatric anesthesiologist.

Course Design:
- The student will be exposed to the practice of anesthesiology and perioperative medicine in the environment of a variety of pediatric surgical cases, including but not limited to: ENT, ophthalmology, congenital cardiac, orthopedic, neurosurgery, trauma, sedation/imaging and general surgery.
- Tentative layout for the two-week course: (subject to change based on pediatric caseload)
  - Day #1: Introduction in JMH or BPEI with clerkship directors to outline expectations and goals for the rotation.
  - BPEI ENT/Eye cases: 3-4 days
  - JMH/Holtz’s Children’s inpatient pediatric surgeries: 4-5 days
  - JMH/Holtz’s Children’s congenital cardiac anesthesia: 1-2 days
  - JMH/Holtz’s Children’s pediatric sedation suite: 1 day
- Pediatric Anesthesia Lectures: Thursday at 8 am @ JMH C-302
  - ~ 30min Attending/Fellow/Resident on a core topic in pediatric anesthesiology.
  - On the second Thursday of each rotation, motivated students may present a short discussion based on a patient of interest they encountered during the first week of their rotation. Please discuss this in advance with the clerkship directors to prevent any time conflicts with existing didactics.
- At a minimum, the following topics will be discussed and reviewed with the students during the rotation.
  - Pediatric fluid management and acid/base balance
  - Anesthetic agents and medications used on pediatric patients under anesthesia
  - Developmental stages: normal vs. abnormal and their anesthetic implications
Common co-morbidities and their anesthetic implications: chronic URI, OSA and obesity, asthma, etc.

- Pediatric preoperative and postoperative assessment and care: including preoperative premedication and management of postoperative emergence delirium
- Pediatric Advanced Life Support

- On occasion, motivated students may be offered the opportunity to stay and/or return in evening hours for exposure to sentinel cases such as pediatric liver or multivisceral transplantations, with subsequent day being postcall.

Goals/Objectives:

- The goal of this course is to educate students on the anesthetic considerations for the pediatric patient undergoing a variety of surgeries and/or procedures requiring anesthesia and to familiarize the students to the management of pediatric surgical patients in the pre-, intra- and postoperative settings.
- The student will participate in preoperative evaluation, intraoperative management and postoperative course of their patients.
- After this clerkship, the student should be able to:
  - Knowledge/Cognitive goals:
    - List the sequence of events performed in the perioperative course.
      - Describe the components of anesthesia: amnesia, analgesia, muscle relaxation, sedation, etc.
      - Describe salient aspects of emergence from anesthesia in the pediatric patient and list criteria for tracheal extubation.
      - Understand commonly encountered adverse events in the immediate postoperative period/pediatric post anesthesia care unit.
    - List recommended NPO times and nutritional requirements for pediatric surgical patients, especially neonates.
    - Understand the normal vital sign ranges for neonates, infants and children.
    - Understand the difference between pediatric and adult airway anatomy and its implication for airway management and intubation.
    - Calculate pediatric fluid requirements and estimated blood loss for uncomplicated pediatric surgical cases.
    - Discuss the physiologic differences between pediatric and adult patients and how these differences impact perioperative anesthetic management, and postoperative care of the pediatric patient.
    - Identify the wide range of surgically-correctable congenital anomalies and their specific pathophysiologic considerations.
    - Recognize and interpret normal and abnormal laboratory values in the pediatric population.
    - Recognize and treat respiratory compromise in the pediatric patient.
    - List common causes of neonatal emergencies.
  - Clinical skills/procedure goals:
    - Perform a complete preoperative assessment and examination on a pediatric surgical patient in preparation for anesthesia and be able to predict perioperative risk based on pre-existing disease and the planned surgical procedure.
    - Formulate anesthetic plan, including medication dosages for induction of pediatric patients undergoing uncomplicated surgery.
    - Develop competence in placing monitoring and IV lines on pediatric patients.
    - Observe placement of invasive monitoring techniques.
    - Develop proficiency in pediatric airway management, including:
      - Mask ventilation
      - Laryngeal mask airway placement
      - Endotracheal intubation
• Assess and plan for presence of postoperative pain and its management in pediatric patient.

Location:
• The rotation will take place in several venues including, but not limited to:
  o JMH Main OR designated for pediatric patients (usually OR 1-4) (40%)
  o Bascom Palmer Eye Institute Operating Rooms - 6th floor (30%).
  o JMH/Holtz Children’s pediatric sedation suite (10%)
  o Congenital cardiac surgery OR/Cath lab (Holtz ET 5th floor) (10%)
  o Preoperative holding area (PACU) (5%)
  o Students may also spend time in “off-sites:” interventional radiology/MRI/radiation oncology when appropriate (2.5%)
  o Pediatric Intensive Care Unit (2.5%)

Participating faculty:
• This course will be taught by a multidisciplinary team of faculty from the Department of Anesthesiology consisting of fellowship trained Pediatric Anesthesiologists, in addition to several additional members of the UM Department of Anesthesiology faculty:
  o Alecia L.S. Stein, MD, Co-Director Pediatric Anesthesia elective
  o Neil Masters, MD, Co-Director Pediatric Anesthesia elective
  o Lydia Jorge, MD, Program Director Pediatric Anesthesia Fellowship.
  o N. Jim Halliday, MD, Division Chief of Pediatric Anesthesiology.
  o Isis Del Rio, MD
  o Luis Rodriguez, MD
  o Eliane Quintas-Varga, MD
  o Giuliana Orihuela, MD
  o Dorothea Baumgard, DO
  o Stephan Klumpp, MD
  o Amanda Saab, MD; Pediatric Cardiac Anesthesiology.
  o Frank Gencorelli, MD; Pediatric Cardiac Anesthesiology
  o Joseph Dayan, MD; Pediatric Cardiac Anesthesiology

Prerequisites:
• Anesthesiology Clerkship (Required), Internal Medicine, Pediatrics, and Surgery

Student evaluations and grading:
• The course coordinators and assisting faculty and fellows will subjectively evaluate the students.
• Grading will be Pass/Fail and based on:
  • Attendance to all scheduled sessions
  • Written evaluations from the attendings
  • Motivation and involvement with patient management
  • Patient evaluation and presentation skills

Interview Time:
One interview day will be allowed. Conditionally, a second interview day may be granted on a very limited basis provided that there are significant extenuating circumstances to justify this. Interview requests must be approved by the start of the rotation and in a timely manner. Please send the requests, with a copy of the invitation via email to ycruz@med.miami.edu.

Orientation is on the first day of each rotation and is mandatory unless approved in writing by the clerkship co-directors in advance.

Revised November 2019
CELL BIOLOGY AND ANATOMY
# ADVANCED GROSS ANATOMY

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<th>COURSE CODE:</th>
<th>MDR 807</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Doug Broadfield, PhD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-8861</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:DBroadfield@med.miami.edu">DBroadfield@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>RMSB, 4th floor, #4099</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks (4 weeks – with permission of Director)</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
<td>6 per session</td>
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<tr>
<td>AVAILABLE:</td>
<td>August – December (Blocks 3B-7A), January - March (Blocks 7B-9B)</td>
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<tr>
<td>U.S.VISITING STUDENTS:</td>
<td>No</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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**Overview:**
Intended primarily for students applying for surgical or orthopedic residency programs, this elective provides the ability to study advanced regional anatomy with opportunities for students to develop teaching and presentation skills.

**Course Design / Expectations:**
Students will perform dissections or prosected reviews of selected regions of the human body, based on their specific interests. They can review their dissections with the faculty. This provides the self-motivated student the opportunity to review anatomy as well as practice surgical or orthopedic techniques on the cadaver. In addition, students will provide assistance in the human anatomy courses to first year medical students. Students are also required to prepare presentations in PowerPoint format on the clinical relevance of their anatomical area of interest.

**Location:**
The course takes place in the gross anatomy laboratory, RMSB, 4th floor.

**Participating Faculty:**
Dr. Doug Broadfield will supervise each student’s performance.

**Prerequisite:**
None

**Student Evaluation and Grading:**
Students are evaluated on a pass / fail basis by their participation in the lab (9 sessions per two week period) and their PowerPoint presentation.

Revised December 2019
DERMATOLOGY
DERMATOLOGY

COURSE CODE: MDR 811
CLERKSHIP DIRECTOR: George Elgart, M.D. (Director)
Brian Morrison, M.D. (Co-Director)
TELEPHONE: 305-689-7067
EMAIL: jpmores@miami.edu
CONTACT: Jessenia Pomares - 305-243-4472
LENGTH OF ELECTIVE: 2 weeks (an additional two weeks may be added with approval)
PREREQUISITE: Must have completed core clerkships
NUMBER OF STUDENTS: 3-for Blocks 3A-5B, 2-for Blocks 6A-11B
AVAILABLE: All year EXCEPT Blocks 00-2B and 12A-12B
U.S. VISITING STUDENTS: Yes
INTERVIEWING TIME: 1 day (2wks) with prior approval
TYPE: Clinical

Course Design / Location:
The student will attend 7 clinics per week, weekly management conferences and grand rounds, the Miami Dermatology Society meetings (which are held 6 times a year), journal club, and slide conferences. The student will participate in outpatient dermatologic care, under supervision of the Chief Resident and a member of the faculty, at Jackson Memorial Hospital and the University of Miami Hospital. Development of history taking, diagnostic skills, and ambulatory management of dermatological diseases will be emphasized in this elective program. Basic diagnostic procedures, including punch and shave biopsies, Tzanck, scabies, and potassium hydroxide preparations will be taught. There will also be opportunities to observe surgical therapy and the Dermatology inpatient service. All students will be required to participate in slide reading session with Dr. Elgart and there will be a quiz at the end of the rotation.

Location: JMH (50%), UMH (50%)

Prerequisites:
All the core clerkships. Non-UM students must apply in order to participate in this rotation. This is done by submitting a CV to the clerkship directors for review.

Expectations
The student will be expected to participate in all activities (clinics and educational conferences) and to be on time. The course director needs to be informed of all absences. Professionalism as mandated by the Miller School of Medicine is expected.

Student Evaluation and Grading:
Students are evaluated based on attendance, promptness, professionalism and participation in clinics and in Dr. Elgart’s Dermatopathology slides sessions. They will be expected to have an understanding of basic dermatology. At the end of the rotation, a short quiz will be administered based on the basics of Dermatology. Students should have mastered the approach to the dermatologic patient, basic dermatology terminology, and the rudiments of punch and shave biopsies.

Revised January 2020
PEDIATRIC DERMATOLOGY  
(Listed under both Dermatology and Pediatrics)

<table>
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<tr>
<th>COURSE CODE:</th>
<th>MDR 886</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Lawrence Schachner, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6735</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jpmores@miami.edu">jpmores@miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Jessenia Pomares - 305-243-4472</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks (an additional two weeks may be added with approval)</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None. Pediatrics Clerkship is preferred</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
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</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year EXCEPT Blocks 00B and 12A-12B</td>
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<tr>
<td>U.S. VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
<td>1 day (2wks), with prior approval</td>
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<td>TYPE:</td>
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**Overview/Course Design:**
The understanding of mechanisms of pathophysiology and effective therapy in pediatric dermatological diseases is stressed in this elective. The students will participate in management of in-patient and out-patient dermatological and connective tissue problems. Diagnostic techniques by light microscopy and immunologic techniques and standard dermatologic laboratory techniques will be emphasized.

The student will attend approximately 7 clinics per week, weekly management conferences and grand rounds, the Miami Dermatology Society meetings (which are held 6 times a year), journal club, and slide conferences. All students will be required to participate in slide reading session with Dr. Elgart and there will be a quiz at the end of the rotation.

**Goals/Objectives:**
The goals of this elective are to introduce the student to clinical and laboratory means of recognition of cutaneous diseases in children and adolescents.

**Location:** JMH (25%) and UM (75%)

**Prerequisite:** Pediatrics Clerkship is preferred. Non-UM students must apply in order to participate in this rotation. This is done by submitting a CV to the clerkship directors for review.

**Expectations:**
The student will be expected to participate in all activities (clinics and educational conferences) and to be on time. The course director needs to be informed of all absences. Professionalism as mandated by the Miller School of Medicine is expected.

**Student evaluations and grading:**
Students will be evaluated based on part, or all of the following:
- Patient evaluation skills
- Data gathering and problem solving
- Fund of knowledge
- Case presentations and write-ups
• Personal qualities
• Clinic/Ward activities and responsibilities
• Communication and interpersonal skills

Revised January 2020
# WOUND HEALING
(Listed under both Dermatology and Surgery)

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<tr>
<th>COURSE CODE:</th>
<th>MDR 806</th>
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</thead>
</table>
| CLERKSHIP DIRECTOR:  | Hadar Lev-Tov, MD (Director)  
                     | Robert S Kirsner MD, PhD (Co-Director) |
| TELEPHONE:           | 305-243-4472 |
| EMAIL:               | jpmares@miami.edu |
| CONTACT:             | Jessenia Pomares - 305-243-4472 |
| LENGTH OF ELECTIVE:  | 2 weeks       |
| PREREQUISITE:        | None. Medicine and Surgery is preferred. |
| NUMBER OF STUDENTS:  | 1             |
| AVAILABLE:           | All year EXCEPT Blocks 9B-10A and 12A-12B |
| U.S. VISITING STUDENTS: | Yes       |
| INTERVIEWING TIME:   | 1 day with prior approval |
| TYPE:                | Clinical with research opportunity if 4 week rotation |

## Overview:
- The student will have the opportunity to participate in the management of a multitude of difficult-to-heal wounds including common wounds such as diabetic foot ulcers, venous ulcers, pressure ulcers, as well as atypical wounds such as wounds due to connective tissue disease and pyoderma gangrenosum.
- Students will interview patients and identify critical pathways that will lead to the diagnosis, etiology, pathophysiology and treatment of these difficult-to-heal wounds.
- Students will learn to care for these wounds by designing treatment plans as part of a multidisciplinary team.

## Course Design:
The student will spend four days a week at the University of Miami Wound Healing Center participating in the care of patients with complex wounds. The student will have the opportunity to see a multi-disciplinary approach to complex wound care working with University of Miami Dermatologists, Surgeons, Hyperbaricists, Wound Nurses and Podiatrists (depending on who is staffing the wound care clinic that day). During this time, they will also spend time working with physicians performing hyperbaric medicine. Students will also attend the weekly wound clinic at Jackson Memorial. All students will meet with Dr. Lev-Tov, the course director, weekly (typically on Thursdays), and they are expected to attend wound care conferences if given and any pertinent dermatology wound care related didactic lessons if given that week as well as weekly Dermatology Grand Rounds.

## Goals:
- Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiology examinations, and cognitive skills as they relate to the diagnosis and treatment of acute and chronic wounds.
- Familiarize the medical student with the care of acute and chronic wounds using various methods including:
  - Debridement, both mechanical, chemical and enzymatic, to obtain a clean non-infected wound
  - Chronic care, with a multitude of current state of the art wound care therapies using gels, dermal and epidermal substitutes, xenografts, etc.
• Familiarize the student with the care of patients with wounds of pressure, arterial, venous, and lymphatic etiologies.
• Familiarize the patient with vacuum assisted therapy biology and indications.
• Familiarize the patient with hyperbaric oxygen treatment and its current indications.
• Reinforce a critical approach to the medical literature.

Objectives:
A. The medical student will be expected to be familiar with the basic evaluation and management of the following disorders by attendance in the wound care clinic:
   • Venous leg ulcers
   • Diabetic foot ulcers
   • Pressure sores of the sacrum, ischium, greater trochanter, limbs
   • Inflammatory ulcers
   • Acute surgical and post surgical wounds
B. The medical student will be expected to have read and discussed with fellows and/or faculty members the basic aspects of the following clinical evaluations and interventions to wound healing:
   • Basic analysis of a chronic wound including staging and measurement analysis
   • Vascular examination of a limb with Doppler examination, ABIs, PVRs, and transcutaneous oxygen measurement
   • Debridement
   • Basic wound care therapy with enzymatic debriders, vacuum assisted therapy, compression, off loading and gels
   • Application of xenografts, dermal and epidermal skin substitutes.
C. Students will be evaluated on their ability to perform the following competencies:
   • Perform and interpret the findings of a problem-focused history, physical examination with completion of a medical record and a differential diagnosis.
   • Understand the multi-disciplinary approach to the care of a patient with a chronic wound.
   • Demonstrate the ability to perform effective debridement and dressing skills.
   • Perform hand hygiene before and after patient care.
   • Ability to interpret lab studies. (i.e. WBC, H/H, BUN and Cr levels and ability to describe significance).
   • Formulate and implement an appropriate plan of management for consultations and referrals.
   • Ability to make an adequate assessment of a pressure sore according to staging criteria.
   • Ability to adequately assess a chronic wound of the leg, including a vascular exam with Doppler ultrasound, and ABI
   • Ability to interpret special studies (i.e. PVRs, MRI, Bone Scan and CTs)
   • Understand and respect the ethical boundaries and interactions with patients, colleagues and employees.
   • Read, interpret and critically examine present medical and scientific literature.

Location:
UHealth Tower Wound Care Center (80%) and Jackson Memorial Hospital (20%).

Participating Faculty:
Faculty and staff from the Wound Care and Hyperbaric Medicine Clinic at the University of Miami Hospital, some of whom who are also faculty in the Departments of Surgery, Dermatology, Physical Medicine/Rehabilitation, and Internal Medicine.

Prerequisite:
None. Medicine and Surgery Clerkships are preferred.
Non-UM students must apply in order to participate in this rotation. This is done by submitting a CV to the clerkship directors for review.

**Expectations:**
The student will be expected to participate in all activities (wound care clinic, procedures in clinic and operating room) and be on time. The course director needs to be informed of all absences. Professionalism as mandated by the Miller School of Medicine is expected.

**Student Evaluation and Grading:**
The medical student will receive a written evaluation at the end of the 2 weeks or month. This will be reviewed with the student by the faculty evaluator.

Revised January 2020
**RMC VENOUS VASCULAR DISEASE**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1027</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Luke Maj, MD, MHA (<a href="mailto:lukemaj@gmail.com">lukemaj@gmail.com</a>)</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-886-1202</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME:</td>
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**Overview:**
Phlebology is an innovative medical specialty in the diagnosis and treatment of disorders of venous origin. This elective will introduce the subspecialty of Phlebology to medical students interested in careers in vein disease and their related specialties (vascular surgery, general surgery, interventional cardiology, cardiology, cardiothoracic surgery and interventional radiology) and to the basic understanding of fundamental venous diseases pertinent to the practice in the primary care setting of internal medicine and family medicine. Phlebology pushes the forefront of medicine into a new direction by offering diagnostics, treatment options, and research and development opportunities not previously available for the patients with venous disease. This elective is intended to expose the medical student to a spectrum of experiences in a private practice outpatient phlebology office and will take part in patient visits and observe common outpatient venous procedures including office-based surgical and cosmetic procedures in Palm Beach County.

**Course Design:**
The course is designed to enhance and expand the knowledge of medical students in the treatment of venous disease which to date has been limited in medical school curriculum and in residency training. The student will spend majority of their time at The Vein Center at Water’s Edge Dermatology (exact practice locations will be determined based on scheduling and availability). The student will work directly with the physician and venous technicians. The student will gain exposure to general venous screening and examinations and to the treatment of common venous disorders such as, but not limited to, deep vein thrombosis, deep vein obstruction, venous ulcers, varicose veins, lymphedema, lipodermatosclerosis and May-Thurner Syndrome. The student will also have the opportunity to obtain pertinent history and physicals and to assist in surgical procedures such as endovenous ablation of the superficial venous system, sclerotherapy, microphlebectomy, intravascular ultrasound (IVUS) and venous stenting. Depending on scheduling, the student will have exposure to removal of face, hand and other body veins, declots, IVC filter placement and angioplasty.

**Goals:**

A. Exposure to phlebology practice for students interested in a vascular or interventional specialty and towards understanding the basics of venous diseases
   1. Become familiar with Phlebology as a subspecialty
   2. Understand how Phlebology fits within the network of other interventional specialties and aids in the primary care setting

B. Review the basics of phlebology and know the management of those most common presenting conditions including distinguishing between obstructive versus refluxing disease
1. Use an evidenced based approach to treat these conditions and gain familiarity with the important phlebology literature as it relates to these conditions
2. Gain knowledge about currently available preventive measures in decreasing risk factors of developing venous disease
3. Understand the pathophysiology of venous disease and the relevant anatomy for venous procedures
4. Acquire diagnostic skills to work up and evaluate common venous and lymphatic conditions as seen in primary care

C. Gain exposure to surgical phlebology including reopening stenosed vessels and improving venous flow

D. Exposure to the shift of new treatment options from commonly treated arterial disease to the development of new venous treatments for 360 degrees of circulation

E. Exposure to and understanding of local coverage determinations (LCD) for medicare and private insurance in an effort to educate the medical student about the non-clinical aspects of the practice of medicine and rules set forth in determining course of treatment based on national and local insurance guidelines and determining what is best for patient practices
   1. Exposure to the basics of billing and coding in the outpatient setting
   2. Exposures to the importance of customer service, professionalism, and efficiency in the private practice setting

Objectives:
A. The medical student will be expected to be familiar with the risk factors and the important causes of venous disease and comprehensive venous screening for prevention.

B. The medical student will be expected to be familiar with recognizing the anatomy, symptoms, and the basic evaluation and management of the following venous disorders:
   1. Chronic venous insufficiency
   2. Superficial venous reflux
   3. Deep venous obstruction (webs, clots, compression syndromes)
   4. Deep vein thrombosis
   5. Post thrombotic syndrome
   6. May-Thurner Syndrome
   7. Lymphedema
   8. Lipodermatosclerosis
   9. Venous Stasis ulcers
   10. Varicose veins, Telangiectasias

C. The medical student will be expected to have read and discussed basic aspects of the following interventions:
   1. Compression stockings
   2. Duplex ultrasound examination, Intravascular ultrasound (IVUS)
   3. Sclerotherapy
   4. Endovenous ablation of superficial venous system
   5. Microphlebectomy
   6. Venography and venous stenting
   7. IVC filter placement
   8. Angioplasty

Location:
The Vein Center at Water’s Edge Dermatology Offices, exact locations to be determined by scheduling availability (potential locations include Light House Point, Delray Beach, Wellington, West Palm Beach, Lake Worth, Okeechobee and Jupiter). Students would be at only one or two locations per day to limit driving.

**Participating Faculty:**
Luke Maj MD, MHA and other faculty at Water’s Edge Dermatology

**Prerequisite:**
None

**Expectations:**
Upon completion of this elective the student will be expected to:
A. Water’s Edge is a fast-paced private practice setting and students will be expected to demonstrate the highest levels of professionalism and punctuality
B. Students will perform histories and physical exams on patients as well as take part in office-based procedures/surgeries
C. Students are expected to be active learners and have an interest in venous and circulatory disease
D. The rotation coordinator needs to be informed of all absences
E. The student will be asked to complete an evaluation of the rotation as a whole upon completion to allow for continual improvement of the student experience
F. Faculty performance will be evaluated by the medical student (submitted anonymously)

**Student Evaluation and Grading:**
A. The medical student will receive a written evaluation at the end of the month
B. Student will be evaluated on performing problem-focused histories and physical examinations and differential diagnosis
C. Students will be required to complete a short oral presentation 5-10 minutes during the rotation on an agreed upon topic with the supervising faculty member
D. Pass/Fail dependent upon attendance, participation and performance on their oral presentation

Reviewed November 2019
EMERGENCY MEDICINE
# EMERGENCY MEDICINE CLERKSHIP (Required) [REQ]

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 812</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Jennifer Jackson, MD, FACEP</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3219</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:j.jackson5@med.miami.edu">j.jackson5@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Enid Khan (Holtz ET2169); 305-585-1280; <a href="mailto:EKhan@med.miami.edu">EKhan@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>18 all year EXCEPT 16 for Blocks 5AB &amp; 6AB (minimum of 6 per rotation)</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Scheduling is flexible with at least 4 weeks advanced notice. Please send your schedule requests in advance to: Dr. Jennifer Jackson, <a href="mailto:j.jackson@med.miami.edu">j.jackson@med.miami.edu</a>. Only can guarantee requests for 4 days off. The following days absolutely cannot be missed or rescheduled: Orientation Day, Simulation x 2, NBME Emergency Medicine Shelf Exam and Observed Patient Encounter</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes, through VSAS only. Block 1-3 only, only EM-bound students</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Required/Clinical</td>
</tr>
</tbody>
</table>

**PLEASE NOTE:** During Blocks 1 thru 3 and Block 12 students will be scheduled for shifts at both Jackson Memorial Hospital and Holy Cross Hospital.

## Overview:
The Emergency Medicine four-week rotation will provide both classroom teaching, simulation, and hands-on clinical experience in emergency care of patients of all ages with a wide spectrum of illnesses and injuries. Students are expected to evaluate and manage assigned patients under the direct supervision of an EM attending physician. Students will also gain additional experience at physical diagnosis and procedural skills by working with patients being evaluated by other housestaff, as appropriate for teaching. Emphasis is placed upon initial assessment, recognition, prioritization, and stabilization of acute emergency conditions. Procedural skills are an important emphasized component, including wound repair, intravenous techniques, airway management, ACLS care, fracture and soft tissue injury management, incision and drainage procedures, etc. This rotation also includes a variety of generalist skills in handling minor acute conditions that will be encountered frequently in primary care practice. The student will participate in the provision of prehospital emergency care with a Fire Rescue EMS crew. The EM rotation will include:

- Day and night shifts in all emergency areas (ER-A, ER-B, ER-C, Triage, Pediatrics)
- 1 eight-hour shift with an EMS crew
- Required 2 four-hour simulation lab sessions (the second session is graded)
- Observed Patient Encounter
- Online Blackboard assignments
- Virtual EM Simulation Modules
- EM Critical Decision Making Patient Writeups (Synthesis on Shifts)
- NBME Emergency Medicine shelf examination

### Scheduling/Attendance:
Scheduling of shifts for the entire rotation is completed 2 weeks prior to start date. Therefore, **specific requests must be received at least four weeks prior to the start date and we would allow a maximum of four (4) day off requests for the month.** We cannot guarantee that all requests will be accommodated. Assigned shifts will include days, nights, holidays, and weekends. Students must make up any missed shifts during the rotation. Orientation day, the two Simulation Days per student and the Observed Patient Encounter cannot be missed or rescheduled. **Students are not allowed to swap shifts without prior approval from the Clerkship Director.** If you will be late for or absent from a shift, you are required to inform the attending physician in the area you are assigned, as well as email or telephone Dr. Jennifer Jackson and Enid Khan.

**PLEASE NOTE:** During Blocks 1 thru 3 and Block 12 students will be scheduled for shifts at Jackson Memorial Hospital and Holy Cross Hospital.

The students are expected to have been certified with American Heart Association BLS and ACLS card, prior to the start of the clerkship. Students are expected to have fundamental knowledge on ACLS arrhythmias and cardiac arrest management prior to the start of the EM clerkship and is no longer incorporated into the EM curriculum.

**Orientation:** MANDATORY SESSION.
You will receive a detailed schedule of Orientation Day, the week prior to the start of the clerkship block. You must attend the entire day’s activities from 8:00a-5:00p. Clerkship course orientation, online resources and hospital orientation will be reviewed.

**REQUIRED ATTENDANCE:**
**Classroom:**
- Simulation – generally every Wednesday from 1:00 p.m. to 4:00 p.m. unless otherwise specified. Practicum on the 1st and 2nd Wednesday; examination on the 3rd and 4th Wednesday (each student attends two Simulation Lab sessions)
- Observed Patient Encounter
- Skills Labs (e.g. wound management, airway skills, intravenous access, EZ/IO)

**Course Completion:**
Students will be required to submit written logs (shift attendance, patient care logs, procedure logs, Synthesis on Shifts), complete their Observed Patient Encounter and online Blackboard assignments in order to complete the rotation. Any student encountering difficulty completing the procedure/patient care logs prior to the end of the 3rd week of the rotation, is required to notify the Clerkship Director and Coordinator. The final examination, NBME Emergency Medicine shelf examination, will be given on the last Friday of the rotation. **All other documentation must be uploaded into Blackboard by the Monday after the clerkship rotation.**

**End of Rotation:** You can be scheduled up to 8 p.m. on the last Sunday of the rotation.

**Prerequisite:** Internal Medicine

***Students planning on applying for emergency medicine residency should not enroll in the EM clerkship until the Spring of their MS3 year, at the earliest, due to impact on the EM SLOE. If they enrolled in the EM clerkship as an MS3, they need to email the Clerkship Director ahead of time to facilitate proper ED scheduling.

**Visiting Students** – Yes, through VSAS only, only Blocks 1-3

**Location:**
- JMH (60%) & HCH (40%) Blocks 1-3 and Block 12
- JMH (100%) Blocks 4 thru 11
EMERGENCY MEDICINE ORIENTATION DATES
2019-2020

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>Monday, June 22, 2020</td>
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<tr>
<td>Monday, July 20, 2020</td>
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<tr>
<td>Monday August 17, 2020</td>
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<tr>
<td>Monday, September 14, 2020</td>
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<td>Monday, October 12, 2020</td>
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<td>Monday, November 9, 2020</td>
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<tr>
<td>Monday, December 7, 2020</td>
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<tr>
<td><strong>Tuesday, January 19, 2021</strong></td>
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<tr>
<td>Monday, February 15, 2021</td>
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<tr>
<td>Monday, March 15, 2021</td>
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<tr>
<td>Monday, April 12, 2021</td>
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<tr>
<td>Monday, May 10, 2021</td>
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</tbody>
</table>

Set dates for Simulation, Observed Patient Encounter and the Shelf Exam are available far in advance. Please communicate with Clerkship Director/Coordinator for these dates.

Revised October 2019
EMERGENCY MEDICINE BOOT CAMP – TRANSITION TO RESIDENCY

COURSE CODE: MDR 1037
CLERKSHIP DIRECTOR: Jennifer Jackson, MD, FACEP
TELEPHONE: 305-243-7425
EMAIL: j.jackson5@med.miami.edu
CONTACT: Enid Khan (Holtz ET2169); 305-585-1280; EKhan@med.miami.edu
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Completion of Core Clerkships
              Emergency Medicine specialty bound MS4 students preferred
NUMBER OF STUDENTS: 15
AVAILABLE: Block 11A
U.S. VISITING STUDENTS: No
INTERVIEWING TIME: None
TYPE: Small Groups, Simulation, Digital Flipped Classroom

Overview:
The Emergency Medicine Boot Camp – Transition to Residency elective offers fourth-year medical students matching into emergency medicine the ability to enhance their critical thinking and clinical skills at the level expected of an incoming emergency medicine intern. With an effort to maximize our students' focus for successful preparation and transition into residency, this elective will review undifferentiated clinical presentations for common ED chief complaints, infuse in specialty-specific, basic science anatomy, physiology and pharmacology review, expand on the students' repertoire of procedural and clinical skills and allow for small group collaboration within the course and interdisciplinary collaboration with other specialty-specific capstone bootcamps. Elements of resident professionalism, wellness, time management and personal organization will also be addressed.

This elective course is offered to all Miami and Regional Campus emergency medicine bound students.

This Emergency Medicine Bootcamp elective is part of the larger Senior Capstone Courses focused on the Transitions to Residency educational initiative. While emergency medicine students can enroll in this course independently, the highest yield is if completed in conjunction and after the broader Senior Capstone Course: Transitions to Residency (MDR 1019).

Course Design:
- The course is two weeks in length and is a combination of didactic lectures, small group sessions, case based learning, procedural skills training and simulation with an emergency medicine focus. Flipped classroom and digital learning technologies will be incorporated into the sessions.
- Each student is expected to present at the end of the elective, on a short clinical topic related to the transition to emergency medicine residency in a microteaching format.
- An EM student wellness day, including a session on professional career goals, personal development and leadership is also part of the elective.

Objectives:
- Develop a framework for the ED workup of common undifferentiated emergency chief complaints, as expected for an EM intern
- Enhance advanced emergency medicine and critical care procedural and clinical skills, likely to be performed during an emergency medicine intern year
• Develop a basic understanding of point-of-care ultrasound for common ED diagnostic bedside uses
• Identify and address our students’ fears and concerns related to the transition into emergency medicine residency
• Allow students to further develop their preliminary career goals, personal life goals, wellness priorities and strategies for professional success in residency

Expectations:
• Students are expected to attend all lectures, small groups, procedural skills training, and simulation exercises within this course, be attentive and interactive during didactic lectures and small group exercises, and fully participate in procedural skills training and simulation based exercises.
• Students are expected to complete all assignments required, including pre-session assignments for Flipped Classroom learning.

Location:
University of Miami Miller School of Medicine – Miami Campus (100%)

Participating Faculty: Emergency Department Faculty

Prerequisite: Completion of Core Clerkships

Student Evaluation and Grading:
Grading will be Pass/Fail. Students will be assessed on the following:
• Attendance
• Completion of required assignments
• Active group participation
• Project presentation

Revised October 2019
<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>0900-1000</td>
<td>Course Orientation/Overview, Expectations</td>
<td>How to not kill a patient - rapid response, approach to an unstable/dying patient, when to call your senior/attending</td>
<td>Basic Ultrasound 101</td>
<td>End of Life Discussion</td>
<td>Trauma Patient - Trauma Pitcrew Primary/Secondary Survey</td>
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<tr>
<td>1000-1100</td>
<td>Review of Digital Resources</td>
<td>Undifferentiated Chest Pain</td>
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<tr>
<td>1100-1200</td>
<td>Role of the EM Intern / How to be a great EM resident</td>
<td>EKG's with cardiac anatomy review</td>
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<td>FAST Exam</td>
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<tr>
<td>Lunch</td>
<td></td>
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</tr>
<tr>
<td>1300-1400</td>
<td>Fears about EM Residency</td>
<td>Undifferentiated SOB</td>
<td>Undifferentiated Altered Mental Status</td>
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<td>Casting/Splinting/Reductions</td>
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<tr>
<td>1400-1500</td>
<td>EM Intern organization 101</td>
<td>ABC's of CXR</td>
<td>Acutely Agitated/Psychotic Patient with basic science review</td>
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<td>AAA/Gallbladder US</td>
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<tr>
<td>1500-1600</td>
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<tr>
<td>0900-1000</td>
<td>Advanced Airway - DL, Glidescope, LMA, Crico, Bipap</td>
<td>US guided lines - peripheral, U, femoral</td>
<td>Charting/Billing</td>
<td>Elective Project Presentations - EM Microteaching</td>
<td>EM Student Wellness Day</td>
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<tr>
<td>1000-1100</td>
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<td>High Risk Charts/AMA</td>
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<tr>
<td>1100-1200</td>
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<td>Finding/Developing your passion</td>
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<tr>
<td>Lunch</td>
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<td></td>
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</tr>
<tr>
<td>1300-1400</td>
<td>Ventilator Management 101</td>
<td>OB Emergencies</td>
<td>Cardiac Echo</td>
<td>Patient Satisfaction and Patient Experience</td>
<td>EM Leadership/Career Goals</td>
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<tr>
<td>1400-1500</td>
<td>Respiratory Physiology (basic science review)</td>
<td>Childbirth Simulation</td>
<td>Renal/Bladder US</td>
<td>Debrief/Feedback</td>
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<tr>
<td>1500-1600</td>
<td></td>
<td></td>
<td>OB US</td>
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</table>
# POINT OF CARE ULTRASOUND ELECTIVE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1036</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Jennifer Jackson, MD, FACEP; Leila PoSaw, MD, MPH, FACEP</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-7425 / 305-585-6992</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:j.jackson5@med.miami.edu">j.jackson5@med.miami.edu</a>; <a href="mailto:Leila.posaw@jmsmiami.org">Leila.posaw@jmsmiami.org</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Enid Khan (Holtz ET2169); 305-585-1280; <a href="mailto:EKhan@med.miami.edu">EKhan@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks (4 weeks with approval by course director)</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of Core Clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2 students (Block 1-3, 10-12), 1 student (Block 4-9)</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes, through VSAS only, block 1-3 only, only EM-bound students</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

## Overview:
This is an intensive 2-week elective (with option for 4 weeks), which will teach the senior medical student point-of-care, bedside emergency ultrasound. The medical student will gain knowledge and competency, through supervised and independent scanning with an ultrasound machine in the JMH Emergency Department, online modules, scholarly articles, image review and a final US presentation.

This elective is opened to students applying into all specialties of medicine, not just emergency medicine.

**Emergency Medicine SLOE’s (subspecialty SLOE) can be written based off this elective rotation for those applying to emergency medicine.**

## Course Design:
- 2 weeks duration. An additional 2 weeks may be added, with approval of the course director
- No call, no overnight shifts. Expected weekend and holidays shifts.
- No unexcused absences.
- The initial orientation on the first day cannot be missed.

## Goals/Objectives:
- Demonstrate proficiency with basic utilization of the ultrasound machine for optimized image acquisition (ex. Probe selection, depth, gain, measurements).
- Demonstrate proficiency through proper scanning technique and image interpretation for the following basic point of care ultrasound exams: E-FAST, abdominal aorta, cardiac, hepatobiliary, renal, and soft tissue.
- Develop an understanding of advanced point of care ultrasound exams, such as ocular, pelvic/OB, DVT, airway, lung, bowel, musculoskeletal.
- Develop basic understanding of the principles of ultrasound guided procedures.
- Facilitate the learning of other student and residents within small group discussions.
- Collaborate effectively with colleagues and other healthcare professionals in the care of the patient based on the point of care ultrasound findings.

## Location:
JMH ED (100%)
Participating Faculty: Emergency Department Ultrasound Faculty

Prerequisite: Completion of Core Clerkships

Expectations / Course Details:

Machines - Philips Sparq, Sonosite X-porte

Online Modules – EMSono, SUSME


Scanning Shifts – 8 total scanning shifts (per 2 weeks). Schedule is set in advance, fixed and predetermined for the student, based on faculty schedule and availability. Therefore, the length of the shifts will vary. Students will be expected to performed a minimum of 1 scan per hour.

Wednesday didactic meeting (SonoHangout) - Required

Professionalism

- Students will be expected to be on time to their scanning shifts.
- They will be expected to maintain a log and save images on a specified computer hard drive.
- They will be expected to wear a white coat and dress appropriately for the shift.
- They will be expected to be polite and respect patients and healthcare staff.

Scanning Proficiency – total 50 required and optional scans.

- Required (45 scans)
  - E-FAST - 15
  - AAA - 5
  - Cardiac - 10
  - Hepatobiliary - 5
  - Renal - 5
  - Soft Tissue / Abscess – 5

- Optional (5 scans)
  - Ocular
  - Pelvic/OB
  - DVT
  - Airway
  - Lung
  - Bowel
  - Musculoskeletal

US-Guided Procedural Proficiency

- Required (5)
  - USG Peripheral IV (5)

- Optional
  - Abscess I/D
  - Paracentesis

Theoretical Foundation

- Required 3 EMSono Modules – Physics/Introduction, E-FAST, Cardiac
• EMSono/SUSME Modules – choice of 3 from the remaining EMSono or SUSME modules per week for the remaining weeks of the rotation (3 additional modules for 2 weeks, 9 additional modules for 4 week elective)

Critical Analysis
• Presentation of one-two assigned scholarly articles at the Wednesday didactic meeting

Presentation Skills
• 1 Ultrasound Quality/Educational project - determined in conjunction with the course directors.

Student Evaluation and Grading:
Grading will be Pass/Fail. Students will be assessed on the following:
• Acquisition and review of required ultrasound images
• Completion of online modules
• Ultrasound Project
• Presentation of scholarly articles
• Professionalism

Visiting Students – Yes, through VSAS only, only Blocks 1-3, only EM-bound students

Revised October 2019
HCH EMERGENCY MEDICINE CLERKSHIP

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 990</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Dr. Nishma Sachedina</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>954-234-6587</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:rnishma.sachedina@gmail.com">rnishma.sachedina@gmail.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Maria Margarita Rodriguez, <a href="mailto:mmr230@med.miami.edu">mmr230@med.miami.edu</a>, 561-548-1557</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>6</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Schedule requests are due at least 2 weeks in advance of the clerkship. Up to 2 interviews will be accommodated. The following days absolutely cannot be missed or rescheduled: Orientation days, Sim Lab, and the Final Exam.</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Required/Clinical</td>
</tr>
</tbody>
</table>

Please contact Ms. Margarita Rodriguez a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and background checks that need to be done far in advance. There may be a costly fee for the background check.

NOTE: Information on the Emergency Medicine Clerkship waiver is available near the end of this document.

Overview:
The purpose of the RMC Emergency Medicine clerkship at Holy Cross is to provide students with an opportunity to acquire a foundation of knowledge and skills to care for patients with emergency medical conditions. Every physician should possess adequate assessment and management skills to rapidly identify life-threatening conditions, to initiate care, and to know whom and when to call for assistance. The Emergency Department is also one of the few practice sites where students play an integral role in the initial evaluation of an “undifferentiated” patient – where the diagnosis is completely unknown on initial contact, and the clinician must “start from scratch” to formulate a differential diagnosis, plan of evaluation, and plan of management. Experience in a wide range of procedural skills are also readily available including airway management, suturing, and central venous line placement. Students will participate in an EMS ride along, simulation cases, and independent learning modules. Students are evaluated through clinical evaluations, simulation performance, written assignments, online quizzes, and the written NBME examination.

A detailed syllabus will be provided. The EM rotation will include:
- Orientation, Procedure Labs, and Simulation Labs
- 12 Day and Night shifts in the HCH Emergency Room
- 1 eight-hour shift with an EMS crew
- Online quizzes: Full Code or Resuscitation App; weekly Blackboard Quizzes
- Online blog posts: Slack
- Synthesis on Shift (SOS), a mini note focused on medical decision making
- Observed Patient Encounter (direct attending observation)
- Clerkship shelf examination
Location: Holy Cross Hospital (86%), Oakland Park Fire Department (7%), Gordon Center/Jackson (7%)

Prerequisite: All Core Clerkships

Participating Faculty:
John Beach, M.D.
Emily Brauer, M.D.
Mark Caputo, M.D.
John Cunha, D.O.
Laura Eliseo, M.D.
Brandon Faza, M.D.
Jennifer Jackson, M.D.
William Korey, M.D.
Nishma Sachedina, M.D.
Gregory Schneider, M.D.
Taha Shaikh, M.D.
Karl Svoboda, M.D.
Ryan Taube, M.D.
R. Peter Thompson, M.D.
Micheal Uggucioni, M.D.
Robert Weber, M.D.

Scheduling/Attendance:
Specific shifts are assigned. Assigned shifts will include days, nights, holidays, and/or weekends. Accommodations may be made for no more than 2 interviews. Students must make up any missed shifts either during the rotation or within 4 weeks of its end. Orientation day (which includes skills labs), Sim Lab Day, and the last Friday of the rotation cannot be missed or rescheduled. Students are not allowed to swap shifts without prior approval from the Director. If you will be late for or absent from a shift, you are required to inform Dr. Sachedina.

Orientation: MANDATORY SESSIONS.
You will have 2 days of orientation. You will spend day 1 of orientation in Miami at the Gordon Center and RSMB. You will spend day 2 of orientation at Holy Cross Hospital. You must report to orientation at the indicated times as provided via pre-orientation emails.

REQUIRED ATTENDANCE:
Classroom:
- Gordon Center Airway Course (Day 1 Orientation, Miami)
- Suture Lab (Day 1 Orientation, Miami)
- Orientation Days (Day 1 Miami, Day 2 Holy Cross)
- Simulation Lab (Holy Cross Hospital)

Course Completion:
Students will be required to submit written materials (shift evaluations, procedure logs, core clinical chat topic write-ups, brief patient write-ups, and course evaluation forms) in order to complete the rotation. Any student encountering difficulty completing the procedure/patient care logs prior to the end of the 3rd week of the rotation, is required to meet with the Dr. Sachedina, the Director. All other documentation must be turned in within 5 business days after the rotation ends, or your grade will be submitted as an incomplete.

Revised December 2019
NOTE: ANY schedule changes involving ALL Family Medicine rotations, must be authorized by Gladys Cordero before your schedule can be officially changed.
FAMILY MEDICINE IN THE FLORIDA KEYS

COURSE CODE: MDR 816
CLERKSHIP DIRECTOR: Marie Denise Gervais, M.D.
TELEPHONE: 305-243-2953
EMAIL: gcordero@med.miami.edu
CONTACT: Gladys Cordero (HPG #420)
LENGTH OF ELECTIVE: 2 or 4 weeks (based on availability)
PREREQUISITE: Family Medicine Clerkship
NUMBER OF STUDENTS: Based on availability
AVAILABLE: Please contact coordinator for availability
U.S. VISITING STUDENTS: None
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: Students may ONLY enroll in this elective with prior authorization from Gladys Cordero.

NOTE: Housing is no longer routinely available. Please communicate with Gladys Cordero to see if housing is available. Enrollment in this elective is dependent on availability.

NOTE: ANY schedule changes involving ALL Family Medicine rotations must be authorized by Gladys Cordero (see above for contact information), before your schedule can be officially changed.

Overview:
Since late 1992, third year medical students have been given the opportunity to complete their Family Medicine rotation in the private office of physicians practicing in the Florida Keys. The popular rotation has prompted many students to request similar experience during the senior year.

Goals / Objectives:
1. To become acquainted with the spectrum of problems dealt with by a general medical practitioner in a relatively rural area.
2. To acquire a basic knowledge of the management principles of common health issues in general medical care.
3. To become familiar with managed care concepts and its effects on practice.
4. To develop an understanding of the concepts of continuity and coordination of care.

Course Design:
According to William Carlos Williams, it is the humdrum, day-in, day-out, everyday work that is the real satisfaction of the practice of medicine. In the elective, students are assigned to a generalist physician - usually a family physician - and remain with that physician throughout the elective. Students are expected to be actively involved in the daily process of private practice, office routine, and practice management. Students will participate in the care of patients and all the other professional aspects in which physicians engage: home visits, hospital and nursing home rounds, as well as the many health related activities that flourish in this relatively rural community.

Location / Participating Faculty:
Community Private Practice (100%)
Students may be assigned to physician practice sites ranging from Key Largo to Key West. Physicians participating in the senior elective have served as preceptors for the third year clerkship for many years and have attended faculty development programs presented by the Department of Family Medicine and Community Health. The physicians hold voluntary faculty appointments in the department.

The Florida Keys Area Health Education Center (FKAHEC) coordinates the students with the physician preceptors and provides student housing convenient to the practice site when available. (Housing is no longer routinely available. Please contact Gladys Cordero to see if housing is available.)

**Prerequisite:**
Family Medicine Clerkship

Reviewed December 2018
**FAMILY MEDICINE PRECEPTORSHIP**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 817</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Marie Denise Gervais, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-2953</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:gcordero@med.miami.edu">gcordero@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Gladys Cordero (HPG #420)</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Family Medicine Clerkship</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2 based on availability</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>Please contact coordinator for availability</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>None</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</tbody>
</table>

**NOTE:** Students may **ONLY** enroll in this elective with prior authorization from Gladys Cordero.

**NOTE:** ANY schedule changes involving ALL Family Medicine rotations must be authorized by Gladys Cordero (see above for contact information), before your schedule can be officially changed.

**Overview:**

Students taking the Family Medicine Preceptorship will have the opportunity to experience the true essence and diversity of Family Practice in an ambulatory setting and develop knowledge of the specialty. *Students are expected to participate with their family physician preceptor in all health care related activities. These may include but are not limited to: management of hospitalized patients, nursing home visits, home visits and volunteer activities.

**Location / Participating faculty:**

Community Private Practice (100%)

The student will work one-on-one with a family physician in solo or group practice in our community. The student will be assigned to a family physician in Broward or Miami-Dade County based on availability.

With prior authorization from the Dean’s office and the clerkship director; a student may be allowed to participate at a different site (i.e. another county or state, not on the specific clerkship list). However, the “student selected” physician must be a family physician. **Special requests need to be submitted at least 2 months in advance to be considered.**

**Prerequisite:**

Family Medicine Clerkship

Reviewed December 2018
**FAMILY MEDICINE SUB-I**

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<tr>
<th>COURSE CODE:</th>
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<tr>
<td>CLERKSHP DIRECTOR:</td>
<td>Marie Denise Gervais, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-2953</td>
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<tr>
<td>EMAIL:</td>
<td><a href="mailto:gcordero@med.miami.edu">gcordero@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Gladys Cordero (HPG #420)</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year EXCEPT for Block 7AB and 12AB</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

**NOTE: ANY schedule changes involving ALL Family Medicine rotations must be authorized by Gladys Cordero (see above for contact information), before your schedule can be officially changed.**

**Overview:**
The overall goal for the students taking Inpatient Family Medicine (Ward Family Medicine) is to afford them the opportunity to experience Family Medicine in an inpatient setting, and to develop some knowledge of the specialty.

**Course Design:**  
Subinterns are assigned to the Family Medicine Wards at Jackson Memorial Hospital and assume primary responsibility for patient care under close supervision provided by an assigned attending hospitalist.

Subinterns will attend grand rounds and specialty conferences. They participate in daily clinical activities such as morning reports, handoffs, and multi-disciplinary rounds. They take part in night and weekend calls every fourth night.

**Goals:**
1. To provide a clinical learning experience in family medicine in the hospital setting.
2. To enable students to learn some of the diagnostic and therapeutic techniques appropriate to Family Medicine.
3. To enable students observe the team approach to care of the hospitalized patient.
4. To enable students to view patients treatment and post-hospitalization care in the context of their families and community.

**Objectives:**
- Gather information through relevant and focused history taking
- Conduct directed and complete physical examinations
- Order appropriate tests and to effectively interpret results
- Engage in clinical reasoning, propose sensible differential diagnoses and formulate appropriate therapeutic recommendations
- Document encounters efficiently and accurately
- Effectively prioritize daily tasks for patient care
- Anticipate patient needs and organize discharge planning
• Ensure safe transition of care
• Demonstrate the understanding of the pathophysiology and natural history of human diseases
• Understand the interconnection and impact of cultural, psychosocial and environmental processes on disease manifestation
• Review and apply current literature and to place emphasis on the practice of evidence-based medicine
• Effectively communicate with the patient, his/her caregiver and with other physician and non-physician members of the healthcare system
• Efficiently coordinate multidisciplinary care through appropriate utilization of consultative and ancillary services
• Use information technology to access online medical information, review evidence from scientific studies and formulate appropriate management decisions
• Understand the risks and benefits of a procedure and to learn how to obtain informed consent
• Recognize the importance of quality improvement, risk management and to promote patient safety
• Maintain timely communication with primary care physicians, sub-specialists and consulting physicians
• Commit to excellence and to personal/professional growth through self directed learning; to perform evaluation of one's performance and develop plan for improvement

**Location:** JMH (100%)
The student will work on the Family Medicine inpatient unit at Jackson Memorial Hospital as a member of the ward team consisting of attending physicians and family medicine residents.

**Participating Faculty:**
Faculty from the Department of Family Medicine

**Prerequisite:**
Completion of all core clerkships

**Expectations:**
• The subintern is an integral part of the medical team and works under the close supervision of an attending hospitalist. He/she participates in the following aspects of patient care:
  o Initial evaluation (admission note, on service note…)
  o Daily management (progress notes, handoffs…)
  o Coordination of care with other specialties and ancillary services
  o Final Disposition (off service note, discharge planning, outpatient follow up…)
• The subintern carries 3-5 patients.
• The subintern participates in on-call duty which starts at 7:00 AM and ends at 7:00 AM the following day.
• On-call duty is every fourth night.
• On average, the subintern is allowed one day (24 hours) off per week. Therefore, on average, the subintern is working 6 days a week.
• The subintern will follow his/her assigned resident to the Family Medicine clinic on the afternoons that the resident is scheduled.

Reviewed October 2019
HUMAN GENETICS
GENETICS AND METABOLIC DISEASES

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 890</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Deborah Barbouth, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6048</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:DBarbouth@med.miami.edu">DBarbouth@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Chwanda ‘Nikki’ Frazier; 305-243-6056; <a href="mailto:c.frazier@med.miami.edu">c.frazier@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2 - <strong>Priority will be given first to MD/MS students followed by Genetics/Genomics Pathway students.</strong></td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical, with exposure to Genetics laboratories, if desired</td>
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Overview: This elective exposes students to diagnosis and management of a variety of genetic syndromes, heritable metabolic diseases, hereditary cancer syndromes, and other heritable disorders.

Course Design: During this elective, patients with genetic syndromes, chromosomal disorders, metabolic disease, and other Mendelian disorders are seen in the Mailman Center Metabolic and Genetics clinic, the Jackson Pediatric Genetics clinic, Weston clinic, Specialty Genetics Clinics at UM, and the Jackson Memorial Hospital wards. The specialty clinics include Cancer Genetics clinic, Muscular Dystrophy clinic, Fragile X clinic, Hearing loss clinic, Ocular clinic, and Prenatal Genetics clinic.

Goals/Objectives: Students will be exposed to and participate in the care of children and adults with genetic disorders and get a basic understanding of laboratory based diagnostic testing for these conditions.

Location: Mailman Center for Child Development (50%), Sylvester clinics (10%), JMH clinics (5%), Weston/Deering clinic (10%), and in-patients (25%).

Prerequisite: None

Expectations: The student attends lectures, seminars and participates in Journal Clubs and will gain exposure to a wide array of genetic problems in pediatric and adult patients.

For Genetics and Genomics Pathway Students Only: Students in the pathway may elect to continue their Genetics research elective if they have the approval of their research mentor. A senior student may concentrate on an ongoing research project involving clinical, stable isotope, cytogenetic, biochemical, cell culture, and recombinant DNA methods. It is also acceptable to do non-laboratory based clinical research. If the student elects to do research, planning should begin and permission granted before the elective time.

Student evaluations and grading: Students are evaluated based on performance in clinical activities, their medical knowledge based on their level of training, and patient/professional interactions. Four year pathway research is evaluated as part of the overall pathway curriculum.

- Knowledge of basic genetic principles and their application to determine the mechanism of heritable disorders of humans.
• **Skills** in pedigree development and analysis. Skills in Medical Genetic laboratory evaluations: newborn screening, biochemical analysis for inborn errors of metabolism, cytogenetic evaluations for malformations, prenatal diagnosis, and Molecular genetics analysis of Mendelian and complex inheritance. Skills in identification of common syndromes. Skills in relaying genetic information to patients and other family members.

• **Attitude** towards the use of the discipline of Medical Genetics for the prediction, intervention and prevention of premature morbidity and mortality.

Revised November 2019
MEDICAL EDUCATION / INTERDISCIPLINARY
CARING FOR THE COMMUNITY: FREE CLINICS ELECTIVE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 949</th>
</tr>
</thead>
</table>
| CLERKSHIP DIRECTOR:| Amar R Deshpande, MD (Director)  
|                    | Erin Kobetz, PhD (Co-Director) |
| TELEPHONE:         | Dr. Deshpande - phone: 305-243-4898  
|                    | Dr. Kobetz - phone: 305-243-6185 |
| EMAIL:             | adeshpande@med.miami.edu / ekobetz@med.miami.edu |
| CONTACT:           | Raysa Christodoulou (rchristodoulou@med.miami.edu) |
| LENGTH OF ELECTIVE:| 2 clinical credits gained by attending 18 clinic sessions or equivalents spread across clinical years 3 and 4 |
| PREREQUISITE:      | Successful completion of the first two years of the medical curriculum with promotion to the third year |
| NUMBER OF STUDENTS:| 40 students in total over years 3 and 4, no visiting students |
| AVAILABLE:         | Continuous during years 3 and 4 (all blocks) |
| INTERVIEWING TIME: | Not applicable |
| TYPE:              | Clinical |

**NOTE –** Students must sign up prior to the start of their junior year, based on availability selections will be made by the first day of their junior year. There may be a required submission of CV and a paragraph explaining why this elective is important to you at the discretion of the course directors.

**NOTE –** Students will receive credit for clinic sessions only while active in an MD degree track; they will not receive credit for sessions attended while on Leave of Absence (research, personal) or during time working on additional degrees (MBA, PhD, etc not including combined MD/MPH degree)

**Overview:**
This elective provides an opportunity for third and fourth year medical students to provide clinical care at student-run free clinics while advancing their knowledge of the social determinants of health and the barriers that uninsured patients encounter in obtaining preventive, primary, and specialty medical care. This elective will provide medical students with engaging clinical experience that will prepare them to more effectively advocate and care for underinsured patients.

In addition to their clinical roles, students will be actively involved as both teachers and learners. Working under the direct supervision of physicians, students will participate in training and educating volunteer underclass students by leading clinical care teams and conducting wrap-up sessions at the end of each clinic session. To prepare them for their educator roles, students will receive didactic training outside of clinic on various topics pertaining to teaching skills and the social determinants of health.

This longitudinal experience provides students the opportunity to receive two weeks of elective credit by completing the required didactic sessions and at least 18 clinic sessions or equivalents as described that may be scheduled over the course of ~21 months during years 3 and 4.

The Free Clinics elective is available to all students; consideration will be given to those third and fourth year students in the Jay Weiss Pathway in Social Medicine but this is not a guarantee.
Course Design:
In order to receive credit for this elective, students must attend at least 18 sessions at the free evening clinics held every week at the Center for Haitian Studies (CHS), San Juan Bosco (SJB), or Infectious Disease Elimination Act (IDEA) clinics or at the Caridad Clinic in Palm Beach held a few Saturdays per semester. Patients in these free clinics are assessed by a team of medical students, working under the direction of a physician. Students on this elective serve as team leaders, supervising both a first and second year medical student who, as a group, conduct a history and physical examination of clinic patients and then discuss possible management plans. The team of students then presents the patient to the supervising physician and formulates a management plan. Subsequently, the student team sees the patient with the physician and together a management plan is finalized. Elective students work with the physician to ensure that all components of the management plan are adequately addressed and documented including communication with the patient.

At the end of each clinic session, the elective student conducts a wrap-up session with the care team, emphasizing important issues encountered and reviewing management plans, all in the context of providing care in a resource-poor environment. The elective student is also required to complete an online reflective evaluation for practice improvement at the end of each session, the purpose of which is to serve as a record of attendance and also to identify individual strengths and weaknesses regarding leadership and teaching ability, clinical knowledge, and clinical skills.

Students may replace up to 6 clinic sessions by working at the DOCS health fairs; one full day at a health fair counts for 2 clinic sessions.

Students must also attend at least 3 approved didactic sessions designed to address topics related to community-based free clinics and the resources and considerations required to effectively meet the medical needs of disadvantaged communities. The didactic sessions are conducted by various faculty recruited by the course directors from the clinical departments and the Department of Public Health Sciences. Another (4th) required session is electronic health record training. All elective students must also complete all of the modules on caringwithcompassion.org, a website with learning cases focusing on health care for at-risk populations.

1 required session at beginning of MS3 year
- Electronic health record (PracticeFusion) training
3 other didactic topics over MS3/MS4 years (examples)
- Social determinants of disease
- Community health resources
- How to use clinical guidelines and best practices to optimize quality of care
- Age-specific prevention and screening
- Health education and literacy
- Managing chronic illness

Required online learning
- All modules on caringwithcompassion.org

Goals:
- Provide students with experience providing preventive, primary, and specialty care in free student-run clinics serving the diverse medically underserved populations of Miami-Dade and Palm Beach counties.
- Enhance the clinical and patient management skills of students.
- Learn to navigate the complex and limited “system” of care available to medically underserved patients.
- Learn about the social determinants of health and disease.
- Develop skills as a mentor, team leader, and educator.
Objectives:
This elective will help students improve their clinical competency and leadership skills while providing them with an opportunity to learn about community health and primary care. The objectives of this elective rotation are:

- Develop a more comprehensive understanding of community health and the social determinants that contribute to health disparities.
- Learn to more effectively navigate the health care system by observing how insurance policy, qualifications, and other barriers may prevent patients without insurance from accessing health care.
- Develop an understanding of the community resources available to those without insurance to become an effective patient advocate and help patients gain access to needed care.
- Gain experience practicing medicine in a resource-poor setting by limiting diagnostic procedures and treatments to those that are the most cost-effective and feasible given financial limitations.
- Gain experience in providing primary care, including preventive and screening services.
- Gain a deeper appreciation for continuity-of-care and the nature of a long-term patient-physician relationship by participating in the care of patients in a primary setting over the course of 2 academic years.
- Gain a deeper appreciation for continuity-of-care and the nature of a long-term patient-physician relationship by participating in the care of patients in a primary care setting over the course of ~21 months.
- Gain clinical experience in the assessment and management of chronic illnesses.
- As the student leaders of a medical team, acquire effective skills and experiences teaching and mentoring younger medical students.
- Observe the administrative operations of a student-run medical clinic and health fair.
- Support the represented clinics in their mission to provide free health care to uninsured patients.

Location:
The free clinic elective clinical experiences will take place in:

- CHS Clinic (Monday evenings)
  8260 NE 2nd Avenue
  Miami, FL 33138

- SJB clinic (Tuesday evenings)
  730 NW 34th Street
  Miami, FL 33127

- IDEA clinic (Thursday evenings)
  1636 NW 7th Avenue
  Miami, FL 33136

- Caridad clinic (a few Saturday mornings each semester)
  8645 W Boynton Beach Blvd
  Boynton Beach, FL 33472

The wrap-up sessions are conducted in the community clinics at the end of each clinical session. The didactic sessions are on the medical campus, specific location determined by the Jay Weiss Pathway in Social Medicine.

Participating Faculty:
All of the free clinics are supervised by UMMSM faculty and housestaff who volunteer their time at these evening sessions. The majority of attendings are full-time faculty; there are also a few community physicians with active voluntary faculty appointments who occasionally supervise in the clinic.
The didactic sessions will be conducted by various faculty recruited by the course directors from the clinical departments and the Department of Public Health Sciences.

**Prerequisite:**
Successful completion of years 1 and 2 with promotion to 3rd year

**Expectations:**
Clinical Experience: Students will commit to volunteering for a minimum of 18 clinic sessions during their third and fourth years at the following clinics:
- CHS clinic on Monday nights
- SJB clinic on Tuesday nights
- IDEA clinic on Thursday nights
- Caridad clinic a few Saturday mornings each semester

At least 9 of the clinic or health fair sessions must be done by the end of 3rd year.

Students must attend at least 3 didactic sessions, in addition to the electronic health record training. They must also complete all modules on caringwithcompassion.org.

Students will conduct wrap-up team discussions at the end of each clinic night and complete a reflective evaluation of the clinic session that will serve as a record of their attendance.

The clinic staff will make the course directors aware of any student who does not meet appropriate professionalism and clinical standards as outlined in the Medical Student Rights and Responsibilities Handbook. After a 2nd infraction, the student will have to meet with Dr. Deshpande to discuss the issues with rights reserved to remove the student from the elective without credit.

**Student Evaluation and Grading:**
The Free Clinic elective is graded Pass/Fail and worth 2 credits.
Students will be evaluated using the following methods:
1. Attendance at the required number of clinic and health fair sessions, including facilitating a team discussion at the end of each session
2. Attendance at the required didactic sessions
3. Completion of a reflective evaluation for practice improvement at the end of each clinic session or health fair
4. Absence of significant professionalism issues
HOSPITALS, HEALTH CARE SERVICES AND ACCESS: AN INTERDISCIPLINARY INQUIRY

(An interdisciplinary course in collaboration with the Schools of Law, Medicine, Nursing & Health Studies, Business Administration, Architecture, and Education and Development, and the Departments of Public Health Sciences, Anthropology, and Geography)

COURSE CODE: MDR 837
COURSE DIRECTOR(S): Alex J. Mechaber, MD
TELEPHONE: 305-243-0496
EMAIL: AMechabe@med.miami.edu
CONTACT: Dr. Mechaber
LENGTH OF ELECTIVE: 8 Saturday seminar sessions during Spring 2018
(Required to attend at least a total of 6 sessions; including the first and the last two modules of the course)
(counts as a 2 week elective)
PREREQUISITE: None
NUMBER OF STUDENTS: 8 (additional students possible depending on student registration from other Schools/Colleges)
AVAILABLE: Saturdays Spring 2019
U.S VISITING STUDENTS: No
INTERVIEWING TIME: Not Applicable
TYPE: Seminar course

Overview:
The healthcare services landscape is shifting. Hospitals, which were the foundation of American healthcare, are having to reconfigure their organizations and services. Satellite offices, acute care locations, and even pharmacies are offering more services to increasingly stratified patient consumers. This interdisciplinary course offers graduate students across the University the opportunity to examine closely the complexity of today’s health care services and the necessarily multiple perspectives from which we view, think, and work in healthcare settings.

Course Design:

Schedule:
Over the course of the semester, students are required to attend six full day Saturday classes: The first class on January 25, three (of five possible) additional Saturday classes (Feb. 01, Feb. 8, Feb. 15, Feb. 22, Feb. 29); and two final classes on March 21 and March 28).

All students are required to attend the FIRST and the LAST TWO full-day modules of this seminar course.

Time and Location: 9:00 am to 4:30 pm, Saturdays as indicated above
Law Library, Faculty Meeting Room, 4th floor for all sessions. (please note: the Law Library opens at 8:30 am on Saturdays).

Breakfast and lunch provided at all sessions
If you have a parking tag for any UM lot, you will be able to park in any Coral Gables campus lot (including purple) on Saturdays. Please let me know if you do not have a UM parking tag and need to park on campus.

Goals/Objectives:
Specific goals/objectives of each of the modules will be available at a later date

Participating Schools/Departments
Organized, coordinated and sponsored by the Law School, the course will be taught by University of Miami professors from the following:

- College of Arts and Sciences: Geography Department
- College of Arts and Sciences: Anthropology Department
- School of Architecture
- Business School
- School of Law
- Miller School of Medicine: MD program
- Miller School of Medicine: Department of Public Health Services
- School of Nursing and Health Studies
- UM Institute for Bioethics and Health Policy
- Graduate students from any of these schools are permitted to take the course.

Prerequisite:
None

Expectations:
Each Saturday am and pm session will have readings assigned and made available to the students in PDF documents. Students are expected to read the papers prior to the class. The final grade will be based on a group presentation (with PowerPoint slides) of a case study. The course contact will assign students into interdisciplinary groups of approx. 3 students based on the sessions they will be attending.

Student Evaluation and Grading:
As in all senior electives, grading is Pass/Fail. All students will be required to attend at least six out of the eight modules. Students will attend the first and the last two full day modules as mandated in addition to 3 other full day modules.
Satisfactory completion of the presentation along with attendance at 6 of the 8 modules will result in two weeks of academic credit.

Contact Information:
For more information on this course, please contact: Sandy Abraham, Executive Liaison for Interdisciplinary Programs and Initiatives, sabraham@law.miami.edu, 305-284-4030.

Topics and Presenters:
January 25: Opening Session: (required for all students)
Setting the Stage; Healthcare Services and Access
9:00 am to 4:00 pm, Law Library, Faculty Meeting Room, 4th floor
- President Julio Frenk: Mexico and the U.S.: Delivering Health Care in Highly Stratified Societies, Trends and Predictions (9:30 to 10:30)
- Movie and Class Discussion: (10:45 to 12:15 p.m.)
- Power to Heal: a documentary describing how the implementation of Medicare was used to mount a momentous effort to desegregate hospitals
- Dean Laura Kohn-Wood, School of Education and Human Development will lead a class discussion afterward
- Lunch: 12:15 to 1:00 p.m.
• Presentation of several projects/studies related to health care disparities and access (1:00 to 3:30 pm):
  • Assignment of case studies (3:30 to 4:00 pm)
  • Questions and Wrap-Up

February 01: Health Care for Whom?
• A.M.:
  Professor Gabriel Scheffler, Associate Professor of Law
  TOPIC: TBD
• P.M.:
  Professor JoNel Newman, Professor of Clinical Legal Education & Director, Health Rights Clinic
  Melissa Swain, Associate Director & Clinical Instructor, Health Rights Clinic
  Access and Outcomes: Populations Left Out Of Care and Medical-Legal Partnerships

Feb. 8: Health Care Services in Global and Local Settings
• A.M.:
  Professor Alberto Cuban-Martinez, Asst Professor, Division of Environmental and Public Health Sciences, Miller School of Medicine
  Health Risks and Access to Health Care Services in Different Occupations
• P.M.:
  Professor Justin Stoler, Associate Professor, Geography, College of Arts and Sciences
  How does a geographic approach help us maximize access to health care?

Feb. 15: The Challenges Faced by Hospitals
• A.M.:
  Ken Goodman, Professor, Institute of Bioethics and Health Policy
  The Ethics of Health Care
• P.M.:
  Professor Joseph DeSantis, Professor, School of Nursing
  The Role of Nursing in the 21st Century

Feb. 22: The Environment of Health Care: Economic, Social and Built
• A.M.:
  Professor Steven Ullmann, Professor and Chair, Department of Health Sector Management and Policy; and Director, Center for Health Sector Management and Policy, School of Business Administration
  Health Care in a High-Tech World: Economic and Social Implications
• P.M.:
  Professor Joanna Lombard, Professor School of Architecture
  The Hospital Building as an Institution

Feb. 29: Patients: How Do They Obtain Care
• A.M.:
  Dr. Ana Palacio, M.D., M.P.H., Department of Public Health Sciences, Miller School of Medicine
  Big Data and Population Health Approaches to Improve Quality of Care
• P.M.:
  Dr. Olveen Carrasquillo, Chief, Division of General Internal Medicine, Dept. of Medicine
  How to Achieve The “Triple Aim” of Healthcare: Access, Quality and Low Cost

March 21: Final Case Study Presentations (required for all students)

March 28: Final Case Study Presentations (required for all students)

Revised November 2019
MEDICAL-LEGAL PARTNERSHIP

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 966</th>
</tr>
</thead>
</table>
| CLERKSHIP DIRECTOR: | Pat Caralis (p.caralis@med.miami.edu)  
Ed Olsen (EOlsen@med.miami.edu) |
| TELEPHONE: | 305-575-3160 or 305-212-4202 (PAGER) |
| EMAIL: | see above |
| CONTACT: | Pat Caralis |
| LENGTH OF ELECTIVE: | 2/4 weeks |
| PREREQUISITE: | Internal Medicine and Surgery Clerkships  
For Health Law Pathway Students, PreRequisites may be waived |
| NUMBER OF STUDENTS: | 1 |
| AVAILABLE: | Available ONLY Blocks 3B-11B |
| U.S. VISITING STUDENTS: | Yes |
| INTERVIEWING TIME: | No |
| TYPE: | Clinical |

It is mandatory you contact one of the course directors two weeks prior to your start date to make arrangements for your rotation.

Overview:
Medical-Legal Partnership clinic presents issues of health in the broader social context of people's lives, providing knowledge and skills from both disciplines to the advancement of health through joint medical-legal advocacy and interdisciplinary solutions to complex problems.

During the course, students from medicine will be partnered with various mentors to focus on basic legal issues in the context of medical care. They will have the opportunity to work in unique clinical experiences which focus not only on medical care of actual patients but also on broader policy issues that affect public health. They will have an opportunity to work with the Child protection Team, Justice Outreach with the Veterans courts, Human Trafficking and Asylum clinics and Mental Health In- Hospital program to learn how medical expertise works with hospital regulations and laws to impact on health outcomes of the public. They will also participate in the medical-legal clinics with law students as medical “experts” to work together to advocate for patients by the elimination of social determinants that adversely affect patient health such as income and employment, housing, education, legal status, and personal safety. The Medical-Legal clinic at the Miami Veterans Administration Medical Center (inter disciplinary with Medical and Psychiatric attendings), will allow students to use their clinical skills and learn about the complex intersection of health and law. There they will develop insight into how the law may be used as a tool to improve health, and how health care providers and lawyers can work together to invoke more effective and preventive remedies for patients and clients.

Course Design:
Medical students will be partnered with Medical Attendings in various programs, including the medical clinics alongside Medical Residents, Forensic Psychiatry fellows and Medicine and Psychiatry Attendings seeing patients in the clinic. In clinic, they will evaluate patients from the perspective of their individual discipline and formulate a comprehensive management plan for their patients. Students will be seeing cases which include capacity assessments, disability evaluations, advance care planning (living wills, powers of attorney), restoration and termination of rights, confidentiality requirements, poverty and benefits applications, asylum and health status. Additionally, students will rotate to the different clinical sites: Child Protection Team, Veterans Court, Mental Health Forensic Psychiatry clinics, JMH Human Trafficking/Asylum clinics. They will attend weekly interdisciplinary sessions at the Miami VHS that where they will have the opportunity to review
current cases, including veteran benefits assessments and Social Security Disability. They will have the opportunity to attend a session at the Juvenile courts, Mental Health courts (Voluntary/Involuntary treatments), and Social Security Disability hearings. They will have the opportunity to practice their clinical skills to include expert witness and deposition techniques, where they will act as the physicians.

Additionally, each student can be expected to be assigned topics, based on their cases, which they will present during their rotation. They will be responsible for the research and presentation. Because of the shortened length of their rotation, students may not be able to accompany patients at any court hearings, but they would be welcome to attend and participate in the development of the advocacy issues for their patients. The lawyers represent these patients in various courts, and will be able to share with the involved medical students the conclusions of any hearings.

*Dates and times subject to confirmation and possible change.

**ROTATION SCHEDULE**

<table>
<thead>
<tr>
<th><em>On first day of rotation report to Dr. Caralis at VA hospital Rm B1039 8:30 AM</em></th>
<th><strong>MONDAY</strong></th>
<th><strong>TUESDAY</strong></th>
<th><strong>WEDNESDAY</strong></th>
<th><strong>THURSDAY</strong></th>
<th><strong>FRIDAY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Report to Miami VA Dr. Delgado to go to the Broward Veterans court</td>
<td>1- Report to Dr. Lambert &amp; the Child Protection Team located at 212 Professional Arts Bldg. 305-243-7550 2- Report to University of Miami School of Law to Professor JoNel Newman/Melissa Swain at 1:30 PM</td>
<td>1-Report to Miami VAMC Blue Clinic on 1st Floor for Med-Law clinic at 9 AM 2-Report to VA Infection Control office A1010</td>
<td>Mental Health Forensic Psychiatry</td>
<td>Report to Dr. Caralis at VA hospital Rm B1039</td>
<td></td>
</tr>
<tr>
<td>9:00AM-12N</td>
<td>Broward Veterans Court</td>
<td>Child Protection Team</td>
<td>VA Med Law clinic-Drs. Caralis/Olsen</td>
<td>Mental Health In-Hospital/clinics Report to 4th floor MVHS</td>
<td></td>
</tr>
<tr>
<td>12N-1:30 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:30-4:00 PM</td>
<td>Broward Veterans Court</td>
<td>Human Trafficking/Asylum clinic ET JMH</td>
<td>Research Topic Presentation</td>
<td>Dr. Caralis MVAMC-Hospital Administrative &amp; Ethics Committee.</td>
<td>Research Day</td>
</tr>
</tbody>
</table>

1. **ASSIGNMENTS**: In order to enhance your experience by maximizing the attending attention you will get in the specialty services you have been assigned this schedule. ALL CHANGES (including scheduling interviews) MUST BE PRE-APPROVED**PLEASE NOTE THAT CLINICS ARE CLOSED ONLY ON OFFICIAL SCHOOL HOLIDAYS. Absence without permission will result in appropriate actions by the supervisors.
2. **CURRICULUM FOR ROTATION**

   a. **Veterans Court** - You will attend with Dr. Delgaldo the intakes and review cases that are presented to the Veterans courts, including criminal charges. The medical interface with the legal system includes substance abuse, mental illness, PTSD.

   b. **Child Protection Team** - You will attend with Dr. Lambert the evaluation of children referred to the team for possible abuse and also dependency hearings.

   c. **VA Medical legal clinic** - You will attend with Drs. Caralis and Olsen and do medical evaluations of patients self-referred for legal issues which impact their medical health. Cases will include capacity assessments, disability examinations, evaluations for VA benefits, advance directives and permanency planning, landlord tenant issues, family issues (domestic violence).

   d. **Infection Control Team** - You will attend with Dr. Baracco the infection control Team and their role in evaluating hospital issues and setting policies which impact patients, providers and hospital procedures.

   e. **UM Law School** - You will attend the Law school and review cases as “expert Medical providers” and interact with the Law school students and faculty, Professors Newman and Swain who will be providing legal representation for real clients.

3. **SPECIAL PROJECTS**: During your 2 week elective you will also have the opportunity to attend one of 2 hospital committee meetings with Dr. Caralis and/or the Chief of Staff of the Miami VAMC, Dr. Marcia Williams, the Medical Executive committee, The Ethics Consult committee, where you will be able to observe how hospital issues and policies are reviewed and set. This will provide you the opportunity to see how hospitals are run and what a broad range of issues occur.

**Goals:**
1. Establish a foundation in medicine and law in health care for subsequent clinical experiences.
2. Build on basic issues in medicine and law that students will encounter in their future endeavors as practitioners of medicine and law.
3. Teach students about the collaborative relationship between medical ethics and law and professional identity formation.

**Objectives:**
1. Students will develop interdisciplinary strategies for medical and legal decision-making to approach clinical problems and issues.
2. Identify appropriate resources (books, relevant journal articles and case law that deals with the topic).
3. Experience opportunities for collaboration of medicine and law.

**Location:**
- Medical Campus (clinics) and Law School (Coral Gables) Campus (for lectures although faculty anticipate a rotation between campuses)

**Participating Faculty:**
- Medical school and law school faculty

**Prerequisite:**
- Internal Medicine and Surgery core clerkships
- PreRequisites may be waived for students in the Health Law Pathway

**Expectations:**
- The students will be expected to attend and participate in all clinics and complete written assignments on time. The rotation coordinator will be informed of all unavoidable absences and reserves the right to not assign full credit for the course. Professionalism as mandated by the Schools of Medicine and Law is expected.

**Student Evaluation and Grading:**
Students will be evaluated on a pass/fail basis based upon:
1. Attendance to all mandatory sessions (clinics, court sessions, Specialty rounds)
2. Assigned Team presentation

Revised January 2016
PROFESSIONAL DEVELOPMENT FOR MEDICAL STUDENT LEADERS

**COURSE CODE:** MDR 939

**CLERKSHIP DIRECTOR:** Alex J. Mechaber, MD

**TELEPHONE:** 305-243-0496

**EMAIL:** amechabe@med.miami.edu

**CONTACT:** Dr. Alex J. Mechaber

**LENGTH OF ELECTIVE:** 5 seminar sessions in July
Plus organizational responsibilities throughout the year
(2 weeks credit given)

**PREREQUISITE:** Leadership position in Academic Societies (director, assistant director, or executive staff, training directors), DOCS, or Student Government Executive staff
Other interested students only with approval from Dr. Mechaber

**NUMBER OF STUDENTS:** 50

**AVAILABLE:** Offered one time each year, starting in July, ending in March
(2 week credit time can be placed anytime during the months listed)
You must attend ALL 5 seminars in July to receive credit

**U.S. VISITING STUDENTS:** None

**INTERVIEWING TIME:** None

**TYPE:** Didactics and group exercises

**Goals / Objectives:** To learn:
1. Learning styles and Kolb’s cycle of learning
2. How teams function and succeed
3. Leadership styles and effectiveness
4. Effective teaching techniques
5. Mentoring and giving feedback

**Course Design / Expectations:**
1. Students must hold a leadership position within the Academic Societies (as a society director, assistant director, a member of the society executive staff, or training director), DOCS, or Executive Student Government staff.
2. The course will span the senior year, from July through March.
3. During the month of July, assigned readings, didactic sessions, and group exercises will be offered during evenings and weekends; students will need to be available to attend ALL of these sessions in July in order to receive the 2 weeks of academic credit.
4. These activities are designed to teach the fundamental aspects of teamwork, leadership, teaching and learning, and mentoring.
5. Throughout the year, students will be responsible for fulfilling the obligations of their specific position within the student organization.
6. Students in Academic Society positions will attend their society training and student report sessions to apply the information learned in the didactic sessions and will complete exercises to evaluate and improve their skills in these areas.
**Student Evaluation and Grading:**
By completing a combination of assigned exercises, attending all scheduled seminar sessions, and fulfilling student leadership responsibilities, each student will receive 2 weeks of elective credit.

**For credit, attendance is **REQUIRED** for **ALL** summer sessions in July.**

Reviewed November 2018
# SENIOR BOOT CAMP: TRANSITION TO RESIDENCY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1019</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Drs. Gauri Agarwal and Paul Mendez</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-886-1202</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito, <a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>, 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of core required M3 clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>50 (maximum per class)</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>10B (March 30 – April 12)</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>No</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical Simulation</td>
</tr>
</tbody>
</table>

## Overview:
The Senior Boot Camp offers fourth-year medical students an opportunity to review and hone core concepts, diagnostic/therapeutic algorithms, procedural skills, and communication tools in preparation for the internship year. This is an elective course offered to a maximum of 50 students.

## Course Design:
- The course is two weeks in length and is a combination of didactic lectures, small group sessions, team building exercises, procedural skills training, paper cases and simulation based exercises. A self-evaluation survey will be offered at the beginning and end of the course. An objective structured clinical examination will take place at the end of the course in order to provide feedback on student preparedness for internship.
- A sample schedule is provided at the end of this course description.

## Goals:
- The goal of this course is to ensure students have learned the knowledge, skills and attitudes necessary to be prepared for internship year.
  - The course will utilize the AAMC Core Entrustable Professional Activities (EPA) for Entering Residency to form the foundation of the course content. Components of the following EPAs will be discussed within the course:
    - Recommend and interpret common diagnostic and screening tests
    - Enter and discuss orders/prescriptions
    - Document a clinical encounter in a patient record
    - Provide an oral presentation of a clinical encounter
    - Form clinical questions and retrieve evidence to advance patient care
    - Give or receive a patient handover to transition care responsibility
    - Collaborate as a member of an interprofessional team
    - Recognize a patient requiring urgent or emergent care and initiate evaluation and management
    - Obtain informed consent for tests and/or procedures
    - Perform general procedures of a physician
    - Identify system failures and contribute to a culture of safety and improvement
  - Discuss the workload and pace of internship year and review key elements of time management, resident wellness, risk management and financial management.
  - Discuss strategies for maintaining professionalism and empathy in a rigorous work environment.
Objectives:
- At the end of the course, students will be able to:
  - List differentiating features and the key steps in diagnosis and management of several medical emergencies such as chest pain, mental status changes, shortness of breath and hypoxemia, fever, hypotension and hypertension, tachycardia and arrhythmias, acute kidney injury, electrolyte abnormalities, and hypo/hyperglycemia.
  - Demonstrate the ability to diagnose and manage selected emergent conditions in the setting of paper and simulated cases.
  - Demonstrate procedural competency in: intravenous access, phlebotomy, airway management and CPR.
  - Demonstrate the ability to interpret the following diagnostic tests: ECG, CBC, CMP, Lipid panel, Arterial blood gas, Cardiac Enzymes, Microbiologic Cultures, STD testing, HgBA1C, Urinalysis, Body fluid analysis (CSF, peritoneal and pleural).
  - Discuss key strategies for avoiding burnout and maintaining wellness during residency.
  - Demonstrate in small groups/role play the ability to call a consult, write an appropriate sign-out, deliver a verbal patient handoff, communicate with team members in a code, discuss end of life wishes with patients and families, perform a death notification, medical error disclosure, obtain informed consent, perform concise oral presentations, and educate students on a teaching team.
  - List time and financial management strategies, elements of malpractice, and reasons to notify risk management.
  - Discuss key strategies to maintain empathy, professionalism, and the skills of life-long learning during residency.

Location:
Gordon Center for Research in Medical Education, University of Miami.

Participating Faculty:
Core Faculty: Gauri Agarwal, M.D., F.A.C.P. and Paul Mendez, M.D., F.A.C.P.

Prerequisite:
Completion of core required M3 clerkships

Expectations:
- Students are expected to attend all lectures, small groups, procedural skills training, and simulation exercises within this course, be attentive and interactive during didactic lectures and small group exercises, and fully participate in procedural skills training and simulation based exercises.
- Some of the small group exercises will require preparatory reading.

Student Evaluation and Grading:
- The medical student will receive verbal feedback during small group exercises, procedural skills training, simulation exercise debriefs and an evaluation of their OSCE performance at the end of the course.
- Pass/Fail dependent upon attendance, participation, professionalism, and clinical skills.
Week One:

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-10:00</td>
<td>Lecture: Course Introduction/Self Evaluation</td>
<td>Lecture: Emergent Cardiac conditions</td>
<td>Lecture: Hyperglycemia</td>
<td>Lecture: Fever</td>
<td>Lecture: Emergent Respiratory conditions</td>
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<tr>
<td></td>
<td>Lecture: Professionalism in Internship year</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>10:00-12:00</td>
<td>Small Group: Burnout/Wellness &amp; Time Management</td>
<td>Procedure Lab: IV/Phlebotomy &amp; Megacode</td>
<td>Simulation Cases</td>
<td>Simulation Cases</td>
<td>Small Group: Communication Skills: Calling a consult/Consenting a patient/Death Notification</td>
</tr>
<tr>
<td>12:00-13:00</td>
<td>IPE Intro</td>
<td>Intern Panel</td>
<td>IPE Panel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13:00-15:00</td>
<td>Lecture and Simulation: IPE Team STEPPS/Patient Safety</td>
<td>Simulation Cases</td>
<td>Pager Exercise/Surgical Skills Lab</td>
<td>Independent Study: Intro to ECG Course/Essential ECG</td>
<td>Procedure Lab: Airway Management</td>
</tr>
<tr>
<td>15:00-17:00</td>
<td>Small Group: End of Life Discussions/Family meetings</td>
<td></td>
<td></td>
<td>Simulation Cases</td>
<td></td>
</tr>
</tbody>
</table>
### Week Two:

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-10:00</td>
<td>Lecture: Shock</td>
<td>Lecture: Altered Mental Status</td>
<td>Lecture: Acute Ischemic Stroke/Intracerebral Hemorrhage</td>
<td>Lecture: Renal Failure and Electrolyte Abnormalities</td>
<td>&quot;Take Home Points&quot;</td>
</tr>
<tr>
<td>10:00-12:00</td>
<td>Small Group: Pain Management</td>
<td>Small Group: Medical Error/Patient Disclosure</td>
<td>Small Group: Sign-outs/Handoffs Presenting on rounds</td>
<td>Simulation Cases</td>
<td>Lecture: Maintaining Empathy/Skills of Life Long learning</td>
</tr>
<tr>
<td>12:00-13:00</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>15:00-17:00</td>
<td>Simulation Cases</td>
<td>Simulation Cases</td>
<td>Simulation Cases</td>
<td>Small Group: Learning to teach your team</td>
<td></td>
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</table>

Revised October 2019
RMC MEDICAL EDUCATION ELECTIVE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1009</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE DIRECTOR:</td>
<td>Daniel Lichtstein, MD &amp; Gauri Agarwal, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-886-1202</td>
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<tr>
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</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito; 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>5 mandatory July Seminar Sessions and teaching activities throughout academic year. 2 weeks credit will be granted. Students must complete activities and project by March 1, 2021.</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships. All students must email Dr. Agarwal directly by May 1, 2020 for permission to take the elective as well as a one paragraph description of the student’s motivation and goals for taking the elective.</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>15</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>Four required seminars must be attended in June and July. Remaining course requirements can be completed throughout academic year up until March. (2 week credit time can be placed anytime during the months listed) <strong>You must attend ALL 4 seminars to receive credit</strong></td>
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<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>None</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Education Elective</td>
</tr>
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</table>

Overview
This elective is grounded in the University of Miami Miller School of Medicine MD/MPH track course work. It offers students who are interested in medical education the opportunity to become familiar with what is required to build and maintain a medical curriculum as well as hone their educational skills in the classroom and clinical setting.

The MD/MPH curriculum is able to provide an excellent environment for learning about medical education as it incorporates both problem-based learning and didactic lectures on the Miami campus as well as integrated and traditional clerkship models at the regional campus. This elective will allow senior students the opportunity to gain further insight into the overall goals of medical education and receive a well-rounded immersion in the areas of teaching and curriculum development.

Course Design
Students will work directly with a curriculum dean of the MD/MPH program throughout the academic year. There will be a set of core objectives that all students must complete that includes the following:

1. Attend all required Seminars. **This is a core mandatory component and students that are on externship at this time will not be able to take this elective.** Seminars will be held in the evening in order to facilitate attendance after daily clinical activities.
2. Attend and participate in required number (15) of teaching sessions. (See below.)
3. Read required articles regarding the goals and philosophies of medical education. A syllabus will be provided.
4. Develop or enhance existing education materials (converting lecture PPT to Team Based Learning session, adding public health objectives to PBL cases, converting lecture PPT to Khan Style video, etc.)
5. Write a final reflective piece that describes the students’ educational experience with the rotation.
**Required Teaching Sessions:** The hands-on component of the course allows the student to directly participate in the education of junior medical students. Students must complete at least 15 of the following activities and log these activities (after completion of the July seminars and prior to March 1st):

1. Students can assist faculty with facilitation of MD/MPH PBL courses in the morning on the Miami campus.
2. Students can lead physical exam teaching rounds once weekly at JFK medical center or when available on the Miami campus through academic societies.
3. Students can serve as educators for junior students at the Caridad clinic on Saturday mornings or other student run clinics with prior approval.
4. Students can take part in anatomy teaching as a teaching assistant.
5. Students can co-facilitate Problem Oriented Patient Sessions (POPS) in Miami or on the RMC.

Additional teaching opportunities will be considered with prior approval from course directors. Students must take part in a variety of the teaching activities listed above (at least 3 out of the 5 described teaching sessions above.)

**Required education project:** Students can work on creating their own medical education materials such as the development of a PBL case, creating materials for a Patient Oriented Problem Session (POPS) session, or creating their own Khan Academy style teaching video.

**Optional:** Students can attend Medical Education Grand Rounds in Miami or Medical Education Journal Club on the regional medical campus.

**Locations:**
- UMMSM Regional Medical Campus, Boca Raton

**Participating Faculty:** Daniel Lichtstein, M.D. and Gauri Agarwal, M.D.

**Prerequisite:** Completion of all core clerkships

**Expectations:**
The student will be responsible for reading all assigned materials and being prepared to discuss these with the participating faculty. Students will be required to fulfill all of their commitments including attending all seminars in June/July, reading assigned materials, participation in at least 15 teaching sessions, attendance at available medical education meetings and grand rounds, and creation of medical education materials. Students will meet with course directors in December in order to ensure that they are on track to complete the requirements. Finally, students are expected to complete a written reflective piece outlining their experience with the rotation.

**Student Evaluation and Grading**
- The student will be evaluated by the participating faculty with input from other faculty members and student feedback.
- The evaluation will be on a Pass-Fail basis, and will be based upon attendance and participation in all aspects of the elective. Faculty will evaluate attendance at required sessions, participation, and quality of reflective piece submitted at the conclusion of the elective. Quality of new educational material that is produced will also be considered.

Reviewed October 2019
AMBULATORY INTERNAL MEDICINE

COURSE CODE: MDR 820
CLERKSHIP DIRECTOR: Erin Marcus, M.D., M.P.H.
TELEPHONE: 305-243-5505
EMAIL: mgarcia11@med.miami.edu
CONTACT: Miriam Garcia, mgarcia11@med.miami.edu, 305-585-5215 x1
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Medicine Clerkship
NUMBER OF STUDENTS: 1
AVAILABLE: All year, EXCEPT Blocks 1-2 and 10
U.S. VISITING STUDENTS: Yes
INTERVIEWING TIME: 1 day (2wks), with prior approval
TYPE: Clinical

Welcome to the Ambulatory Internal Medicine Rotation, an experience we hope you will find both enjoyable and clinically challenging. The following provides an overview of how this rotation functions:

General Information:

1. Rotation Contact information:
   a. Miriam Garcia at 305 383 5215 for all scheduling and administrative issues.
   b. Faculty Coordinator: Erin Marcus, MD. She can be contacted via Ms. Iris Perez - 305-243-5505 or igomez2@med.miami.edu with educational questions.
   c. Chief ambulatory resident: Dr. Reginald Pereira, until June 30, 2019; Dr. Vijay Mehta, after July 1, 2019.
   d. Other attending faculty include Drs. Keith Custer, Marco L. Gonzalez, Margarita Llinas, Greg Coleman, Jacobo Wajner, and the internal medicine chief residents.
   e. ACC West 3B Charge Nurse: Marie Carole Edouard, RN.

2. Didactics/Conferences: Conferences are held on Th mornings from 8 am to noon in the clinical research building. STUDENTS SHOULD CONTACT THE CHIEF AMBULATORY RESIDENT FOR THE EXACT LOCATION AND STUDY MATERIALS. Students are also encouraged to attend medicine grand rounds on Wednesdays at noon.

3. Clinic Hours:
   a. Morning clinic starts at 8:00 am (except when conferences occur) and runs until 12:00 noon (or until the last patient is seen). Afternoon clinic sessions start at 1:00 pm and typically run until 5:00 pm (or until the last patient is seen). Please introduce yourself to the attending each morning and afternoon and he or she will assign you to a resident.

4. Session specifics: Each fourth year students will work with a resident or intern seeing patients. All patients must be presented to the supervising attending. During the first few days of the rotation, you should observe the session with the resident. AFTER the first few days, you may help a resident by seeing patients who are waiting for him or her while he or she sees other patients (make sure the resident consents to your doing this). You should then present the patient to the resident, who will then see the patient. Please ask the charge nurse, Ms. Edouard, for a room in which you can see the patient.

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a. **Morning and Afternoon Continuity Clinics:** General Types of visits:
   i. **Initial visits:** These patients are primarily new to our system. Initial evaluations should focus on comprehensive preventive care whenever possible. Frequently, these patients have multiple medical problems. In these cases, care should be focused on their chronic medical conditions with preventive counseling being provided as time permits.
   
   ii. **Follow-ups:** In addition, you may see patients here for a follow-up from a previous appointment.

   iii. **Walk-ins:** Patients with acute medical complaints. Visit should be focused on the presenting complaint.

b. **Other educational opportunities:** residents on their medical ambulatory rotation are assigned at least one afternoon session with health professionals from other disciplines. Medical students are also welcome to attend these sessions, which are:
   a. **Monday afternoon:** Physical therapy observation at the JMH physical therapy department, which is located in Room 146, on the 1st floor of the Rehab wing at JMH. Go to the rehab wing and ask at the reception desk and they will direct you. Ms. Taime Roque is the contact person. You should try to focus on how the PT service diagnoses and treats common outpatient musculoskeletal problems, such as back pain, neck pain, shoulder pain, knee and hip pain. If the session finishes before 5 pm, you should return to ACC west clinic and check in with the afternoon attending MD to help with patient care.

   b. **Tuesday afternoon smoking cessation class at JMH.** These usually occur in the 3d floor conference room in ACC west. Ms. Gladys Castro is the educator. The sessions usually begin at 1 or 2 pm. AFTER the class, you should return to the clinic and check in with the afternoon attending MD to help with patient care.

5. Absences or changes in the schedule
   a. **All absences or changes must be approved by the clinic director.**

7. **Recommended Reading:**
   a. We urge you to read in order to complement the “in the trenches” experience that you are having in the clinic. In addition to enhancing your understanding of different cases, this will help you demonstrate a good fund of knowledge when you present cases to attending physicians. Reading should be done during your off time as well as during “downtime” when waiting for patients in the clinic. Here are some sources that we highly recommend:
      i. **Annals of Internal Medicine** “In the Clinic” series – practical discussions of common outpatient problems
   ii. **The Cleveland Clinic Journal of Medicine** – offers well-written reviews of many outpatient (and inpatient) topics
   iii. **CURRENT Practice Guidelines in Primary Care:** this is published every year and is available online through the UM Calder library at: [http://www.accessmedicine.com/guidelines.aspx](http://www.accessmedicine.com/guidelines.aspx)
   iv. **The US Preventive Services Task Force Guide to Clinical Preventive Services:** This is a “must-read” for primary care clinicians and is available online at [http://www.ahrq.gov/clinic/pocketgd.htm](http://www.ahrq.gov/clinic/pocketgd.htm)

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**Educational Purpose:**

The ambulatory block rotation serves to enhance the medical student’s knowledge and skills in caring for the ambulatory medical patient. Students will primarily be seeing patients which are new to the outpatient clinic, addressing preventive screening as well as care of chronic conditions such as diabetes, hypertension,
cardiomyopathy, and chronic obstructive pulmonary disease. In addition, they will be exposed to patients with the following characteristics:

- Ambulatory patients with acute complaints
- Gender-specific medical care
- Patients recently discharged from the inpatient setting or from the emergency room
- Patients being evaluated for surgery
- Patients presenting for routine GYN care.

**Mix of Diseases:**

Medical students will be exposed to patients with a wide range of medical and social issues. Patient ages range from 18 to Geriatric patients and are typically from the Dade County Public Health Trust. Students perform preoperative evaluations on surgical patient, focused examinations of patients with acute ambulatory complaints or who have recently been discharged from the inpatient and emergency rooms, and assess common complaints in the geriatric population. Medical problems encountered and managed typically include but is not limited to the following: preventive health examination, hypertension, diabetes, coronary disease, heart failure, dizziness, and headache.

**Overall Goals of the rotation:**

- Provide the opportunity for students to develop core generalist competencies:
  - Care of the new healthy patient
  - Care of patients with acute illnesses
  - Care of chronically ill patients with multiple medical problems
  - Comprehensive, gender-specific primary care of women
  - Focused care of patients with acute complaints and of patients recently discharged from the inpatient or emergency room settings
  - Preoperative Evaluation of the Ambulatory Surgical Patient
- Prepare students to manage the primary care gynecologic screening needs of their patients
- Foster students’ acquisition of life-long, self-directed learning skills
- Improve student knowledge of common ambulatory topics through reading assignments, didactics, and self-directed learning.

**Specific Competency-based Learning Objectives:**

- **Patient Care:** By the end of the ambulatory month rotation, each learner should be able to:
  - Develop proficiency at interviewing, performing comprehensive and focused physical examinations based on clinical presentation, and developing tailored medical assessments and plans that are sensitive to patients’ needs and preferences.

- **Medical Knowledge:** By the end of the ambulatory month rotation, learners should be able to:
  - Develop knowledge, skills and attitudes related to a variety of medical problems, including but not limited to: osteoporosis, cervical screenings, reflux, hypertension, preoperative evaluation, common gender-specific complaints, common neurological complaints, and common ophthalmologic complaints.
  - Demonstrate a working knowledge of the guidelines and indications for cervical and breast screening in primary care

- **Interpersonal and Communication:** By the end of the ambulatory rotation, each learner should have:
  - Developed improved listening and communication skills by interactions with patients and their families, their colleagues and the clinic staff
  - Demonstrated an ability to work effectively with both colleagues and staff
- Developed proficiency in chart documentation

**Professionalism:** Learners should:
- Demonstrate motivation for self-learning, demonstrating a desire for self-improvement
- Demonstrate competence in providing patient-centered care to people from diverse cultures, age, genders, sexual orientation, and disabilities

**Practice-Based Learning and Improvement:** By the end of the ambulatory rotation, learners should demonstrate:
- Assessment of patient adherence and modification of prescribing practices accordingly.
- An ability to learn from prior mistakes and apply this knowledge to improve one’s practice
- Use of information technology and application of evidence from scientific studies

**Systems-Based Practice:** Learners should:
- Demonstrate knowledge of the Public Health Trust system and its resources
- Demonstrate a general familiarity with ways of helping low income patients obtain needed care
- Foster awareness of and responsiveness to the contexts of health care in our community
- Apply systematic and cost-effective strategies to prevention, diagnosis, and treatment in a manner that does not compromise quality of care.

**Evaluations**

Student performance will be assessed by the faculty rotating on the ambulatory block rotation. Blank evaluations should be given to Ms. Miriam Garcia BEFORE THE END of the ambulatory elective. She will give them to the appropriately assigned attending.

**Sample Ambulatory Block Rotation Schedule**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>ACC CONTINUITY CLINIC</td>
<td>ACC CONTINUITY CLINIC</td>
<td>ACC CONTINUITY CLINIC</td>
<td>DIDACTICS – ACC W 3d floor conference room</td>
<td>ACC CONTINUITY CLINIC</td>
</tr>
<tr>
<td>Physical Therapy Observation (Room 146, 1st floor of Rehab building) or ACC CONTINUITY CLINIC</td>
<td>Smoking Cessation Class (ACC West 3d floor conference room, 2 pm) and ACC CONTINUITY CLINIC</td>
<td>ACC CONTINUITY CLINIC</td>
<td>ACC CONTINUITY CLINIC</td>
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</table>

Reviewed November 2019
ARTHRITIS

COURSE CODE: MDR 821
CLERKSHIP DIRECTOR: Elaine Tozman, M.D. and Carlos Lozada, M.D.
TELEPHONE: 305-243-7545
CONTACT: Nidia Shanley [Clinical Research Building #1105]
EMAIL: nshanley@med.miami.edu
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITES: None
NUMBER OF STUDENTS: 2
AVAILABLE: All year
U.S. VISITING STUDENTS: No
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

Overview / Goals:
This elective will teach the student an approach to the diagnosis, management and therapy of common rheumatic disease including rheumatoid arthritis, gout and osteoarthritis. In addition, unusual diseases such as systemic sclerosis, polymyositis, and vasculitis are seen. Students will become proficient in the examination of joints and interpretation of joint fluid findings.

Course Design:
A schedule is provided, with mandatory attendance expected.

The student will attend clinics at JMH and VAMC 4 half-days weekly. Patients will be assigned to the student and will be seen with one of the arthritis attendings. Arthritis Rounds are held three times weekly and there is a Journal club every two weeks. The schedule includes other teaching rounds.

Location:
JMH (60%), UMHC (30%), and VAMC (10%) Arthritis clinics.

Prerequisite:
None

Student Evaluation and Grading:
On the first and last day of their elective, a multiple choice examination will be provided for the student.

Contact office (305-243-7545) one week prior to rotation for schedule and book.

Revised December 2018
**UMH CARDIAC CATHETERIZATION**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 853</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Mauricio G. Cohen, MD, FACC</td>
</tr>
<tr>
<td></td>
<td>UHealth Tower, Suite 864</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-5050</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:mgcohen@med.miami.edu">mgcohen@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Angelica Escalante; 305-243-2218; <a href="mailto:aescalan@med.miami.edu">aescalan@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine (Cardiology or Cardiology Consult preferred) Must contact Dr. Cohen two weeks in advance via email</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<tr>
<td>U.S. VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
<td>1 day (2wks), with prior approval</td>
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**Overview:**
This is a 2-week elective intended to expose the senior medical student to the vast array of procedures performed in interventional cardiology. During the rotation, the student will have the opportunity to interact with multiple specialists who have expertise in various areas of interventional cardiology and attend cardiology conferences.

**Course Design:**
The student will spend time at the Catheterization Laboratory of the UHealth Tower (UHT) at University of Miami Hospitals and Clinics, and be actively involved in the care of patients undergoing procedures. The student will discuss all cases with cardiology fellows and attending physicians and scrub in 3 or more diagnostic and interventional catheterization procedures daily. The student will attend cardiology conferences and a weekly half-day clinic where he/she will either see patients referred for catheterization procedures or follow up patients who had recently undergone a procedure. Learning during the rotation will be case-based. The student will meet at least once weekly with Dr. Mauricio Cohen, the clerkship director, or a designated faculty member. During these meetings, the student will present the case log and discuss one of the two required case work-ups as detailed below.

**Goals/Objectives:**
- Review and apply basic scientific principles, pathophysiology, clinical laboratory data, imaging examinations, and cognitive skills as they relate to the diagnosis and treatment of coronary artery disease and structural heart disease in the cardiac catheterization laboratory.
- Familiarize the medical student with cardiac catheterization procedures (general indications for the procedure, major risks and complications, participation in procedures)
  1. List the risks and benefits of coronary angiography and percutaneous revascularization techniques, including angioplasty, stenting, and other valvular/structural procedures.
  2. Describe the basic aspects of vascular access techniques.
  3. List the most important indications and basic technique for right and left heart catheterization.
  4. Describe the most important aspects of the coronary, cardiac, and peripheral vascular anatomy.
  5. Use hemodynamic measurements performed in the catheterization laboratory to diagnose and determine severity of structural heart abnormalities (i.e.: congestive heart failure, abnormal chamber communications, valvular heart disease).
6. Correlate signs and symptoms and electrocardiographic abnormalities with angiographic and hemodynamic findings (i.e.: systolic ejection murmur with trans-valvular aortic gradient, coronary disease in patients with angina and/or ECG changes)

7. Identify the basic equipment used in the catheterization laboratory and the role of each member of the team (physician, nurse, technologist, ancillary staff).

8. Describe pre- and post-procedural patient management including appropriate pharmacologic interventions as well as landmark clinical trials.

- Reinforce a critical approach to the medical literature.

**Location:**
Cardiac Catheterization Laboratory, UHealth Tower (3rd Floor), University of Miami Hospitals and Clinics (100%).

**Participating Faculty:**
Interventional Faculty of the Division of Cardiovascular Medicine
- Mauricio G. Cohen, MD (Clerkship Director)
- Carlos Alfonso, MD
- Eduardo De Marchena, MD
- Michael Dyal, MD
- Claudia Martinez, MD

**Prerequisite:**
- Completion of Internal Medicine Core Clerkships. CCU, In-patient Cardiology, or Cardiology Consults preferred.
- The student must contact Dr. Cohen via email 2 weeks prior to starting the elective rotation for planning and to discuss expectations.

**Expectations:**
- The student is expected to report every day to the Cardiac Catheterization Laboratory at UMT between 7:00 and 8:00 AM. Cases are usually scheduled until 5:00 – 6:00 PM. In order to take maximum advantage of this rotation, the student should be involved in at three or four cases every day. The student will maintain a case log including the date, diagnosis and procedures performed.
- The medical student will be expected to participate in all clinical and academic activities related to the catheterization laboratory. These include:
  a. Academic:
     i. Heart Team Conference on Tuesdays at 7:00 AM (UMH 5th Floor Conference Room)
     ii. Topics in Cardiovascular Disease (Division Grand Rounds Lecture Series) on Wednesdays at 7:30 (Mailman Center for Child Development, 8th floor)
     iii. Valvular / Structural Heart Disease meeting on Thursday at 7:00 AM (Board Room, UMH)
     iv. Interventional Cardiology Core Conference on Mondays at 7:30 AM (C403, JMH)
  b. Clinical: The student will actively participate in the care pathway of patients undergoing procedures in the catheterization laboratory, in which the student will be involved.
     i. Pre-procedure: clinical evaluation (history & physical), review of imaging and laboratory data, presentation to the attending physician, and discussion of indications and risks.
     ii. Procedure: the student will scrub in the case and participate as an active member of the team. During the procedure, the student will follow specific instructions by the attending physician or interventional fellow.
     iii. Post-procedure: Participate with the attending and cardiology fellow in the interpretation of hemodynamic and angiographic data and formulation of a management plan.
     iv. Outpatient Clinic: The student will attend a weekly half-day clinic under the supervision of the director of the cardiac catheterization laboratory.
The medical student will be expected to be familiar with the basic evaluation and management of the following disorders in order of priority:

a. Coronary artery disease
   i. Acute coronary syndromes
   ii. ST-elevation acute myocardial infarction
   iii. Chronic stable angina

b. Valvular heart disease
   i. Mitral
   ii. Aortic

c. Cardiomyopathies
   i. Hypertrophic
   ii. Dilated
   iii. Restrictive

d. Pericardial disease
   i. Acute pericarditis
   ii. Tamponade
   iii. Constrictive

e. Congenital heart disease
   i. Atrial or ventricular septal defects
   ii. Patent foramen ovale

f. Peripheral vascular disease
   i. Intermittent claudication
   ii. Critical limb ischemia

The medical student will be expected to have read and discussed with fellows and/or faculty members the basic aspects of:

a. Basic hemodynamic evaluation
b. Coronary anatomy
c. Peripheral vascular anatomy
d. Heart anatomy
e. Indications for percutaneous coronary and peripheral vascular interventions

**Student Evaluation and Grading:**

- The medical student will receive a written evaluation at the end of the rotation. This will be reviewed with the student by the faculty evaluator.
- Two written case work-ups performed by the medical student will be reviewed with the Director of the elective rotation or designated faculty member. In addition to the basic elements of a history and physical examination. These work-ups will include an in-depth discussion of the pathophysiology of the patient condition, differential diagnoses, and indications for the procedure. During the presentations, the student will retrieve the case images and describe angiographic and hemodynamic findings and whether or not a therapeutic procedure was performed.
- Faculty performance and clerkship will be evaluated by the medical student.

**References:**


Reviewed October 2019
### JMH CARDIOLOGY CONSULT

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 824</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Alexandre C. Ferreira, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5540 or 5527</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:alexandre.ferreira@jhsmiami.org">alexandre.ferreira@jhsmiami.org</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Noemi Melendres (<a href="mailto:Noemi.Melendres@jhsmiami.org">Noemi.Melendres@jhsmiami.org</a>)</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships and 2 weeks of CCU (4th year students only)</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) with prior approval</td>
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### Overview:
Give an overview of the senior elective. What is the student going to be exposed to and expected to learn about during this rotation?
- This rotation includes consultative diagnosis, electrocardiography, and intensive medical and surgical cardiac care at either JMH or VAMC.

### Course Design:
How is the rotation set up? Are there didactic sessions? Are there clinics that the student is expected to attend and evaluate patients? Are there surgeries or procedures where the student is expected to attend and observe? Be specific
- Students work up patients and discuss the history and physical findings with the cardiology fellows, participate in daily consultation rounds with the attending cardiologists, and are in the supervision of fellows and faculty. Students attend and participate in the cardiology conference; and for those interested, a period of observation in the Cardiac Catheterization Laboratory may be arranged.

### Goals:
What is expected for the student to learn during their time on this elective? Be specific
- Review and apply basic scientific principles in cardiology, Pathophysiology, cardiac laboratory testing, patient consultations as they relate to the diagnosis and treatment of cardiovascular disease.
  - Understand the general indications
  - Understand the major risks of treatment
  - Observe patients’ cardiac and overall medical therapy progression, especially post cardiac procedures.
- Reinforce a critical approach to the medical literature.

### Objectives:
How is the student going to accomplish the goals of the rotation?
- The medical student will be expected to be familiar with the basic evaluation and management of the following disorders:
  - Coronary atherosclerotic heart disease and its complications
  - Non-ischemic dilated cardiomyopathies
  - Valvular heart disease
  - Inherited cardiac disorders
• Cardiac evaluation in organ transplant candidates
• Heart disease in pregnancy and labor and delivery

• The medical student will be expected to have read and discussed with fellows and/or faculty members the basic aspects of the following clinical problems:
  • Acute coronary syndromes
  • Heart failure
  • Cardiac arrhythmias
  • Diagnostic tests

**Location:**
• JMH Hospital 100%

**Participating Faculty:**
• JMH Assigned Faculty
• Included but not limited to Drs. ds

**Prerequisite:**
• Completion of Internal Medicine core clerkships
• 4th year students only
• 2 weeks of CCU rotation

**Expectations:**
What are the expectations for the student? Be specific
• The student will be expected to participate in all activities (consultations, rounds, clinics, conferences) and be on time. The rotation coordinator (Dr. Myerburg) needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

**Student Evaluation and Grading:**
How are the students evaluated? Be specific, is the student expected to evaluate patients and present them to the attending physician? Is the student expected to achieve a certain level of competency in a specific area at the end of the rotation? If so, then how will this be evaluated?
• The medical student will receive a written grade based upon his/her performance during the rotation. He/she will receive a briefing on performance at the end of the rotation.
• The student will be asked to complete an evaluation of the rotation as a whole upon completion to allow for continual improvement of the student experience.
• Faculty performance will be evaluated by the medical student (submitted anonymously).
• Credit will be given for exceptional performance.

Visiting students applying through Visas will be accepted based on the Cardiology Consult total limit of observers per rotation.

Reviewed December 2019
# CARDIOLOGY TEACHING LAB – HARVEY
## 4 WEEK PROGRAM

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 823</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Joseph Esterson, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6491</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jesterson@med.miami.edu">jesterson@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Donna Fye <a href="mailto:dfye@med.miami.edu">dfye@med.miami.edu</a> Gordon Center for Research in Medical Education [D-41]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine or prior approval</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
<td>3 days with prior approval; 1st or final day absences approved for special circumstances only</td>
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</table>

**Overview:** This rotation consists of a comprehensive review of clinical cardiology. Clinicians must be able to evaluate and manage patients with cardiovascular disease as they represent a significant proportion of patients they encounter.

**Goals:** Each student is trained to develop the knowledge and skills needed to conduct a complete cardiovascular bedside examination, and interpret ECGS and arrhythmias.

**Course Design:**
The rotation includes the integration of the cardiac bedside evaluation with non-invasive diagnostic testing. The diagnosis and management of valvular, coronary, hypertension, heart failure, and congenital conditions are covered in large- and small-group sessions with Harvey, the Cardiopulmonary Patient Simulator. Interactive ECG and Arrhythmia interpretation skills sessions are conducted daily. Each student will interpret and review electrocardiograms and arrhythmias with clinical faculty. The web based UMedic multimedia computer curriculum is incorporated into the elective to further promote interactive self-learning.

There are no specific patient responsibilities. The course is streamlined, and time is tightly structured. Most days finish by 1:00 p.m. Attendance is closely monitored.

**Note:** Absences on the first day of class [orientation and introductory lectures] or the last day of the course [assessments] will only be approved for extremely special circumstances or illness.

**Location:** Gordon Center for Simulation and Innovation in Medical Education (100%)

**Prerequisite:** Internal Medicine or prior approval

**Student Evaluation and Grading:**
Evaluation is achieved by several methods, including testing of skills and cognitive knowledge, and day-to-day contact with faculty during large and small-group sessions.

Revised November 2019
CARDIOLOGY TEACHING LAB – HARVEY
TWO WEEK PROGRAM

<table>
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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Joseph Esterson, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6491</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jesterson@med.miami.edu">jesterson@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Donna Fye <a href="mailto:dfye@med.miami.edu">dfye@med.miami.edu</a></td>
</tr>
<tr>
<td></td>
<td>Gordon Center for Research in Medical Education [D-41]</td>
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<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine or prior approval</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>30</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>3A, 7B, 10A</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days with prior approval; 1st or final day absences approved for special circumstances only</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

**Overview:** This rotation consists of a focused review of clinical cardiology. Clinicians must be able to evaluate and manage patients with cardiovascular disease, as they represent a significant proportion of patients they encounter.

**Goals:** Each student is trained to develop the knowledge and skills needed to conduct a complete cardiovascular bedside examination, and interpret ECGs and arrhythmias.

**Course Design:**
The rotation includes the integration of the cardiac bedside evaluation with non-invasive diagnostic testing. The diagnosis and management of valvular, coronary, hypertension, heart failure, and congenital conditions are covered by large- and small- group sessions with Harvey, the Cardiopulmonary Patient Simulator. Interactive ECG and Arrhythmia interpretation skills sessions are conducted daily. Each student will interpret and review electrocardiograms and arrhythmias with clinical faculty. The web based UMedic multimedia computer curriculum is incorporated into the elective to further promote interactive self-learning.

There are no specific patient responsibilities. The course is streamlined, and time is tightly structured. Most days finish by 2:00 p.m. Attendance is closely monitored.

**Note:** Absences on the first day of class [orientation and introductory lectures] or the last day of the course [assessments] will only be approved for extremely special circumstances or illness.

**Location:** Gordon Center for Simulation and Innovation in Medical Education (100%)

**Prerequisite:** Internal Medicine or prior approval

**Student Evaluation and Grading:**
Evaluation is achieved by several methods, including testing of skills and cognitive knowledge, and day-to-day contact with faculty during large and small-group sessions.

Revised November 2019
UMH CARDIOVASCULAR INTENSIVE CARE UNIT

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 822</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Carlos E Alfonso, MD</td>
</tr>
<tr>
<td>TELEPHONE</td>
<td>305-243-7067</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:kxp656@med.miami.edu">kxp656@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Kristie Pino</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of core clerkships Must contact Dr. Alfonso at least 1 week before starting</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>all year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
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</tbody>
</table>

Overview:
This elective is intended to provide the senior medical student with a variety of cardiac critical care experiences, including acute myocardial infarction, cardiogenic shock, heart failure, valvular heart disease, post cardiac surgery, and arrhythmias. The student will also be exposed to clinical research ranging from valvular heart disease to stem cell transplantation. Three-to-four cardiology conferences will be offered each week, supplementing the daily teaching rounds, which include didactic presentations. An opportunity for procedures experience, including central line placement, will also be available.

Course Design:
The student will participate in all CCU activities Monday through Friday, and round on one day of the weekend. He/she will work under the direct supervision of second or third year medical residents, who will in turn be supervised by the cardiology fellow and CCU attending. The student will work up approximately one new admission daily, follow that patient during their CCU stay, and assist in their discharge and transfer. Attendance at daily rounds is mandatory; these generally occur between 8-8:30AM, at the discretion of the attending physician, and will include detailed presentations and patient management discussions, as well as didactic presentations by the attending. Bedside teaching, including heart auscultation, will also be a prominent feature of the rotation. The student will have an opportunity to observe the post-operative management of cardiac surgery patients. The student will attend our weekly Cardiology/CT surgery multidisciplinary conference held at 7:00 am in the CCU conference room as well as our Topics in Cardiovascular Medicine conference, held on Wednesdays at 7:30AM. They will be invited to attend scheduled subspecialty conferences during the week.

Goals:
- Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, imaging examinations, and cognitive skills as they relate to the diagnosis and treatment of ischemic heart disease, valvular abnormalities, decompensated heart failure, cardiac arrhythmias, and structural heart disease.
- Understand the use and appropriateness of cardiac testing procedures
- Reinforce an evidence-based approach to clinical care and a critical approach to the medical literature.
- Develop a multi-disciplinary team based approach to delivery of care
- Observe life-threatening conditions that cardiac patients and their family experience, developing a compassionate approach to these situations.

Objectives:
A. The medical student will to discuss and demonstrate the basic evaluation and management of the following disorders:
   1. Acute coronary syndromes
   2. Cardiogenic shock
   3. Heart failure
   4. Ventricular and supraventricular arrhythmias
   5. Valvular heart disease including but not limited to aortic stenosis, and mitral regurgitation
   6. Acute respiratory failure
B. The medical student will be able to discuss the procedural aspects and clinical applications of the following procedures performed on CCU patients:
   1. Echocardiography
   2. Nuclear cardiology
   3. Swan-Ganz catheterization and interpretations of invasive hemodynamics
   4. Left and Right heart cardiac catheterization including coronary angiography
   5. Percutaneous cardiac interventions including: Coronary interventions, transcatheter aortic valve replacement, percutaneous mitral valve repair, etc
   6. Pericardiocentesis
   7. Ventilator management
   8. Inotropic therapy
   9. Mechanical circulatory support including: Aortic balloon counterpulsation, percutaneous left and right ventricular support devices
   10. ACLS including defibrillation and synchronized cardioversion

Location:
University of Miami Hospital – CCU 5th floor (100%)

Participating Faculty:
The University of Miami Cardiovascular Division faculty, assigned to the CCU, including:
   Carlos E Alfonso, MD
   Mauricio G Cohen, MD
   Eduardo De Marchena, MD
   Maureen Lowery, MD
   Claudia Martinez, MD

Prerequisite:
Successful completion of Core Clerkships.
Contact Dr. Alfonso at least 1 week before starting.

Expectations:
The student will be expected to participate in all activities, including patient evaluation, clinical presentations, procedures, and review imaging procedures. The student should also attend morning and afternoon sign-out rounds, as well as all cardiology conferences held at University of Miami Hospital. The student should maintain professional behavior at all times and be on time for all activities.

References
Please refer to the articles on specific cardiovascular disease topics at the following link:
http://sites.google.com/site/jmhvachiefs/home/rotations/cvicu-articles

Student Evaluation and Grading:
The medical student will receive a written evaluation at the end of the month. This will be reviewed with the student by the faculty evaluator. Two written assessments performed by the medical student will be reviewed, as well as at least 5 oral patient presentations. Faculty performance will be evaluated by the medical student.
JMH CORONARY CARE UNIT

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 829</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Alexandre C. Ferreira, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5540 or 5527</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Noemi Melendres (<a href="mailto:noemi.melendres@jhsmiami.org">noemi.melendres@jhsmiami.org</a>) JMH Central Building Room 409</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2/4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships (4th students only)</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>U.S. VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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Overview / Course Design:
This elective presents students with the opportunity to follow patients with life endangering cardiac problems from the moment of admission to the hospital to discharge from the Unit. Particular emphasis is placed on clinical aspects of diagnosis and management of these patients. Participation in the insertion of Swann-Ganz and pacemaker catheters shall be allowed for students who show exceptional interest. The rotation will, in addition, provide experience in computerized monitoring of arrhythmias, EKG and echocardiographic interpretations, and experience in interpreting cardiac catheterization data.

Location:
JMH CCU. (100%)
JMH Central Bldg. 4th FL (Coordinator in C409)

Prerequisite:
Completion of Internal Medicine core clerkships
4th year students only

Revised December 2019
ENDOCRINOLOGY, DIABETES, & METABOLISM

<table>
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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR</td>
<td>Maria Pilar Solano, MD.  <a href="mailto:msolano@med.miami.edu">msolano@med.miami.edu</a></td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-1062</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Cary Menendez  <a href="mailto:Cmenendez@med.miami.edu">Cmenendez@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine and Surgery</td>
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<td>NUMBER OF STUDENTS</td>
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<tr>
<td>INTERVIEWING TIME:</td>
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Overview:
This is a 4-week elective intended to expose the senior medical student to a spectrum of experiences in Endocrinology and Diabetes.

Course Design:
The student will spend time at Jackson Memorial Hospital (JMH) and University of Miami Hospital (UMH) on the inpatient Diabetes and Endocrinology consult services, seeing patients in consultation and follow-up and discussing them with the fellows and attending on rounds. The student will attend the JMH and VA diabetes and endocrinology outpatient clinics. All students will meet with Dr. Solano, the rotation coordinator and are expected to attend all conferences.

Goal:
Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiology examinations, and cognitive skills as they relate to the diagnosis and treatment of endocrine diseases.

Objectives:
A. The medical student will be expected to be familiar with the basic evaluation and management of the following disorders:
   1. Diabetes (in-patient and out-patient settings)
   2. Thyroid gland hypo and hyperfunction
   3. Thyroid nodules and thyroid cancer
   4. Adrenal disorders
   5. Pituitary disorders

B. The medical student will be expected to have read and discussed with fellows and/or faculty members the basic aspects of the following clinical problems:
   1. Microvascular complications of diabetes
   2. Macrovascular complications of diabetes
   3. Diabetic ketoacidosis
   4. Hypothyroidism
   5. Hyperthyroidism
   6. Adrenal insufficiency
   7. Interpretation of thyroid function tests and dynamic endocrine tests.
**Location:**
Jackson Memorial Hospital (40%), University of Miami Hospital (25%), University of Miami Hospital and Clinics (15%), and Veterans Administration Miami Hospital (20%)

**Participating Faculty:**
Faculty from the Division of Endocrinology, Diabetes and Metabolism

**Prerequisite:**
Internal Medicine Clerkship

**Expectations:**
The student will be expected to participate in all activities (consultations, rounds, clinics, conferences) and be on time. The rotation coordinator needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

**Student Evaluation and Grading:**
The medical student will receive a written evaluation at the end of the month. This will be reviewed with the student by the faculty evaluator.

Reviewed December 2019
GASTROENTEROLOGY

COURSE CODE: MDR 830
CLERKSHIP DIRECTOR: Amar R. Deshpande MD
TELEPHONE: 305-243-6884 (Nidia Shanley)
EMAIL: nshanley@med.miami.edu
CONTACT: Amar R. Deshpande MD
LENGTH OF ELECTIVE: 2 / 4 weeks
PREREQUISITE: Internal Medicine and Surgery
NUMBER OF STUDENTS: 2
AVAILABLE: All year
U.S. VISITING STUDENTS: Yes
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

OVERVIEW
This is a 2- or 4-week clinical elective intended to expose the medical students to a wide spectrum of experiences in gastroenterology. Each week or two (depending on the length of the elective), the students will rotate through a different clinical setting and see patients/procedures based on the emphasis at that location.

COURSE DESIGN
The students will spend time at Jackson Memorial Hospital on the consult service, seeing patients in consultation and follow-up and discussing them with the fellows and attending on rounds. The students will also watch endoscopy and learn its indications and findings. At UHealthTower, students will be exposed to a more tertiary care setting, also rounding with the fellow and attending and watching procedures; some of the cases are more advanced and not done at Jackson. Students can request additional outpatient experience at Sylvester Comprehensive Cancer Center and UHealthTower, including subspecialty clinics in areas like Inflammatory Bowel Disease and watching advanced endoscopic procedures. The students can request the opportunity to go to clinic and watch procedures at the VA as well. Dr. Deshpande, the rotation coordinator, will try to meet with the students during the rotation, and they are expected to attend fellow conferences and the fellows clinics across campus based on their site that particular week.

GOALS
1. Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiologic examinations, and cognitive skills as they relate to the diagnosis and treatment of gastrointestinal diseases
2. Familiarize the medical student with gastrointestinal endoscopy
   a. Understand the general indications for the procedures
   b. Know the major risks of the procedures
   c. Observe endoscopy, especially when involved with the evaluation of the patient
3. Reinforce a critical approach to the medical literature

OBJECTIVES
1. The medical student will be expected to be familiar with the basic evaluation and management of the following disorders:
   a. Diseases of the esophagus
   b. Acid-peptic disorders
   c. Irritable bowel syndrome
d. Inflammatory bowel disease  
e. Gastrointestinal and pancreatic neoplasms  
f. Pancreatitis  
g. Gastrointestinal manifestations of HIV  

2. The medical student will be expected to have read and discussed with fellows and/or faculty members the basic aspects of the following clinical problems:  
   a. Dysphagia  
   b. Abdominal pain  
   c. Nausea and vomiting  
   d. Diarrhea  
   e. Constipation  
   f. Gastrointestinal bleeding  

3. There is a separate Hepatology elective; therefore, specific topics dealing with the liver and biliary tract disease will not be the systematically discussed during this rotation.

LOCATION  
Jackson Memorial Hospital (60%), UHealthTower (40%), Sylvester (as requested), Miami Veterans Administration Hospital (as requested); the breakdown, in particular of Jackson vs UM, will be dependent on the volume/distribution of other learners (fellows, residents, other students) at that time.

PARTICIPATING FACULTY  
Faculty from the Division of Gastroenterology and Hepatology

PREREQUISITE  
Completion of Internal Medicine and Surgery core clerkships

EXPECTATIONS  
The students will be expected to participate in all activities (consultations, procedures, rounds, clinics, conferences) and be on time. The rotation coordinator (Dr. Deshpande) needs to be informed of all absences, as does the Office of Student Affairs in accordance with the relevant academic year’s version of the Medical Student Rights and Responsibilities Handbook. Professionalism as mandated by the University of Miami Miller School of Medicine is expected.

STUDENT EVALUATION AND GRADING  
1. The medical students will receive a written evaluation at the end of the month. This will be reviewed with the student by the faculty evaluator(s).  
2. The students will be asked to complete an evaluation of the rotation as a whole upon completion to allow for continual improvement of the student experience.  
3. Faculty performance will be evaluated by the medical students (submitted anonymously).  
4. Credit will be given for exceptional performance.

Revised October 2019
GERIATRICS AND PALLIATIVE MEDICINE CLERKSHIP (Required)
This is a required four-week course in geriatric medicine for medical students

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 957</th>
</tr>
</thead>
</table>
| CLERKSHIP DIRECTOR:  | Rose Maria van Zuilen, PhD  
                       | Joel Danisi, MD (Associate Director) |
| TELEPHONE:           | 305-575-3388 |
| EMAIL:               | rzuilen@med.miami.edu |
| CONTACT:             | Corinne Ferrari, cbf54@med.miami.edu |
| LENGTH OF ELECTIVE:  | 2 weeks |
| PREREQUISITE:        | None |
| NUMBER OF STUDENTS:  | 8 |
| AVAILABLE:           | All blocks, including Block 00 and excluding Block 6A and 11B |
| U.S. VISITING STUDENTS: | No |
| INTERVIEWING TIME    | 1 day (2wks), with prior approval |
| TYPE:                | Clinical |

**Overview:**
The 2-week Geriatrics and Palliative Medicine clerkship is primarily based at the Miami VA Medical Center with additional clinical venues at the Miami Jewish Health System and the University of Miami Health System. Students will assume responsibility for the care of older and seriously ill patients under the supervision of board-certified geriatricians and palliative care physicians, geriatric and palliative medicine fellows, and members of the interdisciplinary care team. Clinical activities will take place in multiple care venues (e.g., intermediate care unit, long-term care unit, hospice unit, outpatient clinic, palliative care consults and clinic). Each student will complete a one-week geriatric and a one-week palliative care rotation. Clinical exposure will include longitudinal care of selected patients and involvement in the assessment, care planning, and management of patients with acute and active medical issues. Clerkship activities emphasize the knowledge, skills, and attitudes required to compassionately care for our aging and seriously ill patient population.

**Course Design:**
Clinical activities generally take place weekdays between 8:00 AM and 5:00 PM. Clinical activities are complemented by mandatory small group sessions, independent self-learning (training modules on Aquifer and assigned readings on Blackboard), student presentation on “Choosing Wisely” topics, and divisional Geriatrics Grand Rounds and other educational conferences. The clerkship has a strong competency-based component which focuses on the core geriatric skill of and fall risk assessment. Students participate in a standardized patient competency assessments and must achieve the performance standard to receive a passing final grade.

**Objectives:**
- Describe and distinguish between the clinical presentation of common geriatric syndromes (e.g., dementia, depression, and delirium)
- Explain the impact of age-related changes on drug selection and dose based on knowledge of age-related changes in renal and hepatic function, body composition, and Central Nervous System sensitivity
- Explain the function of different sites/levels of care and appropriate referral indications (e.g., long-term care, sub-acute care, assisted living, home care, hospice)
- Define palliative and hospice care
- Perform a comprehensive geriatric and palliative care history and physical examination that includes an assessment of the non-medical domains of function (functional, psychological/spiritual, socio-economic)
• Apply and interpret selected geriatric and palliative care assessment tools (e.g., Montreal Cognitive Assessment, Confusions Assessment Method, Geriatric Depression Scale, Palliative Performance Scale).
• Document a patient’s complete medication list, including prescribed, over-the-counter, and herbal medications, and for each medications provide the dose, frequency, indication, benefit, side effects, and assessment of adherence.
• Utilize all available resources, including the patient, family members, the chart, and reports from other members of the healthcare team, to assess the patient status accurately and comprehensively.
• Formulate a plan of care for a geriatric and palliative patient that integrates the medical and non-medical domains to maximize function and quality of life.
• Identify medications, including anticholinergic, psychoactive, anticoagulant, analgesic, hypoglycemic, and cardiovascular drugs that should be avoided or used with caution in older adults and explain the potential problems associated with each.
• Describe the common symptoms that occur at the end of life and appropriate management strategies.
• Formulate a pain management plan (pharmacologic and non-pharmacologic) for patients with different levels and types of pain (WHO ladder).
• Explain the basic principles of prescribing, titrating, and changing common opioid medications.
• Perform a medication reconciliation applying appropriate deprescribing principles.
• Develop a non-pharmacologic management plan for agitated dementia or delirium patients.
• Identify potential hazards of hospitalization older patients (including immobility, delirium, medication side-effects, malnutrition, pressure ulcers, procedures, peri- and post-operative periods, and hospital acquired infections) and identify potential prevention strategies.
• Explain the risks, indications, alternatives, and contraindications for physical and pharmacological restraint use.
• Formulate a clinical question for a geriatric or palliative care patient, critically assess the biomedical literature, and consider patient and system-specific factors when apply the literature findings back to the management of the patient.
• Demonstrate initiative to learn by asking questions and actively participating in discussions during rounds and didactic sessions and independently researching topics.
• Solicit feedback and show receptivity to feedback.
• Identify personal learning gaps and actively seek out appropriate learning resources to fill these gaps.
• Perform duties dependably and reliably, demonstrating respect and compassion for geriatric and palliative care patients and their families and adherence to ethical precepts of the medical profession.
• Describe common ethical issues in geriatric and palliative care and strategies for managing ethical conflicts.
• Demonstrate effective communication skills with patients, their families, and other team members that reflect a respect for their unique cultures, values, roles and responsibilities.
• Engage patients and their caregivers in making health care decisions that account for life expectancy, functional status, patient preferences and their goals of care.
• Integrate the knowledge of other health care professionals in patient assessment and care planning.
• Explain the role of other health care providers on the interdisciplinary team caring for geriatric and palliative care patients and how the team works together to provide care.
• Discuss the benefit of including the patient and/or family as part of the healthcare team.
• Explain the roles of a geriatrician and palliative care physician and their value to the overall health care system (e.g., improved patient outcomes, reduced readmission rates, cost reductions).

Location:
The primary location is the Veterans Administration Medical Center with the University of Miami Health System and the Miami Jewish Health System serving as additional clinical training venues.

Participating Faculty:
Faculty from the Division of Geriatrics and Palliative Medicine: The primary faculty members include:
Rose Maria van Zuilen, PhD – Clerkship Director and Director, Longitudinal Curriculum in Geriatrics, Pain Management, and Palliative Care
Joel Danisi, MD – Associate Clerkship Director, VA Geriatrics Primary Care Clinic Director
Khin Zaw, MD – Director, VA Hospice Unit
L. Fernando Samos, MD – Director, VA Community Living Center
Marcos Milanez, MD – Director, Geriatric Evaluation and Management (GEM) Service
Marcio Soares, MD and Jenny Drice, MD. Attending physicians, Miami Jewish Health System
Mariana Khawand-Azoulai, MD and Julia Sanchez, MD Attending physicians, University of Miami Hospital
And other interdisciplinary faculty members

**Prerequisite:** None

**Expectations:**
Students are expected to become active members of the interdisciplinary team. They will attend morning rounds, closely follow assigned patients, and present during interdisciplinary team meetings. Attendance at didactic activities is mandatory unless prior approval has been received for an absence. Whenever possible, absence requests must be received prior to the start of the clerkship. Although specific learning activities are assigned, we also expect students to be self-directed learners and identify learning issues pertaining to the care of their assigned patients and other patients whose care they may be involved in.

**Student Evaluation and Grading:**
A multimodal evaluation approach is used to determine the student's final grade including performance on the standard UMMSM clerkship student evaluation form, a narrative medicine exercise, student presentation on a “Choosing Wisely” topic, a standardized patient assessment, completion of Aquifer geriatrics cases, a final exam, and for attendance and participation. Students are expected to turn in a performance and assignment checklist to the Geriatric Medicine Education Office at the end of the rotation documenting that they have met the minimum clinical requirements for our course.

Revised December 2019
ADVANCED GERIATRICS

| COURSE CODE: | MDR 827 |
| CLERKSHIP DIRECTOR: | Rose van Zuilen, PhD, Clerkship Director (VA CLC207) |
| TELEPHONE: | 305-575-3388 |
| EMAIL: | rzuilen@med.miami.edu |
| CONTACT: | Corinne Ferrari, Education Coordinator cbf54@med.miami.edu, geriatriceducation@med.miami.edu 305-575-3388 |
| LENGTH OF ELECTIVE: | 2-4 weeks |
| PREREQUISITE: | Completion of Geriatrics Clerkship (MDR 957) |
| NUMBER OF STUDENTS: | 2 |
| AVAILABLE: | All year EXCEPT Blocks 6A, 6B, 11B, 12A, 12B |
| U.S. VISITING STUDENTS: | Yes |
| INTERVIEWING TIME: | 1 day (2wks) OR 2 days (4wks), with prior approval |
| TYPE: | Clinical |

**Overview:**
This senior level elective in geriatric medicine allows students to gain additional experience evaluating older patients in a variety of care settings under the supervision of attendings physicians and fellows in geriatric medicine. It can also be designed to give students a clinical or research experience in a specialized area of geriatrics tailored to their interests. Students will be assigned to a primary clinical venue and will have opportunities to rotate through other care settings (inpatient consultation, outpatient, home-based and/or long term care).

**Course Design:**
Students will be assigned a primary mentor whom they will meet with regularly during the 2 or 4-week elective. They are expected to attend the weekly Geriatric Medicine conferences and other educational activities offered by the division of Gerontology and Geriatric Medicine. The elective can be tailored to students’ particular educational goals both in terms of clinical and educational activities. Students who are interested in gaining experience in other scholarly activities (e.g., presentations, research) may be able to do so depending on the length of the rotation and availability of resources. This will be arranged on an individual basis.

**Goals:**
The goals of this elective are to improve students’ ability to assess and manage complex older patients and to enhance students’ understanding of specialized geriatrics services.

**Objectives:**
Specific objectives depend on the chosen focus of this elective.

**Location:** Several venues are available including the VA Medical Center, University of Miami Health System, and the Miami Jewish Health System.

**Participating Faculty:**
Faculty from the Division of Geriatrics and Palliative Medicine

**Prerequisite:**
Geriatrics Clerkship (MDR 957)
**Expectations:**
Students should contact Dr. van Zuilen at least two weeks prior to the elective to discuss their education goals so their schedule can be tailored accordingly. Students who would like to gain research experience should contact us even earlier as availability may be limited. Students will work primarily with their assigned faculty mentor, but are expected to meet with Dr. van Zuilen weekly to review their progress.

**Student Evaluation and Grading:**
Students will receive pass/fail grades for this rotation based on the following criteria:
- Attendance
- Professionalism
- Participation in patient assessment and management
- Quality completion of assignments given by the clerkship directors, attending faculty and/or geriatric fellow

Revised Dec 2019
ADVANCED GERIATRICS @ MIAMI JEWISH HOME

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 832</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Jenny Drice, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-795-8494</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:JDrice@med.miami.edu">JDrice@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Jackie Green; 305-795-8494</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Integrated Medicine Clerkship or Geriatrics Clerkship</td>
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<td>NUMBER OF STUDENTS:</td>
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</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME</td>
<td>1 day (2wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

Please call Medical Staff office (305-795-8494) in advance to let them know you are scheduled.

Overview:
The medical student will spend two weeks at the Miami Jewish Health Systems and assume responsibility for the care of older patients under the supervision of a faculty member and members of the interdisciplinary care team. The goal is to teach, model and assess the knowledge, skills, and attitudes needed by medical students to complete a comprehensive geriatrics assessment. Clinical activities will take place in multiple chronic care venues available at the Miami Jewish Health Systems, which include a nursing home, an assisted living facility, outpatient clinics, and an inpatient hospital.

Course Design:
Clinical activities take place weekdays between 9:00 am – 4:00 pm on average. Clinical activities are complemented by mandatory small group sessions including journal club, independent self-learning, assigned readings.

Goals:
- Promote students’ knowledge of geriatric assessment and longitudinal care in multiple venues for care of the elderly
- Give students experience as first responders for acute changes in long-term care patients
- Improve ability of students to competently administer, score and interpret selected geriatric assessment tools (e.g., mini-mental state exam, confusion assessment method, timed up-and-go, and geriatric depression scale)
- Improve the ability of students to recognize and assess common geriatric syndromes (e.g., dementia, delirium, falls, pressure ulcers, and polypharmacy)
- Have students apply the results of geriatric assessment to develop an integrated problem list and care plan
- Enhance students’ understanding of the common ethical issues in geriatrics with emphasis on frail dependent elderly in long-term care environments
- Involve students in the interdisciplinary approach to care planning

Objectives:
- By the end of the rotation, a student will be able to be able to competently administer, score and interpret selected geriatric assessment tools.
The student will be able to develop an integrated care plan based upon a geriatric assessment.
The student will be able to recognize and assess common geriatric syndromes, formulate a differential diagnosis and management plan.
The student will understand the challenges related to transitions in care in the post-acute setting.

Location: Miami Jewish Health Systems, Students should report to Douglas Gardens Hospital at 9am.

Participating Faculty:
Jenny Drice, M.D., Marcio Soares, M.D., and Brian Kiedrowski, M.D.

Prerequisite: Completion of M3 RMC Integrated Medicine Clerkship or Miami Geriatrics Clerkship

Expectations: Students are expected to become active members of the interdisciplinary team. They will attend morning rounds, closely follow assigned patients, and present to their attending and during interdisciplinary team meetings. The students are expected to be self-directed learners and identify learning issues pertaining to the care of their assigned patients and other patients whose care they may be involved in.

Student Evaluation and Grading: The student’s final grade will consist of performance on the standard UMMSM clerkship student evaluation form based on their performance during the rotation and on attendance and participation.

Reviewed January 2017
HEMATOLOGY

COURSE CODE: MDR 833
CLERKSHIP DIRECTOR: James Hoffman M.D.
TELEPHONE: 305-243-4860
EMAIL: j.hoffman@med.miami.edu
CONTACT: Gilberto Lopes M.D.
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITE: None
NUMBER OF STUDENTS: 2
AVAILABLE: All year
U.S. VISITING STUDENTS: No
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

IMPORTANT: Students should email the Program Director Dr. Gilberto Lopes (glopes@med.miami.edu) two weeks before the rotation and he will give you the name and contact information for the Heme/Onc fellow on the rotation so that you can coordinate with them

Overview:
The Hematology consult service at JMH is responsible for the initial evaluation and ongoing management of patients admitted to JMH in which a hematology consult is requested. These requests can include consultations for malignant hematologic conditions, benign hematologic conditions and coagulopathies.

Goals / Objectives:
1. Exposure to benign and malignant hematologic conditions such as: leukemias, lymphomas, TTP, HIT, DIC, Hyper viscosity syndromes, APL.
2. Evaluate, diagnose and follow the disease and treatment course and outcomes of patients diagnosed with benign and malignant hematological conditions.
3. Develop the skills needed to work successfully as a member of the in-patient team for a multidisciplinary specialty.
4. Encourage respect, reliability, accountability, honesty, compassion and commitment to patients.
5. Understand the indications for the different treatment modalities employed, when treating benign and malignant hematological conditions.
7. Review peripheral blood smears and assess morphologic features involving the different cell lines
8. Work collaboratively with the Hematopathology service, Transfusion Medicine and the Coagulation lab, in an effort to establish an accurate diagnosis based on the correlation between the clinico-pathologic information.
9. Become familiar with the use of flow cytometry and cytogenetics.

Course Design / Expectations:
Team Composition:
The team is composed of a Third Year Hematology/Oncology fellow and an attending. In addition, IM residents from JMH, medical students and observers are commonly part of the team. There is one supervising hematology attending assigned to support, educate and direct the service.

Responsibilities:
Students should email the Program Director Dr Gilberto Lopes (glopes@med.miami.edu) two weeks before the rotation and he will give you the name and contact information for the Heme/Onc fellow on the rotation so that you can coordinate with them.

The student will attend 1) Sickle Cell Clinic (ACC West) with Dr Thomas Harrington 2) Hemophilia Clinic with Dr Thomas Harrington 3) one half day outpatient clinic/week at SCCC with Dr James Hoffman at SCCC and 4) inpatient Hematology Consultation Service.

The student will work closely with the supervising fellow and attending. The student will evaluate specific patients assigned by the fellow and the attending. The student will discuss all relevant aspects of the case with the fellow and attending, formulate a plan, and attend the case presentation in the weekly lymphoma, leukemia, or myeloma/benign hematology conference. Students must effectively communicate with the other members of the hematology consult service as well as the Hemato-pathology team, Transfusion Medicine and the Coagulation Laboratory.

**Lectures and Tumor Boards:**
The student must attend the Leukemia Tumor Board, the Lymphoma Tumor Board and the Benign Hematology/Myeloma Conference.

**EDUCATIONAL ACTIVITIES**
Please use the Resident 360 portal through the New England Journal of Medicine at: [https://resident360.nejm.org/](https://resident360.nejm.org/)
Additional references can be found on The Hub in the “Clinical Resources” tab in the Hematology/Oncology Folder

The mix of patients and their disease processes can be unpredictable on the Hematology Consultation Service. We recommend that your reading be based on the clinical cases that are seen each day. For this reason we have included a broad spectrum of references.

**Location:**
Jackson Memorial (JMH) (90%) SCCC (UM) (10%)

**Participating Faculty:**
Faculty and Fellows in the Division of Hematology.

**Prerequisite:**
None

**Expectations:**
See Course Design above.

**Student Evaluation and Grading:**
The attending will meet with the student at the end of the rotation to provide individual feedback. The student is responsible for providing the evaluation form to the attending.
# HEMATOLOGY CONSULTATION SCHEDULE

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM conferences at Sylvester</strong></td>
<td>8:00 – 9:00 Lymphoma conference SCCC 1537</td>
<td>9:00-10:00 Leukemia Tumor Board CRB 6</td>
<td></td>
<td></td>
<td>8:00-9:00 Division Education Conference SCCC 1301 9:00 – 10:00 Core Curriculum CRM SMOB 245J</td>
</tr>
<tr>
<td></td>
<td>8:30 – 12PM JMH Hematology consults</td>
<td>JMH Hematology consults</td>
<td>Hoffman SCCC 3rd floor</td>
<td>JMH Hematology consults</td>
<td>JMH Hematology consults</td>
</tr>
<tr>
<td>1 – 5 pm</td>
<td>Hemophilia Clinic ACC West 3C</td>
<td>JMH Hematology consults</td>
<td>Sickle Cell Clinic ACC West 3C</td>
<td>JMH Hematology consults</td>
<td>JMH Hematology consults</td>
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<tr>
<td></td>
<td>JMH Hematology consults</td>
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<td>JMH Hematology consults</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM conferences at Sylvester</td>
<td>3:00 – 4:00 pm Myeloma/benign hematolgy conf</td>
<td></td>
<td></td>
<td>12:00-1:00 Board Review SMOB 245 J 1:00-2:00 Professionalism Series SMOB 245J</td>
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</tbody>
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Revised November 2019
HEPATOLOGY

COURSE CODE: MDR 834
CLERKSHIP DIRECTOR: Andres Carrion, MD
TELEPHONE: 305-243-6884
EMAIL: NShanley@med.miami.edu
CONTACT: Nidia Martin Shanley
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITE: Completion of Internal Medicine Clerkship
NUMBER OF STUDENTS: 1
AVAILABLE: All year, except blocks 1A and 6A
U.S. VISITING STUDENTS: Yes
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: Student must contact Clerkship Director two weeks prior to the start of rotation to confirm and receive important information.

Overview:
The student will be exposed to a wide spectrum of liver and biliary disease. The pathogenesis and development of a practical clinical approach to the recognition and differential diagnosis of these disorders will be emphasized.

Course Design:
This will be predominantly an outpatient rotation. Inpatient exposure is possible provided the student obtains prior approval from the course director. In the outpatient rotation the student will be assigned to the clinic fellow and will attend daily outpatient clinic at UMH and UMHC with different faculty members. In the inpatient rotation the student will round with the inpatient fellow and attending on inpatient Hepatology consults. In a 4-week rotation the student may opt to spend 2 weeks in the outpatient and 2 weeks in the inpatient setting or all 4 weeks in one of them. There are daily morning conferences at 8:00 a.m., weekly liver biopsy / tumor conferences and literature review sessions.

Goals:
The senior elective in Hepatology is designed to provide medical students with basic knowledge in the clinical approach to the diagnosis and treatment of liver diseases.

Objectives:
After the completion of their elective in Hepatology, the students are expected to be familiar with the signs and symptoms of common liver diseases and with the basic approaches and tools used for their diagnosis and treatment.

Location:
Outpatient rotation: UMH-MSCC (80%); UMHC/SCCC (20%)
Inpatient rotation: JMH (100%)

Participating Faculty:
Cynthia Levy, Paul Martin, Eugene R. Schiff, Christopher O’Brien, Kalyan Bhamidimarri, Leopoldo Arosemena, Patricia Jones, Eric Martin
**Prerequisite:**
Completion of the Internal Medicine Clerkship

**Expectations:**
The students are expected to be motivated to learn about liver disease, be punctual to all conferences and clinics, and to actively participate in all of the clinical activities of the Division.

**Student Evaluation and Grading:**
The evaluation is based on the impression of the faculty from the student’s motivation to learn, fund of knowledge, and level of participation in the academic and clinical activity of the Division. There will be an informal evaluation by a faculty member at the end of the rotation.

**Note:**
Students should report to the Division of Hepatology office at the CRB, 1120 NW 14th Street, 11th floor at 7:45am on the first Monday of their rotation and have with them a card with their name, photo and dates of rotation. They should present themselves to Cristina Flores or Carol Cottrell who will provide a Hepatology orientation manual and direct them to the morning conference.

Revised November 2019
**HIV PRIMARY CARE CLINIC**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 845</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Hansel Tookes, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-2398</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:hetookes@med.miami.edu">hetookes@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Dr. Tookes</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 / 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</tbody>
</table>

**Overview/Course Design:**
Students, under the supervision of an HIV / Infectious Disease Attending, will act as Internist developing their skills of diagnosis and management of patients with human immunodeficiency virus (HIV) infection at the dedicated outpatient ambulatory facility. The spectrum of patients includes those with predominantly advanced HIV disease and complications to evaluation and screening of patients with mildly symptomatic or asymptomatic HIV disease. Special emphasis is placed on Infectious Disease, Primary Care, and General Internal Medicine. In addition, particular needs in the areas of psychiatry, Dermatology and Ophthalmology related to the general internist will be covered.

**Goals/Objectives:**
Students will be exposed to and participate in the ambulatory care of patients with human immunodeficiency virus (HIV) disease.

**Location:** Jackson Memorial Hospital (100%)

**Prerequisite:** None

**Expectations:**
Students are assigned to a schedule with the faculty supervising the outpatient clinic. Working hours are from 8am to 5pm, Monday to Friday. No student will work past 5:00 p.m. or on week-ends.

Reviewed December 2019
## MT. SINAI INFECTIOUS DISEASES

<table>
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<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Claudio Tuda, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-674-2766</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Claudio.Tuda@msmc.com">Claudio.Tuda@msmc.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Claudio Tuda, MD [Mt. Sinai Med. Ctr. 4302 Alton Rd, MSOP, # 670, Miami Beach] Guerline Duverson, MedEd Coordinator, 305-674-2251</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes (arranged directly through Mt. Sinai)</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
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<td>TYPE:</td>
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</table>

Please contact a minimum of two weeks before the start of the rotation to complete hospital specific orientation requirements. Please contact Guerline Duverson in the Mt. Sinai Medical Education Office at Guerline.duverson@msmc.com (305-674-2251).

The Medical Education office is open from 830a-500p. If you arrive early, wait in the cafeteria for the office to open. You will need to park in the employee parking lot. On the first day, hit the call button for access.

### Goals:
The goal of the elective is to provide the opportunity to increase understanding of the broad range of Infectious Disease through the experience of serving as a consultant.

### Course Design:
Students work closely with the fellow and Attending in Infectious Disease at Mt. Sinai Medical Center. The student is expected to see patients as a consultant. Cases are presented to Attending physician and discussed in detail. There are special microbiology laboratory conferences and a weekly Infectious Disease clinical conference.

### Location:
Mt. Sinai Medical Center

### Prerequisite:
Completion of all core clerkships

### Student Evaluation and Grading:
Evaluation of students is done by the fellows and Attendings on the consultation service. The coordinator of the electives also evaluates students at various rounds. The process of teaching and evaluations is done daily at the various hospitals on consultation rounds.

Reviewed October 2019
INFECTIOUS DISEASE

| COURSE CODE: | MDR 836 |
| CLERKSHIP DIRECTOR: | Jose Gonzales Zamora, M.D., jxg1416@med.miami.edu |
| TELEPHONE: | 305-585-5215 |
| EMAIL: | sxa1268@med.miami.edu |
| CONTACT: | Sandy Acosta |
| LENGTH OF ELECTIVE: | 2 / 4 weeks |
| PREREQUISITE: | Completion of all core clerkships |
| NUMBER OF STUDENTS: | 2 |
| AVAILABLE: | All year |
| INTERVIEWING TIME: | 1 day (2wks) OR 2 days (4wks), with prior approval |
| TYPE: | Clinical |

**NOTE:** ANY schedule changes involving the Infectious Disease Consultation Service rotations, must be authorized by Nicole Burnside (see above for contact information) before your schedule can be officially changed.

**Overview:**
This elective provides a learning experience in the clinical discipline of Infectious Diseases, a discipline that stresses accurate definition of disease and establishment of an etiologic diagnosis through clinical assessment and microbiologic testing. Treatment can be rationally selected when the etiologic diagnosis is correctly identified. Appropriate initiation and discontinuation of antimicrobials are key activities on the ID service. Performing these steps under guidance of a physician with ID specialty training provides the essence of this clinical experience. This elective provides a unique opportunity to see a broad range of infectious diseases.

**Course Design:**
Students are assigned to the ID Consultation Service at Jackson Memorial Hospital (JMH). Students work closely with the ID Fellow who is responsible for the daily operation of the specialty service. An attending physician supervises the entire ID consultation service. During assignments at JMH, members of the consultation service participate in rounds with faculty for an estimated 18 hours per week. Students perform the initial evaluation of assigned patients, review the medical record and microbiology tests, provide a differential, formulate a potential treatment plan, and report their findings and assessment to the fellow and then the attending. Students are expected to perform a minimum of 12 ID inpatient consultations during a four-week rotation. Students will be asked on occasion to do research and prepare short informal presentations on topics related to their patients.

Microbiologists at each facility play an integral role in ID training and are available for consultation. There is a major interaction between the microbiologists in the Clinical Laboratory at JMH and the ID Division, and team members are expected to go to the laboratory to review microbiologic findings on their patients. Likewise, imaging studies are reviewed with the radiologists. There are several Infectious Disease conferences weekly that the student is expected to attend.

**Location:** JMH

**Prerequisite:** Completion of all core clerkships
Student Evaluation and Grading:
The fellows and attendings on the consultation service evaluate the students. Students will be evaluated on the quality of their patient evaluations and case presentations, their interest and participation in rounds, their self-learning activities, and the quality of their assigned scholarly presentations during rounds. The process of teaching and evaluation is done daily on consultation rounds.

Reviewed October 2019
LATIN AMERICA EXTERNSHIP

<table>
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<tr>
<th>COURSE CODE:</th>
<th>MDR 838</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>J. Donald Temple, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6826</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:ocata@med.miami.edu">ocata@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Olivia Cata [Jackson Medical Towers, East Bldg., Rm 1027 R-36]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of Core Clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>U.S. VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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<td>TYPE:</td>
<td>Clinical</td>
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You must get approval and make arrangements 3-6 months in advance.

Students must meet with one of the Deans of Student Affairs both prior to leaving on this elective (to review safety measures) and upon their return (to review their experience).

**Overview / Requirements:**
Electives in various Latin American countries can be arranged on an individual basis. Areas of special interest will vary but most deal with tropical hygiene and medicine in underdeveloped areas. This program is a reciprocal part of our Latin American Training Program and as such entails certain stipulations.

- All students will be screened by the Office of Student Affairs and recommended in writing.
- Students must speak Portuguese if they are planning to travel to Brazil. All other countries in Latin America require conversational Spanish skills.
- Students will be responsible for their travel, room and board, and any other incidental expense.
- A maximum of 10 students will be allowed to travel to Latin America.
- Length of externship is 4-6 weeks. Students will receive credit for four weeks only.

Participation in medical clerkships in the areas of Tropical Medicine, Internal Medicine, Pediatrics, Surgery and Family Medicine can be arranged in the following countries: Brazil, Colombia, Costa Rica, Ecuador, Mexico, and Peru.

**Important!** You are required to complete the “Application for International Study” packet and return to Student Affairs RMSB #2012 **BEFORE** leaving.

Reviewed December 2018
JMH MEDICAL INTENSIVE CARE UNIT

COURSE CODE: MDR 839
CLERKSHIP DIRECTOR: David De La Zerda, M.D.
TELEPHONE: 305-585-5215 Option 2
CONTACT: Cary Menendez [JMH – Central 600D] 305-585-5215 Option 2
E-MAIL: cmenendez@med.miami.edu
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITE: Completion of all core clerkships
NUMBER OF STUDENTS: 2
AVAILABLE: All year
U.S. VISITING STUDENTS: None
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: Call two weeks prior to the start of rotation to confirm and receive important information.

Overview:
This elective is intended to expose the senior medical student to a spectrum of experiences in Medical Intensive Care Unit. The student will be assigned to the either the blue or the gold team at Jackson Memorial Hospital Medical Intensive Care Unit.

Course Design:
The student will be assigned to the MICU at Jackson Memorial Hospital. These services consist of a University of Miami Pulmonary/critical care medicine faculty member, pulmonary fellow, residents and interns. The student will be responsible for seeing patients in consultation and follow-up and discussing them with the fellows and attending on rounds. The student will watch bronchoscopies and central lines placement and learn its indications and findings. All students will meet with Dr. De La Zerda, the rotation coordinator, weekly, and they are expected to attend conferences.

Goals:
A. Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiology examinations, and cognitive skills as they relate to the diagnosis and treatment of critical ill patients
B. Familiarize the medical student with bronchoscopy and central lines (general indications for the procedures, major risks):
   1. Understand the general indications for the procedures
   2. Major risks of the procedures
   3. Observation of the actual bronchoscopy and central line placement, especially if they were involved with the evaluation of the patient
C. Reinforce a critical approach to the medical literature.

Objectives
By the end of this elective, the medical student will be expected to be familiar with the basic evaluation and management of the following:
1. Common Medical Emergencies like septic shock, acute respiratory failure, hemoptysis, chest pain, and dyspnea.
2. Acute and chronic obstructive lung disease including asthma, bronchitis, bronchiectasis, emphysema, and bronchiolitis.
4. Pulmonary vascular disease including pulmonary embolism
5. Neuromuscular diseases
6. Infectious diseases.
7. Develop facility in the interpretation of radiographic procedures of all types.

**Location:** JMH Medical Intensive Care Unit (central Building fourth floor) (100%)

**Participating faculty**
Faculty from the Division of Pulmonary/Critical Care Medicine

**Prerequisite:** Completion of all core clerkships

**Expectations:**
The student will be expected to participate in all activities (consultations, procedures, rounds, and conferences) and be on time. The rotation coordinator needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

**Student evaluations and grading:**
Evaluation and assessment is made by the attending on service and evaluation includes attendance, participation, quality of written work-ups, quality of oral presentation and interaction with others. Feedback to students is given on a daily, but informal basis.

Reviewed November 2019
MIA VAMC MEDICAL INTENSIVE CARE UNIT

COURSE CODE: MDR 840
CLERKSHIP DIRECTOR: Andrew A. Quartin, M.D.
TELEPHONE: 305-575-3223 (Direct Line for Dr. Quartin)
CONTACT: Cary Menendez [305-585-5215 Option 2]
EMAIL: cmenendez@med.miami.edu
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITE: Completion of all core clerkships
NUMBER OF STUDENTS: 1
AVAILABLE: All year
U.S. VISITING STUDENTS: None
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

Overview:
By spending time on Attending rounds in the morning and check-out rounds in the afternoon with the housestaff, students will increase their appreciation of the problems of providing care for patients with acute and chronic respiratory failure, the various types of shock, cardiogenic pulmonary edema, the adult respiratory distress syndrome, malignant hypertension, acute myocardial infarction and various complications of multi-organ system failure.

Course Design:
Students assist in the diagnostic therapeutic management of critically ill patients and in performing various procedures under careful supervision. They are introduced to the various types of mechanical ventilators and the indications for their use, and provided with an increased understanding hemodynamic and respiratory monitoring.

Goals/Objectives:
The goal is to provide an understanding of Critical Care Medicine. There is special emphasis on understanding invasive procedures including their indications and contraindications.

Location: VAMC (100%)

Participating Faculty: Dr. Andrew Quartin and Dr. Roland Schein

Prerequisite: Completion of all core clerkships

Expectations:
The student participates on rounds 5 days per week and is expected to do some night call.

Student evaluations and grading:
Direct feedback is given to each student and evaluation is based on performance and discussion during presentations of cases as well as the discussions of the cases during supervised clinical care of patients. (Report at 8:00 a.m.)

Reviewed December 2019
MED-PEDS
(Listed under Medicine, Pediatrics, and Med-Peds)

<table>
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<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Dr. Kendra Van Kirk</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-7476</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:kxv192@med.miami.edu">kxv192@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Sadiz Torres; <a href="mailto:sttorres3@med.miami.edu">sttorres3@med.miami.edu</a>; 305-585-5954</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine and Pediatrics Core Clerkships</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year – Students going into MedPeds preferred during the first half of the year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days / 4 weeks, with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

NOTE: ANY schedule changes must be authorized by Dr. Van Kirk or the Med/Peds Residency Coordinator before your schedule can be officially changed.

Overview:
Combined Internal Medicine and Pediatrics is a unique specialty that trains physicians in the care of patients of all ages. The elective aims to give students interested in our specialty exposure to Med/Peds in an urban primary care practice setting. Students will see routine care of newborns, infants, children, adolescents and adults, as well as care of patients with complex pediatric diseases as they transition into adulthood. Students interested in Med/Peds as a career are preferred between June and January and other students will be scheduled thereafter.

Course Design:
The rotation will comprise of the following experiences:

1. Med/Peds Primary Care Practice- Students will spend a majority of their time with Med/Peds faculty and residents seeing and evaluating patients in the primary care practice. This will include patients that are being transitioned from pediatrics to adult care.


3. Transitional Care Clinics*- Students will have exposure to adolescent/ transitional care patients with complex pediatric diseases. *depends on availability

4. Inpatient care – Students will spend half of their time with Med/Peds faculty and residents seeing and evaluating patients on inpatient wards.
Sample Weekly Schedule

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
</tr>
<tr>
<td><strong>Noon</strong></td>
<td>Med/Peds Noon Conference PICU 5009E</td>
<td>Peds Grand Rounds MCCD 8th Floor Auditorium</td>
<td>Internal Med Grand Rounds RMSB 3rd floor auditorium</td>
<td>Peds Academic Half Day (until 3:00pm) MCCD 8th Floor Auditorium OR - Ambulatory Medicine Academy Half Day (Obtain weekly location from MedPeds Chiefs)</td>
<td>IM NC Central 2 Auditorium OR Peds Staff Conference MCCD 8th Floor Auditorium</td>
</tr>
<tr>
<td><strong>PM</strong></td>
<td>Med/Peds Resident Clinic 1PM ACC West 5A</td>
<td>Med/Peds Resident Clinic 1pm ACC West 5A</td>
<td>Med/Peds Resident Clinic 1pm ACC West 5A</td>
<td>Med/Peds Resident Clinic 1pm ACC West 5A</td>
<td>Med/Peds Resident Clinic 1pm ACC West 5A</td>
</tr>
</tbody>
</table>

Goals:
1. The students will receive exposure to the Med/Peds specialty and the unique opportunities the career can provide.
2. The student will receive broad clinical training in the care of adult and pediatric outpatients and inpatients in a major urban setting.
3. The student will receive exposure and training in transitional care of the complex pediatric patient.

Objectives:
1. The student will learn and be able to apply age/gender appropriate screening, immunizations, and anticipatory guidance for the following populations:
   - Newborn
   - Infant/Toddler
   - School Aged Child
   - Adolescent
   - Adult
2. The student will be able to diagnosis and provide initial management of the following primary care problems:
   - Gastroesophageal Reflux
   - Allergic Rhinitis
   - Asthma/COPD
   - Obesity
   - HTN
   - Diabetes Mellitus
   - Hyperlipidemia
   - Low Back Pain
3. The student will know the following with regard to transitional care:
   - The definition of healthcare transition
   - The importance of providers to understand the specific issues regarding healthcare transition
   - Specific tools and resources they can utilize to help youth and their families develop a long-term transition plan
   - Specific strategies that can be used with young patients to empower them to be more responsible for their own healthcare.
- The importance of multispecialty (pediatrics, internal medicine, subspecialists) coordination in the transition of healthcare from pediatric to adult care.

**Location:**
- Primary Location- Jackson Memorial Hospital Ambulatory Care Center Med Peds Primary Care Practice (ACC West 5A) (JMH 100%)
- Students may be asked to attend meetings/conferences in other parts of ACC, Jackson Memorial Hospital or University of Miami Hospital and/or Clinics.

**Participating Faculty:**
- Med Peds Faculty and Faculty from Division of Internal Medicine and Division of Pediatrics

**Prerequisite:**
- Completion of both Internal Medicine and Pediatric Core Clerkships

**Expectations:**
- The student is expected to participate in all activities (primary care clinic, noon conferences) in the course curriculum. They are expected to be on time, and to give appropriate notice to clerkship director for all absences or tardiness. Students are expected to follow the codes of professionalism as mandated by the School of Medicine
- Progress notes on patients that are evaluated by the student are to be completed by the end of the same day the patient was seen.

**References (suggested materials)**

- Online references (commonly used in clinic):
  - CDC immunization schedules: [https://www.cdc.gov/vaccines/schedules](https://www.cdc.gov/vaccines/schedules). Also available as an Android/iPhone app.

- Online Modules/Training:
  - Florida Health and Transition Services Education and Training for Health Care Professionals- [http://www.floridahats.org/?page_id=2206](http://www.floridahats.org/?page_id=2206)

- Suggested Readings:

**Student Evaluation and Grading:**
- The medical student will receive a written evaluation at the end of the month based on the six ACGME core competencies. This will be reviewed with the student by the faculty evaluator.
- The student will complete an evaluation of the overall rotation and of the faculty with whom they worked.
• Grading will be given as pass/fail.
Nephrology

Course Code: MDR 842
Clerkship Director: Zain Mithani, M.D.
Telephone: 305-243-3583
Contact: Zain Mithani, M.D. (zmithani@med.miami.edu)
Length of Elective: 4
Prerequisite: None
Number of Students: 3
Available: All Year
U.S. Visiting Students: Yes
Interviewing Time: 2 days (4wks), with prior approval
Type: Clinical

Overview:
The clinical and teaching activities focus on the provision of consultative and direct medical care for patients with renal disease, hypertension, disorders of water, electrolyte and acid-base balance, and related metabolic and immunologic disease. Contemporary technologies used in diagnosis and treatment include renal biopsy, acute and chronic hemo- and peritoneal-dialysis, renal transplantation, plasmapharesis, evaluation of nuclear flow studies, and interventional nephrology.

Course Design:
Students work closely with the Fellow who assigns patients (new consults) for whom they are expected to write up case histories and to formulate a reasonable differential diagnosis and therapeutic plans, which they present to the attending physician. Attending rounds are conducted for 2-4 hours daily.

Goals/Objectives:
Students will be exposed to and participate in the care of patients with renal disorders.

Location: JMH (80%) and UMTower (20%)

Prerequisite: None

Expectations:
Students are expected to attend a formal conference of the division; journal club, nephrology grand rounds, clinical nephrology conference. Student may participate selectively in out-patient clinics. The generally recommend text is Primer in Renal Diseases.

Student evaluations and grading:
The Fellows and Attendings evaluate students. Feedback is informal and readily available.

Reviewed November 2019
MEDICAL ONCOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 859</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Gilberto Lopes, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td></td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:glopes@med.miami.edu">glopes@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Gilberto Lopes MD</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
<td>All year</td>
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<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

You must contact Dr. Gilberto Lopes at least two weeks before your elective. He will provide the contact information for the fellow on service. You must contact him well in advance to insure that there is space available in the attendings' SCCC clinics.

Overview:
Solid Tumor Oncology encompasses multiple tumor types. This rotation is conducted in both the inpatient and the outpatient arenas, although it is predominantly an outpatient specialty. In order for the student to gain an appreciation of the entire spectrum of Solid Tumor Oncology care this rotation is composed of three parts:

1) An intensive outpatient experience with representative malignancies (breast cancer, sarcoma and GI malignancies)
2) Tumor Boards for breast cancer and sarcomas
3) In-Patient Oncology Consultations at JMH.

Exposure to all three areas is critical in order to be able to create the holistic and multidisciplinary treatment plans that are required by the modern oncology patients.

Course Design:
Responsibilities:

Inpatient Oncology Consults
The student will round with the Oncology fellow and attending who are staffing the JMH Oncology Consultation Service on Monday PM, Thursday all day and Friday all day. The inpatient team is composed of an attending and a first year Heme/Onc fellow. There is a maximum of 2 students on the service at a time. You must work closely with the fellow.

Outpatient Clinics at SCCC
The student will attend the following clinics at SCCC:
Dr. Benedetto (GI)-Monday AM
Dr. Pimentel (GI)-Tuesday PM
Drs. D'Amato and Trent (sarcoma)-Wednesday AM/PM

Lectures and Tumor Boards
The student will attend:
- Breast Cancer Tumor Board at JMH with Drs. Hurley and O'Neil (10AM Tuesday at Taylor Breast Center JMH)
- Sarcoma Tumor Board (Thursday 4:00-5:00)
• Division Education Conference Friday 8:00 SCCC 1301
• Core Curriculum Friday 9:00 SMOB 245J
• Board Review Friday 12:00 SMOB 245J
• Professionalism Series Friday 1:00 SMOB 245J

EDUCATIONAL ACTIVITIES
Please use the Resident 360 portal through the New England Journal of Medicine at:
https://resident360.nejm.org/
Additional references can be found on The Hub in the “Clinical Resources” tab in the Hematology/Oncology Folder

Goals/Objectives:
1) Expose the student to a broad range of patients with a variety of solid tumors in different stages of treatment in multiple different venues.
2) Learn the appropriate tests to order to complete staging work-ups on patients with newly diagnosed oncologic malignancies.
3) Learn about issues that may arise as a result of a patient’s cancer diagnosis (pain, obstruction) or as a result of their treatment (intractable nausea, neutropenic fever).
4) The student will establish relationships with patients and their families and learn to communicate information about the disease, the prognosis and assist the patient with treatment decisions and transitions in care.
5) Recognize oncologic conditions that require emergent evaluation and treatment. Examples include but are not limited to: spinal cord compression, increased intracranial pressure, tamponade, superior vena cava syndrome and hypercalcemia.
6) Develop an understanding of the balance between treatment and expectations.
7) Understand the difference between curative and palliative intent.

Location:
Jackson Memorial (JMH) (50%) and Sylvester Comprehensive Cancer Center (SCCC) (50%)

Participating Faculty:
Drs. Hurley, Benedetto, Pimentel and other faculty in the Division of Solid Tumor Oncology.

Prerequisite:
None

Expectations:
See Course Design above.

Student Evaluation and Grading:
The attending will meet with the student at the end of the rotation to provide individual feedback. The student is responsible for providing the evaluation form to the attending.
# ONCOLOGY SCHEDULE

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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</thead>
<tbody>
<tr>
<td>AM</td>
<td>conferences</td>
<td></td>
<td></td>
<td></td>
<td>8:00-9:00 Division Education Conference SCCC 1301</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>9:00 – 10:00 Core Curriculum SMOB 245J</td>
</tr>
<tr>
<td>8:00 – 12:00PM</td>
<td>Benedetto</td>
<td>10 – 1 PM JMH Breast tumor board Taylor Breast Center JMH DTC 1st floor Hurley/O’Neil</td>
<td>D’Amato, Trent</td>
<td>JMH Oncology Consults</td>
<td>JMH Oncology Consults</td>
</tr>
<tr>
<td>1 – 5 pm</td>
<td>JMH Oncology consults</td>
<td>Pimentel</td>
<td>D’Amato, Trent</td>
<td>JMH Oncology Consults</td>
<td>12:00-1:00 Board Review 1:00-2:00 Professionalism Series JMH Oncology consults</td>
</tr>
<tr>
<td>PM</td>
<td>conferences</td>
<td></td>
<td></td>
<td></td>
<td>Sarcoma Tumor Board 4-5PM</td>
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</table>

**Benedetto SCCC 2nd Floor**

**D’Amato, Trent SCCC 2nd Floor**

**Pimentel SCC 2nd Floor**

Revised November 2019
PULMONARY

COURSE CODE: MDR 843
CLERKSHIP DIRECTOR: David De La Zerda, M.D.
TELEPHONE: 305- 585-5215, Ext 2
CONTACT: Cary Menendez, [JMH-C600D] 305-585-5215 Option 2 cmenendez@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Medicine Clerkship
NUMBER OF STUDENTS: 2
AVAILABLE: All year
U.S. VISITING STUDENTS: No
INTERVIEWING TIME: 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: Call two weeks prior to the start of rotation to confirm and receive important information.

Overview/Course Design:
This 4-week elective is intended to expose the senior medical student to a spectrum of experiences in pulmonary disease. The student will be assigned to the pulmonary consultation services at Jackson Memorial Hospital.

Course Design:
The student will be assigned to the pulmonary consultation service at Jackson Memorial Hospital. These services consist of a University of Miami Pulmonary/Critical Care Medicine faculty member, pulmonary fellow, residents, and interns. The student will be responsible for seeing patients in consultation and follow-up and discussing them with the fellows and attending on rounds. The student will watch bronchoscopy and learn its indications and findings. The student will be given exposure to Pulmonary Function Testing and learn how to interpret them. The student may choose to have their own pulmonary test performed during the rotation as well. In order to gain a broader understanding of pulmonary medicine, the student will also participate in an outpatient pulmonary clinic at JMH one half day session per week (Monday 1-5pm). All students will meet with Dr. De La Zerda, the rotation coordinator, weekly, and they are expected to attend conferences.

Goals:
D. Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiology examinations, and cognitive skills as they relate to the diagnosis and treatment of pulmonary diseases.
E. Familiarize the medical student with pulmonary bronchoscopy (general indications for the procedure, major risks, observation of actual endoscopy being performed)
   4. Understand the general indications for the procedure
   5. Major risks of the procedure
   6. Observation of the actual bronchoscopy being performed, especially if they were involved with the evaluation of the patient
F. Reinforce a critical approach to the medical literature.

Objectives
C. By the end of this elective, the medical student will be expected to be familiar with the basic evaluation and management of the following:
   A. Common respiratory symptoms and signs of: hemoptysis, cough, chest pain, and dyspnea.
B. Acute and chronic obstructive lung disease including asthma, bronchitis, bronchiectasis, emphysema, and bronchiolitis.
C. Subacute and chronic interstitial lung disease.
D. Pulmonary vascular disease including pulmonary embolism and other forms of primary and secondary pulmonary hypertension.
E. Neuromuscular diseases of the respiratory systems
F. Nodules and masses in the lung.
G. Sleep disorders.
H. Infectious diseases involving the respiratory systems.
I. Post-operative pulmonary complications including respiratory failure, hypoxemia, pleural effusion, and atelectasis.
J. Recognize the indications for diagnostic procedures including bronchoscopy, transthoracic needle biopsy, V/Q scans, pulmonary angiography, CT scans and standard chest roentgenograms.
K. Develop facility in the interpretation of radiographic procedures of all types.

**Location:** JMH (100%)

**Participating faculty**
Faculty from the Division of Pulmonary/Critical Care Medicine

**Prerequisite:** Medicine Clerkship

**Expectations:**
The student will be expected to participate in all activities (consultations, procedures, rounds, clinics, conferences) and be on time. The rotation coordinator needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

**Student evaluations and grading:**
Evaluation and assessment is made by the attending on service and evaluation includes attendance, participation, quality of written work-ups, quality of oral presentation and interaction with others. Feedback to students is given on a daily, but informal basis.

Reviewed November 2019
**STUDENT HEALTH CLINIC**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 846</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Howard Anapol, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-284-5921</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:tmodest@miami.edu">tmodest@miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Teesha Modest; 305-284-5195</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
<td>1</td>
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<tr>
<td>AVAILABLE:</td>
<td>Blocks 3B, 4A/B, 5A/B, 6A, 8A/B, 9A/9B, 10B, 11A/B</td>
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<tr>
<td>U.S VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
<td>1 day (2wks), with prior approval</td>
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</table>

**Overview:**
The Student Health Service provides primary care services to UM undergraduate and graduate students. Students are seen for acute illnesses and injuries, and are followed for chronic medical problems. Specialty care services include women's health, and allergy clinics. Routine lab tests and X-rays are performed on site.

**Course Design:**
Medical students will work under the supervision of the Department of Medicine faculty and other Health Center staff, and will provide direct patient care and order and interpret routine lab tests and x-rays.

Common problems seen include:
- Acute respiratory, gastrointestinal, and urinary problems and infections.
- Common chronic medical illnesses including asthma, hypertension, and diabetes.
- Orthopedic injuries and minor trauma, including lacerations.
- Routine gynecological care, including pap smears and contraception counseling.
- Immunizations, allergy injections, and travel medicine.

This rotation is especially helpful for students considering primary care careers, and those anticipating working in urgent care settings. Important factors include – interest, ability to relate to patients and staff members and willingness to learn.

**Goals/Objectives:**
Students will be exposed to and participate in the ambulatory care of patients with medical conditions.

**Location:** UM Student Health Service at Lennar Foundation Medical Center (Coral Gables 100%)

**Prerequisite:** Completion of all core clerkships

**Expectations:** Daily attendance is expected. Hours are 8:30 a.m. to 5:00 p.m., Mon-Fri

**Student evaluations and grading:**
The student is evaluated on their professionalism, clinical skills, and participation. They are expected to master basic history taking and physical exam skills.

Revised October 2019
JMH MEDICINE SUB-I

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 847</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Mark A. Gelbard, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5095 / -5215</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:mgelbard@med.miami.edu">mgelbard@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Mark Gelbard, M.D. (<a href="mailto:mgelbard@med.miami.edu">mgelbard@med.miami.edu</a>) Angelica Escalante; 305-243-2218; <a href="mailto:aescalan@med.miami.edu">aescalan@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
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</table>

NOTE: ANY schedule changes involving ALL Internal Medicine Sub-I (JMH, UMH, & VA) must be authorized by Angelica Escalante before your schedule can be officially changed.

ABSOLUTELY NO TIME OFF IS ALLOWED DURING THE ROTATION FOR ANY REASON. Time off for interviews, taking USMLE Step 2, attending conferences or any other event is NOT allowed. Please plan accordingly and do not enroll if interviewing/meetings/events are anticipated. The Sub-I Intern is a key member of the medical team and is expected to be present throughout the month.

Any and all scheduling issues (i.e., family events, emergencies, etc.) need to be brought to the attention of the Sub-I Director (Dr. Gelbard) as soon as the student knows about the conflict.

Overview/Course Design:
Senior students will carry out all the duties and responsibilities of an intern, commensurate with their capabilities. He/she will function as an “acting intern” and will have an increased level of responsibility for direct patient care. There will be an opportunity to improve clinical and didactic skills in the diagnosis and treatment of a wide spectrum of medical disorders. They will be directly supervised by their second or third year medical resident and Attending Physician.

Students will be assigned to one of the following Jackson Memorial Hospital (JMH) medical teams – General Medicine, HIV/Infectious Diseases, Cardiology, Hematology/Oncology, or Transplant Nephrology. Every effort will be made to accommodate student requests. Assignment will be made by the Chief Medical Residents with input from Dr. Gelbard. While students may indicate a preference, the final decision will be up to the course director.

Goals/Objectives:
Students will participate in the inpatient care of patients with medical conditions and serve as an acting intern on the ward team. They are expected to assume direct responsibility for patient care and to become increasingly proficient and competent as interpreters and managers.

Location: Jackson Memorial Hospital (100%)
Prerequisite: Completion of all core clerkships

Expectations:
Sub-Interns will attend morning work rounds and daily attending rounds. They will attend interns’ report on Wednesday morning and the intake conference or quiz conference, when it occurs. They are expected to attend conferences such as Medical Grand Rounds and are invited to the residents' noon conference. They will also have separate rounds with Dr. Gelbard once per week for case presentations and discussions. They will be responsible for patient presentations and will participate in the regular admission call schedule. Students participating in the ward medicine rotation must understand that the scheduling of this rotation is complex, which is why the student who enrolls is obligated to the date and the rotation.

Student evaluations and grading:
The supervising Medical Resident and the Attending physicians evaluate the student both in written form and by providing verbal feedback at the end of the rotation. Students will, in turn, evaluate their resident and attendings at the conclusion of the rotation.

Reviewed December 2018
UMH MEDICINE SUB-I

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 958</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Matthew Imm, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-1960</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:mimm@med.miami.edu">mimm@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Angelica Escalante; 305-243-2218; <a href="mailto:aescalan@med.miami.edu">aescalan@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of Core Clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>U.S VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
<td>None</td>
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<td>TYPE:</td>
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NOTE: ANY schedule changes involving ALL Internal Medicine Sub-I (JMH, UMH, & VA) must be authorized by Angelica Escalante before your schedule can be officially changed.

ABSOLUTELY NO TIME OFF IS ALLOWED DURING THE ROTATION FOR ANY REASON. Time off for interviews, taking USMLE Step 2, attending conferences or any other event is NOT allowed. Please plan accordingly and do not enroll if interviewing/meetings/events are anticipated. The Sub-Intern is a key member of the medical team and is expected to be present throughout the month.

Any and all scheduling issues (ie, family events, emergencies, etc.) need to be brought to the attention of the Sub-I Director (Dr. Imm) as soon as the student knows about the conflict.

Overview:
The primary objective of this rotation is to emphasize mastery of clinical core internal medicine competencies, to develop skills in inpatient management of common medical illnesses, and to prepare fourth year medical students for internship. This rotation will promote the expansion of the clinical knowledge base and emphasize the practice of evidence based internal medicine.

Course Design:
Subinterns are assigned to the University of Miami Hospital and assume primary responsibility for patient care under close supervision provided by an assigned attending hospitalist, senior resident and intern. The student will be assigned to the teaching hospitalist service (Team A and B). Sub interns will participate in a traditional academic medicine team, and be present for pre-rounds, attending rounds and any and all clinical care pertaining to the team patients. They will also attend hospital medicine grand rounds. They will participate in daily clinical activities such as handoffs and multi-disciplinary rounds. Sub Intern schedule will be commensurate with the intern on service.

Goals:
- Develop the knowledge base, skills and attitudes that are needed to master clinical core competencies of internal medicine; particularly common inpatient diagnoses, and the disciplines of hospital medicine, cardiovascular medicine, and gastroenterology.
- Promote the practice of evidence based medicine in order to improve quality of care and patient safety
- Review common clinical conditions with an emphasis on diagnosis and management
**Objectives:**
1. Gather information through relevant and focused history taking
2. Conduct directed and complete physical examinations
3. Order appropriate tests and to effectively interpret results
4. Engage in clinical reasoning, propose sensible differential diagnoses and formulate appropriate therapeutic recommendations
5. Document encounters efficiently and accurately
6. Effectively prioritize daily tasks for patient care
7. Anticipate patient needs and organize discharge planning
8. Ensure safe transitions of care
9. Demonstrate the understanding of the pathophysiology and in common medical diseases.
10. Understand the impact of cultural, psychosocial and environmental processes on disease manifestation
11. Review and apply current literature to emphasize the practice of evidence-based medicine
12. Effectively communicate with the patient, his/her caregiver and with other physicians and non-physician members of the healthcare system
13. Efficiently coordinate multidisciplinary care through appropriate utilization of consultative and ancillary services
14. Use information technology to access online medical information, review evidence from scientific studies and formulate appropriate management decisions
15. Understand the risks and benefits of a procedure and to learn how to obtain informed consent
16. Recognize the importance of quality improvement and promote patient safety
17. Maintain timely communication with primary care physicians, sub-specialists and consulting physicians
18. Commit to excellence and to personal/professional growth through self-directed learning; to perform evaluation of one’s performance and develop a plan for improvement

**Location:**
University of Miami Hospital Inpatient Service (100%)

**Participating Faculty:**
Faculty from the Department of Medicine

**Prerequisite:**
Completion of Core Clerkships

**Expectations:**

**Role and Responsibility of the Subintern:**
- The subintern is an integral part of the medical team and works under the close supervision of an attending hospitalist. He/she participates in the following aspects of patient care:
  - Initial evaluation (admission note, on service note...)
  - Daily management (progress notes, handoffs...)
  - Coordination of care with other specialties and ancillary services
  - Final Disposition (off service note, discharge summary, outpatient follow up...)
  - The subintern carries 3-5 patients.
  - The subintern call schedule will be dependent on the schedule of the co-intern.
  - The subintern admits 1-3 patients on a given call day.
  - Pre-Round begins at 6:30 AM.
  - Turn Over, from the Nocturnist, takes place at 7:00 AM.
  - Attending Rounds starts from 8:15-8:30 AM and Typically ends 11:00 AM
  - Sign Out occurs at 7:00 PM.
  - The subintern participates in all scheduled didactic sessions with the exception of academic half day.
The subintern attends workshops and all others conferences as outlined in the conference calendar.

Conference Schedule:
During the rotation, the subintern is required to attend the following conferences:
- Department of Medicine Grand Rounds at Rosenstiel Medical Science Building every Wednesday at noon.
- Sub-internship Weekly Workshop and journal club every 2nd and 4th Friday at Noon at the University of Miami Hospital and 1st and 3rd Thursday at VA Medical Center.

Readings:
A set of prerequisite reading material is assigned on a weekly basis in preparation for the workshop.

Student Evaluation and Grading:
The supervising attending hospitalist will provide periodic verbal feedback to the subintern over the course of the rotation and will submit a written evaluation of the subintern at the end of the rotation.

The subintern will complete an evaluation of the supervising attending(s) and the rotation at the conclusion of the rotation. These evaluations will be anonymous.

Revised December 2019
MIA VAMC MEDICINE SUB-I

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 961</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Devora C. Kahn MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-575-3160 / -3147</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:devora.kahn@va.gov">devora.kahn@va.gov</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Devora C. Kahn MD; <a href="mailto:devora.kahn@va.gov">devora.kahn@va.gov</a> Angelica Escalante; 305-243-2218; <a href="mailto:aescalan@med.miami.edu">aescalan@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>U.S VISITING STUDENTS:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>NO – see below</td>
</tr>
<tr>
<td>TYPE:</td>
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</tr>
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</table>

NOTE: ANY schedule changes involving ALL Internal Medicine Sub-I (JMH, UMH, & VA) must be authorized by Angelica Escalante before your schedule can be officially changed.

ABSOLUTELY NO TIME OFF IS ALLOWED DURING THE ROTATION FOR ANY REASON. Time off for interviews, taking USMLE Step 2, attending conferences or any other event is NOT allowed. Please plan accordingly and do not enroll if interviewing/meetings/events are anticipated. The Sub-Intern is a key member of the medical team and is expected to be present throughout the month.

Any and all scheduling issues (ie, family events, emergencies, etc.) need to be brought to the attention of the Sub-I Director (Dr. Kahn) as soon as the student knows about the conflict.

Overview:
The objective of this rotation is to provide students in their fourth year of medical school training with hands on clinical experiences that are specifically designed to mirror their upcoming roles as interns in postgraduate training. The medical Sub-intern will master specific core competencies and basic principles of inpatient medical care.

Design:
The sub-I will be a member of a medical ward team that consists of a Hospitalist attending, one residents, two interns and occasionally two third year clerks. The sub-intern will work specifically with the resident on the team who will directly oversee the sub-I and the care of his/her patients. They will focus on delivery of inpatient care to general medical patients as well as collaborate with medical and surgical subspecialties.

They will attend daily attending rounds as well as participate in daily sign out/hand off rounds. Sub-Interns will attend, weekly grand rounds, weekly interns report and intern academic half day.

Goals: The goals of the rotation are to provide the Sub-Interns with the clinical skills and knowledge they will need for their future clinical training. With the guidance and oversight of the supervising attending and resident, the sub-I will be seen as the primary care giver by the patient and the hospital staff.

Objectives:
1. Describe the intricacies of the inpatient clinical care setting
2. Demonstrate being an effective member of a health care team
3. Demonstrate use of the electronic medical record
4. Demonstrate proficiency in history taking and performing the physical exam
5. Demonstrate proficiency in information gathering skills
6. Demonstrate proficiency in note writing and oral presentation skills
7. Demonstrate proficiency in basic procedural skills
8. Demonstrate acceptable communication skills with patients and families as well as other medical professionals and ancillary staff
9. Create differential diagnosis and appropriate management plans based on clinical reasoning and evidence based medicine
10. Coordinate multi/interdisciplinary care for patients including social work, case management, psychology, pastoral care, wound care, nutrition
11. Create plans of care for inpatient stay and transition to outpatient setting
12. Delineate and communicate appropriate hand offs/sign outs
13. Obtain informed consent and demonstrate ability to communicate risks, benefits, alternatives
14. Describe when subspecialty consultation should be sought and develop the communication skills to obtain the specific answers and help needed
15. Perform self directed learning, relevant patient care literature reviews and inculcate feedback into practice

**Location:**
Miami VA Medical Center (100%)

**Participating Faculty:**
Hospitalist Group and Medical Subspecialists

**Prerequisite:**
Completion of Core Clerkships

**Expectations:**
The sub-intern will be a functioning member of the team. He/she will be responsible for all orders, admission notes, daily progress notes, transfer notes and discharge summaries as well as daily written and oral hand-offs to the night covering staff. They are expected to initiate and call consults when indicated, follow up labs and radiology tests as well as other diagnostic modalities. It is expected that the Sub-Intern will be the primary communicator with the patients’ families.

The sub-intern is expected to participate in all team activities and to be on time. He/she will take call with his/her resident. This comes out to roughly every other day. There may be times when they admit consecutive days in order to have other days off. The volume of hospital admissions will determine the number of admissions per call. The total number of patients a sub-intern can carry is seven and is expected to have a minimum of three at any given time.

Work rounds will begin at 7 am after the Sub-I receives the hand off from the night staff. Attending rounds are at 8am daily unless otherwise specified by the attending. Hand off/sign out rounds are daily at 6:30 pm, weekends and holidays at 6pm (you may be excused earlier if your are not on call that day and all the work is done but this must be cleared by the resident). The Sub-Intern will also attend daily interdisciplinary rounds with pharmacists, social workers, case managers and coders and present their cases and detail their plan of care.

**Conference Schedule:**
The following is a list of conferences that the sub-interns are expected to attend.

1. Intern’s Half Academic Day Thursdays 10am-1pm
2. Internal Medicine Grand Rounds: Wednesdays at noon Rosenstiel Medical Science Building

Evaluations and Feedback:
The supervising Attending and Resident will provide verbal face to face feedback to the sub-I at the close of the second week and then again at the end of the rotation. The Attending and Resident will complete a written evaluation at the end of the rotation.

The sub-intern will complete written evaluations of the rotation, attending and resident at the conclusion of the rotation. Should any issues or questions arise during the rotation, the sub-I should address them to the Sub-I coordinator at any time.

Revised November 2019
**JFK CARDIOLOGY CONSULT**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 967</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE DIRECTOR:</td>
<td>Robert Chait, M.D., Waqas Ghumman, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>Joseph Sollecito, 561-886-1202</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:BobChait@gmail.com">BobChait@gmail.com</a>; <a href="mailto:wghumman@gmail.com">wghumman@gmail.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito, <a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>, 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ROTATION:</td>
<td>2 / 4 weeks – 4 weeks is recommended</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<tr>
<td>U.S. VISITING STUDENTS:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>0 day (2wks) OR 2 days (4wks), with prior approval</td>
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<tr>
<td></td>
<td>Interview days may not be taken on this service if it is a two week rotation. If taken for 4 weeks a max of 2 days is permitted with prior approval.</td>
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</table>

*Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.*

**Overview**

This is an inpatient consult rotation is at JFK Medical Center, a tertiary care center in Palm Beach County. It is a very active cardiac center with invasive cardiology services, cardiac surgery, and electrophysiology services. Patients encountered reflect the rich, diverse nature of pathology present in the area with equal exposure to men and women of multiple ethnicities and socioeconomic backgrounds.

Possible disease states the student will encounter may include: coronary artery disease, acute coronary syndrome and its complications, congestive heart failure including systolic as well as diastolic dysfunctions, endo-, myo- and pericarditis, valvular heart disease, brady- and tachy-arrhythmias, cardiac conduction abnormalities, cardiac pacers and ICDs, peripheral vascular disease, hyperlipidemia, ischemic and non-ischemic cardiomyopathy, preoperative cardiac evaluation for cardiac and non-cardiac surgery for both elective and emergency procedures, and pulmonary embolism. The student will gain valuable insight into the indications, contraindications, and performance of commonly ordered cardiac tests. Cost-effective health issues are regularly addressed in this setting.

**Course Design**

Students will work directly with a Cardiology Fellow and the residents from the Regional Campus Internal Medicine Residency. The daily activities will consist of rounds on the floors of the hospital where they will be seeing new consults and rounding on established patients. Students work up patients and discuss the history and physical findings with the team, participate in daily consultation rounds with the attending cardiologists, and will be supervised by the faculty. Students attend and participate in the cardiology conference. The student will be encouraged to follow the patients through the continuum of inpatient care and will also have the chance to observe diagnostic as well as therapeutic cardiac catheterizations.

Students have the option of working directly with Dr. Ghumman at an outpatient cardiology practice in the afternoons if they have an interest in congestive heart failure.

**Location:**

- JFK Medical Center, Atlantis, Florida (100%)
Participating Faculty
- Robert Chait, M.D.
- Steven Borzak, M.D.
- Waqas Ghumann, M.D.

Prerequisite
- Completion of all core clerkships

Expectations
The student will be responsible for the initial evaluation and daily documentation of patients in the inpatient setting, the student will be expected to search and review evidence to support the decision-making made on their patients. The student will be expected to fully participate in all conferences and rounds as outlined below.

The student will round Monday through Friday with the consult team. Mornings will be spent in a combination of rounding on existing patients, and in evaluation of new consults. Time will be available to review the literature, discuss with the patients with the supervising residents in preparation for Cardiology Teaching Rounds. In addition, the student will be required to attend Morning Report and Grand Rounds, as well as Noon Conference. The student may be asked to present patients at morning report and at the Cardiology teaching conference. In the afternoons, Monday through Friday, the student will attend Cardiology Teaching Rounds, and review and present patients on the service to the team. Alternatively, in the afternoons, the student may attend clinic from 1-5 PM with Dr. Ghumman. There will also be EKG reading sessions one on one with Dr. Chait that will occur at least once weekly.

Conferences:
- Grand Rounds: Thursday, 7:30 AM
- Noon Conference: M-F, 12 noon
  - Noon Conference includes biweekly Cardiology Teaching rounds and weekly Professor's Rounds.

Hours:
- M-F: 7:30-5:00 PM

Student Evaluation and Grading
The student will be evaluated by the Attending, along with input from the residents on the cardiology service. The evaluation will be on a Pass-Fail Basis, and will be based upon attendance and participation in all aspects of the elective, including medical knowledge, patient care, interpersonal and communication skills, professionalism, practice-based learning and improvement, and systems-based practice.

Revised October 2019
HCH CARDIOLOGY

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<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Joshua Larned, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>954-772-2136</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Joshua.Larned@holy-cross.com">Joshua.Larned@holy-cross.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito, <a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>, 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ROTATION:</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

Overview
This rotation includes consultative diagnosis, electrocardiography, and intensive medical and surgical cardiac care at Holy Cross Hospital and Clinics. Under the direct supervision of the attending cardiologist, students will have the opportunity to evaluate patients presenting with a full spectrum of cardiac complaints. The student will participate in consultation rounds with the attending cardiologists, in both the inpatient and outpatient settings, participate in the evaluation of noninvasive testing, and observe cardiac catheterization and cardiac surgery of their patients.

Course Description
The student will be responsible for the initial evaluation and daily documentation of patients in the inpatient setting, and will independently evaluate patients in the outpatient cardiology office, with an increasing level of responsibility for direct patient care as the elective progresses. Emphasis will be placed on the physical exam of the cardiac patient, the evaluation of common complaints, EKG interpretation and an introduction to echocardiography.

Expectations
The student will be responsible for the initial evaluation and daily documentation of patients in the inpatient setting, and will independently evaluate patients in the outpatient cardiology office. The student will be expected to search and review evidence to support the decision-making made on their patients. The student will also be expected to attend monthly cardiology conference and Grand Rounds.

Location: (100%) Holy Cross Hospital and Clinics
Jim Moran Heart and Vascular Center
4725 North Federal Highway, Suite 401
Fort Lauderdale, FL 33308

Participating Faculty:
- Joshua Larned, M.D – Clerkship Director
- Karan Munuswamy, M.D.
- Danny Weitz, M.D.
• Rishi Anand, M.D.
• Charley Russo, M.D.
• Josh Purow, M.D.
• Pablo Guzman, M.D.
• Vincent Font, M.D.
• Jose Elias Collado, M.D.
• Felipe Albuquerque, M.D.

**Hours:**
8:30-6:00 pm Monday-Friday
*Hours will comply with the duty hour regulation of the ACGME.*

**Evaluation:**
Each student will be evaluated by the attending physician. Formative, ongoing feedback will also occur throughout the four-week rotation.

Revised November 2019
GERIATRICS: MORSE CENTER PALM BEACH

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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Karl Dhana, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-687-5768</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:KarlD@morselife.org">KarlD@morselife.org</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito, <a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>, 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Integrated Medicine Clerkship or Geriatrics Clerkship</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME</td>
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This meets the requirement for the two week course in geriatric medicine for Regional Medical Campus students. Some hospitals have significant paperwork and background checks that need to be done far in advance.

Overview:
The medical student will spend two weeks at the Morse Geriatric Center and assume responsibility for the care of older patients under the supervision of a board-certified geriatrician, geriatric medicine fellows, and members of the interdisciplinary care team. Our mission is to teach, model and assess the knowledge, skills, and attitudes needed by medical students to complete a comprehensive geriatrics assessment. Clinical activities will take place in multiple chronic care venues including the Morse Geriatric Center, a long term care facility; the Levine Rehabilitation Center, a subacute rehabilitation center; the Traditions of the Palm Beaches, an assisted living center; and the Geriatric Clinic.

Course Design:
Clinical activities take place weekdays between 7:30-5:00 on average. Clinical activities are complemented by mandatory small group sessions including journal club, independent self-learning, and assigned readings.

Potential Sample Schedule:
Student A: Week 1: Short Term Stay/Outpatient Geriatric Clinic  
Week 2: PACE Unit/Long Term Care
Student B: Week 1: PACE Unit/Long Term Care  
Week 2: Short Term Stay/Outpatient Geriatric Clinic

Goals:
- Promote students’ knowledge of geriatric assessment and longitudinal care in multiple venues for care of the elderly
- Give students experience as first responders for acute changes in long-term care patients
- Improve ability of students to competently administer, score and interpret selected geriatric assessment tools (e.g., mini-mental state exam, confusion assessment method, timed up-and-go, and geriatric depression scale)
• Improve the ability of students to recognize and assess common geriatric syndromes (e.g., dementia, delirium, falls, pressure ulcers, and polypharmacy)
• Have students apply the results of geriatric assessment to develop an integrated problem list and care plan
• Enhance students’ understanding of the common ethical issues in geriatrics with emphasis on frail dependent elderly in long-term care environments
• Involve students in the interdisciplinary approach to care planning

**Objectives:**
• By the end of the rotation, a student will be able to be able to competently administer, score and interpret selected geriatric assessment tools.
• The student will be able to develop an integrated care plan based upon a geriatric assessment.
• The student will be able to recognize and assess common geriatric syndromes, formulate a differential diagnosis and management plan.

**Location:** Morse Geriatric Center, West Palm Beach, FL (100%)

**Participating Faculty:**
Karl Dhana, M.D., and other interdisciplinary faculty members

**Prerequisite:** Completion of M3 JFK Integrated Medicine Clerkship or the Miami Geriatrics Required Clerkship

**Expectations:** Students are expected to become active members of the interdisciplinary team. They will attend morning rounds, closely follow assigned patients, and present during interdisciplinary team meetings. The students are expected to be self-directed learners and identify learning issues pertaining to the care of their assigned patients and other patients whose care they may be involved in. The student will also be asked to present an article in Journal Club. The student will also be asked to document a complete geriatric assessment and plan using the template provided by the faculty.

**Student Evaluation and Grading:** The student’s final grade will consist of performance on the standard UMMSM clerkship student evaluation form and grades received on a progress notes, performance and documentation of a thorough geriatric assessment, journal club presentation, and for attendance and participation.

**Remediation of a Failing grade**
If a student fails a clerkship, remediation will be determined by the Clerkship Director(s) in conjunction with the Clinical Promotions Committee. If remediation includes additional time in clinical experiences, the scheduling of this time will be set by the Associate(Regional) Dean for Clinical Curriculum, after consultation with the student and the Clerkship Directors.

Reviewed November 2019
MULTIDISCIPLINARY
HEMATOLOGY AND ONCOLOGY @ DEERFIELD BEACH

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 868 ON HOLD</th>
</tr>
</thead>
</table>
| COURSE DIRECTOR: | Mohammad Jahanzeb, MD  
mjahanzeb@med.miami.edu  
954-698-3665 / 954-698-3693 |
| TELEPHONE: | Joseph Sollecito, 561-886-1202 |
| EMAIL: | jsollecito@med.miami.edu |
| CONTACT: | Joseph Sollecito, jsollecito@med.miami.edu, 561-886-1202 |
| LENGTH OF ELECTIVE: | 4 weeks |
| PREREQUISITE: | Completion of all core clerkships |
| NUMBER OF STUDENTS: | 1 |
| AVAILABLE: | All year EXCEPT Blocks 00, 1A, 5A/B, 7A/B, 9A/B, and 10A/B |
| U.S. VISITING STUDENTS: | None |
| INTERVIEWING TIME: | 2 days (4wks), with prior approval |
| TYPE: | Clinical |

Please contact a minimum of 2 weeks before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance.

Overview:
This elective will focus on a multidisciplinary approach to the diagnosis and treatment of solid and blood cancers, as well as benign hematologic diseases. It will take place in the outpatient hematology oncology clinic at the Sylvester Cancer Center at Deerfield Beach.

Design:
The MS4 student will be part of the hematology and oncology consult service, the outpatient hematology oncology practice, the surgical oncology service, and the radiation oncology service. The clerkship will provide a basic knowledge of the natural history, diagnostic work up, treatment options, and areas of treatment controversy in the areas of common tumors (breast, respiratory tract, and digestive) and hematologic malignancies, and as well as common benign hematologic processes. The student will spend time in the outpatient clinic, working with specialists in the areas of oncology, hematology, surgical oncology, radiation oncology, and palliative care. The student is expected to participate in conferences. In addition to evaluating multiple patients on a daily basis, the student will be assigned 2 patients to follow longitudinally through the diagnosis and treatment process during the rotation.

Setting:
Sylvester at Deerfield Beach provides complete cancer care to patients in Broward and Palm Beach counties. Part of the Sylvester Comprehensive Cancer Center/ University of Miami Hospital & Clinics, the facility has a team of more than 30 cancer specialists offering multidisciplinary care in 14 of Sylvester's site disease groups.

Location:
1192 East Newport Center Drive, Suite 100  
Deerfield Beach, Florida 33442

Participating Faculty:
Prerequisite:
Completion of all core clerkships

Expectations:
Hours: M-F: 8:30 AM – 5:30 PM

Supervised patient care activities in the following clinical areas
- Ambulatory Hematology/Oncology clinic: initial evaluation of the patient, including history and physical, participation in the discussion of assessment and plan with the patient and attending.
- Surgical oncology clinic: initial evaluation, including history and physical, assisting the surgeon with procedures, and post operative follow-up.
- Radiation oncology clinic: initial assessment of the patient including history and physical, participation in discussion of treatments with attending.

Conferences
Tuesday: Case Conference, Tumor Board

Independent Study
Students will spend time reading on assigned topics and researching the literature to answer clinical questions pertinent to their patients.

Electronic Resources:
Students have 24-hour access to the University of Miami online resources which links them to a vast collection of resources needed for their education, research, and care of patients.

Evaluation:
Students are evaluated at the end of each rotation using the standard Pass Fail format. The evaluation will be based on the areas of medical knowledge, clinical skills, self-directed learning, interpersonal and communication skills.

The supervising attending will provide verbal face-to-face feedback to the M4 student at the close of the second week and then again at the end of the rotation.

Revised December 2018
## HCH INFECTIOUS DISEASE

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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Ricardo Reyes, MD</td>
</tr>
<tr>
<td></td>
<td>(<a href="mailto:Reye5240@bellsouth.net">Reye5240@bellsouth.net</a>)</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-886-1202</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito,</td>
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<tr>
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<td><a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>, 561-886-1202</td>
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<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 / 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine Clerkship</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All Year, except block 7A and 8B – All Blocks require clerkship director approval before considered final. You must email the clerkship director and coordinator to obtain approval directly or it will not be considered final.</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

### Overview:
Infectious Disease Medicine requires an understanding of the microbiology, prevention and management of diseases caused by viral, bacterial, fungal and parasitic infections, including the appropriate use of antimicrobial agents, vaccines and other immunobiologic agents. The Infectious Disease fourth year elective at Holy Cross Hospital will provide students with the skills to begin to appropriately provide preventive, diagnostic and therapeutic care for many infections. There will also be specific experiences in HIV clinics to learn about the management of patients with HIV infection.

### Course Design:
This Course is designed to provide students with clinical opportunities in an infectious disease clinic. They will work with Drs. Reyes, Goransek, and Guerra. Students will be expected to see patients in their Infectious Disease clinic, obtaining the initial history and physical and developing an assessment and plan under the supervision of the attending physician. If inpatient consults are available, the student may also be asked to evaluate patients in the hospital that need infectious disease specialists. Furthermore, students will have an opportunity to rotate through the Microbiology lab where they can learn how to do gram stains and how to evaluate cultures.

### Goals:
The Goal of this elective is to have Fourth year students gain a better understanding of antimicrobial prescribing, vaccinations, factors that predispose to infections and how to appropriately assess and treat a variety of infectious diseases.

### Objectives:
- Patient Care:
  - Students will employ effective techniques to obtain a history in patient with fevers, emphasizing exposures, travel and sexual history
• Students will perform a complete physical exam and use appropriate language to describe findings
• The student will organize a rational and clinical approach to the diagnosis and management of the most common infections including:
  ▪ Pharyngitis
  ▪ Otitis
  ▪ Sinusitis
  ▪ Meningitis
  ▪ Pneumonia
  ▪ Skin and soft tissue infection including osteomyelitis
  ▪ Prosthetic infections
  ▪ Sepsis
  ▪ Hepatitis
  ▪ Fever of Unknown Origin
  ▪ HIV infection
• Medical Knowledge
  ▪ Students will interpret and integrate the results of cultures, imaging findings, serologies and antibiotic levels to patient care
  ▪ Students will cite the epidemiology and clinical presentation of common pathogens including:
    ▪ Staphylococcus
    ▪ Streptococcus
    ▪ C. Diff Colitis
    ▪ Enterococcus
    ▪ Pseudomonas
    ▪ Klebsiella
    ▪ Herpes Simplex Virus
    ▪ Epstein Barr Virus
    ▪ Hepatitis
    ▪ HIV
    ▪ Fungal infections
  ▪ Indicate the spectrum of activity, side effects and mechanism of action for common antimicrobial agents
• Interpersonal and Communication Skills:
  ▪ Students will communicate clear recommendations on assessment and management to both the care team as well as to the patient
• Professionalism
  ▪ The student will be punctual to all clinical and didactic activities
  ▪ The student will be prepared for all clinical and didactic activities
• Systems Based Practice:
  ▪ Students will work in multidisciplinary teams and identify roles of each member in the care of a patient with an infectious disease

Location:
• Office of Dr. Reyes, Dr. Goransek and Dr. Guerra
• Holy Cross Hospital

Participating Faculty:
• Dr. Reyes
• Dr. Goransek
• Dr. Guerra
Prerequisite:
- Internal Medicine Clerkship
- You must email the clerkship director and coordinator to obtain approval directly or it will not be considered final.

Expectations:
- Students on this rotation are expected to come with an interest in learning. Expectations include conducting complete history and physicals and begin to create assessments and management plans under the supervision of faculty. After evaluating a patient, students should present to the attending physician in a thorough yet concise manner. They are to supplement clinical learning with independent reading to have a more robust educational experience.
- Students are expected to conduct themselves in a professional manner. They are to notify their preceptor as well as course director of any anticipated absences.
- They are to treat all patients, staff and physicians with respect.

Student Evaluation and Grading:
- Students will be evaluated by the attending physician with whom they interact. Students will be evaluated based off of the completeness of their history and physical, and their ability to assess different infectious diseases. This will allow the attending to evaluate both medical knowledge and patient care. Attendance and punctuality will be used to assess professionalism. Students should also begin to develop skills in communicating findings and plans to patients which will be observed by attending physician, contributing to the grade in communication skills.
- The final evaluation will be discussed face to face with the student, and will also be submitted electronically for official records.

Reviewed November 2019
JFK MEDICINE SUB-I

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 959</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Sarah Bland, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-548-1557</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:sbland@med.miami.edu">sbland@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Maria Margarita Rodriguez, <a href="mailto:mmr230@med.miami.edu">mmr230@med.miami.edu</a>, 561-886-1207</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year EXCEPT Block 7AB</td>
</tr>
<tr>
<td>U.S VISITING STUDENTS:</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>None</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</table>

Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

Overview:
The objective of this rotation is to provide students with hands on clinical experiences that are specifically designed to mirror their upcoming roles as interns in postgraduate training. The medical Sub-intern will master specific core competencies and basic principles of inpatient medical care.

Design:
The sub-intern will be a member of a medical ward team that consists of an attending, one resident, two interns and two third year clerks. The sub-intern will work specifically with one resident on the team who will directly oversee the sub-intern and the care of his/her patients. They will focus on delivery of inpatient care to general medical patients as well as collaborate with medical and surgical subspecialties.

They will attend daily morning report and attending rounds as well as participate in daily sign out/hand off rounds. Sub-Interns will attend daily noon conferences, weekly grand rounds, and a weekly session with the sub-internship coordinator to review key inpatient topics.

Goals:
The goals of the rotation are to provide the sub-intern with the clinical skills and knowledge they will need for their future clinical training. With the guidance and oversight of the supervising attending and resident, the sub-intern will be seen as the primary care giver by the patient and the hospital staff.

Objectives:
1. Demonstrate being an effective member of a health care team.
2. Demonstrate proficiency in history taking and performing the physical exam
3. Demonstrate proficiency in information gathering skills
4. Demonstrate proficiency in note writing and oral presentation skills
5. Demonstrate acceptable communication skills with patients and families as well as other medical professionals and ancillary staff, such that the subintern student will be able to interact with these groups as the patient’s primary care giver.
6. Create differential diagnosis and appropriate management plans based on clinical reasoning and evidence based medicine
7. Coordinate multi/interdisciplinary care for patients including social work, case management, psychology, pastoral care, wound care, nutrition
8. Create plans of care for inpatient stay and transition to outpatient setting
9. Delineate and communicate appropriate hand offs/sign outs
10. Obtain informed consent and demonstrate ability to communicate risks, benefits, alternatives
11. Describe when subspecialty consultation should be sought and develop the communication skills to obtain the specific answers and help needed
12. Perform self-directed learning, relevant patient care literature reviews and inculcate feedback into practice

Location:
JFK Medical Center (100%)
5301 South Congress Avenue
Atlantis, FL 33462

Participating Faculty:
Hospitalist Group and Medical Subspecialists

Prerequisite:
Completion of Core Clerkships

Expectations:
The sub-intern will be a functioning member of the team. He/she will be responsible for admission notes, daily progress notes, transfer notes, discharge summaries at times, as well as daily written and oral hand-offs to the night covering staff. They are expected to place and call consults when indicated, order and follow up labs and radiology tests as well as other diagnostic modalities. It is expected that the sub-intern will be the primary communicator with the patients’ families.

Work rounds will begin at 7 am after the sub-intern receives the hand-off from the night staff. Morning Report begins at 8:30 am on M,T,W,F, and attending rounds begin immediately after the conference. There is no overnight call, and the average day typically runs from 7AM to 5:30 PM. The sub-intern is expected to round with the team 6 days per week. The volume of hospital admissions will determine the number of admissions per call not to exceed three. The total number of patients a sub-intern can carry is seven.

The sub-intern will attend all conferences delineated below. They will also be expected to attend a weekly sub-internship conference during which key inpatient clinical topics will be reviewed. This time will also be used as a forum to allow the sub-interns to voice their issues, questions, and concerns regarding the rotation, hospital system, and the program.

Conference Schedule:
The following are a list of conferences that the sub-interns are expected to attend.

1. Daily noon conference, JFK Medical Center
2. Internal Medicine Grand Rounds: Thursdays 7:30 AM
3. Morning Report M,T,W and F, 8:30 AM

Readings:
A syllabus will be provided at the beginning of the rotation.
Evaluations and Feedback:
The supervising Attending and Resident will provide verbal face-to-face feedback to the sub-I at the close of the second week and then again at the end of the rotation. The Attending and Resident will complete a written evaluation at the end of the rotation.

The sub-intern will complete written evaluations of the rotation, attending, and resident at the conclusion of the rotation. Should any issues or questions arise during the rotation, the sub-I should address them to the sub-I coordinator at any time.

Revised November 2019
HOLY CROSS HOSPITAL MEDICINE SUB-I

<table>
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<tr>
<th>COURSE CODE:</th>
<th>MDR 1028</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Stacy Rubin, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>954-938-3359</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:splieberman@med.miami.edu">splieberman@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Maria Margarita Rodriguez, <a href="mailto:mmr230@med.miami.edu">mmr230@med.miami.edu</a>, 561-548-1557</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year – pending approval from Clerkship Director (after optimization)</td>
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<tr>
<td>U.S VISITING STUDENTS:</td>
<td>Yes</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>None</td>
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<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</tbody>
</table>

**Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.**

**Overview:**
The objective of this rotation is to provide students with hands on clinical experiences that are specifically designed to mirror their upcoming roles as interns in postgraduate training. The medical Sub-intern will master specific core competencies and basic principles of inpatient medical care.

**Design:**
The sub-I will be a member of a medical ward team that consists of an attending, two residents, and two interns. The sub-intern will work specifically with one resident on the team who will directly oversee the sub-I and the care of his/her patients. They will focus on delivery of inpatient care to general medical patients as well as collaborate with medical and surgical subspecialties and develop efficient hand offs of care.

They will attend daily afternoon report and attending rounds as well as participate in daily sign out/hand off rounds. Sub-Interns will attend weekly academic half days, weekly grand rounds, and weekly sessions with sub-internship coordinators to review key inpatient topics.

Typical days begin at 7am, and alternate ending at 4pm and 7 pm. You will have one day off every week. There is no night coverage during this rotation.

**Goals:**
The goals of the rotation are to provide the Sub-I with the clinical skills and knowledge they will need for their future clinical training. With the guidance and oversight of the supervising attending and resident, the sub-I will be seen as the primary care giver by the patient and the hospital staff.

**Objectives:**
1. Demonstrate being an effective member of a health care team.
2. Demonstrate proficiency in history taking and performing the physical exam
3. Demonstrate proficiency in information gathering skills
4. Demonstrate proficiency in note writing and oral presentation skills
5. Demonstrate acceptable communication skills with patients and families as well as other medical professionals and ancillary staff, such that the MS4 student will be able to interact with these groups as the patient’s primary care giver.
6. Create differential diagnosis based on information gathered in history, physical, diagnostic studies and discussion with other care providers.
7. Develop appropriate management plans based on clinical reasoning and evidence based medicine.
8. Coordinate multi/interdisciplinary care for patients including social work, case management, psychology, pastoral care, wound care, nutrition.
9. Develop concise and complete verbal and written transitions of care when handing off patients.
10. Successfully transition a patient from the inpatient to the outpatient setting.
11. Obtain informed consent and demonstrate ability to communicate risks, benefits, alternatives.
12. Describe when subspecialty consultation should be sought and effectively communicate questions to consultant in order to optimize patient care.
13. Perform self directed learning, relevant patient care literature reviews and inculcate feedback into practice.

**Location:**
Holy Cross Hospital  
4725 North Federal Highway  
Ft. Lauderdale, FL  33308

**Participating Faculty:**
Hospitalist Group, General Medicine Faculty and Medical Subspecialists

**Prerequisite:**
Completion of Core Clerkships

**Expectations:**
The sub-intern will be a functioning member of the team. He/she will be responsible for admission notes, daily progress notes, transfer notes, discharge summaries at times, as well as daily written and oral hand-offs to the night covering staff. The sub-intern is expected to place and call consults when indicated, order and follow up labs and radiology tests as well as other diagnostic modalities under supervision of resident and/or attending. It is expected that the sub-intern will be the primary communicator with the patients’ families.

Work rounds will begin at 7 am after the sub-I receives the hand-off from the night staff. Attending rounds begin at 8 AM. There is no overnight call, and the average day typically runs from 7AM to 5:00 PM, except on long call days where you the sub-I will remain until 8PM every eighth day. The sub-intern is expected to round with the team 6 days per week, and will remain within the ACGME duty hours of no more than 80 hours/week and have one day off in seven. Sub-interns will not cover patients overnight. The volume of hospital admissions will determine the number of admissions per call not to exceed three. The maximum number of patients a sub-intern can carry is seven.

The sub-intern will attend all conferences delineated below. They will also be expected to attend a weekly sub-internship conference during which key inpatient clinical topics will be reviewed. This time also will be used as a forum to allow the sub-interns to voice their issues, questions, and concerns regarding the rotation, hospital system, and the program.

**Conference Schedule:**
The following are a list of conferences that the sub-interns are expected to attend.

1. Intern Report on Mondays at 11:00.
2. Afternoon report at noon Monday, Tuesday, Thursday; Holy Cross Hospital, Sister Innocent Conference Center (SICC) room A
3. Internal Medicine Grand Rounds: Wednesday 12:30, Holy Cross Hospital, SICC
4. Academic half day: Wednesday 1-4:30pm, Holy Cross Hospital, SICC, room A
5. Morning Report; Fridays at 7am, SICC room A
6. Sub-I weekly bedside rounds with course director, time to be determined

Readings:
A syllabus will be provided at the beginning of the rotation.

Evaluations and Feedback:
At a minimum, the supervising resident will provide verbal face-to-face feedback to the sub-I at the close of the second week and then again at the end of the rotation. The Attending will provide mid rotation verbal feedback as well. Both the resident and attending will complete a written evaluation at the end of the rotation.

The sub-intern will complete written evaluations of the rotation, attending, and resident at the conclusion of the rotation. Should any issues or questions arise during the rotation, the sub-I should address them to the sub-I coordinator at any time.

Revised November 2019
MEDICINE-PEDIATRICS
MED-PEDS
(Listed under Medicine, Pediatrics, and Med-Peds)

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1013</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Dr. Kendra Van Kirk</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-7476</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:kxv192@med.miami.edu">kxv192@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Sadiz Torres; <a href="mailto:storres3@med.miami.edu">storres3@med.miami.edu</a> ; 305-585-5954</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine and Pediatrics Core Clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year – Students going into MedPeds preferred during the first half of the year</td>
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<td>U.S. VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
<td>2 days / 4 weeks, with prior approval</td>
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<td>TYPE:</td>
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_NOTE: ANY schedule changes must be authorized by Dr. Van Kirk or the Med/Peds Residency Coordinator before your schedule can be officially changed._

**Overview:**
Combined Internal Medicine and Pediatrics is a unique specialty that trains physicians in the care of patients of all ages. The elective aims to give students interested in our specialty exposure to Med/Peds in an urban primary care practice setting. Students will see routine care of newborns, infants, children, adolescents and adults, as well as care of patients with complex pediatric diseases as they transition into adulthood. Students interested in Med/Peds as a career are preferred between June and January and other students will be scheduled thereafter.

**Course Design:**
The rotation will comprise of the following experiences:
1. **Med/Peds Primary Care Practice** - Students will spend a majority of their time with Med/Peds faculty and residents seeing and evaluating patients in the primary care practice. This will include patients that are being transitioned from pediatrics to adult care.
3. **Transitional Care Clinics** - Students will have exposure to adolescent/ transitional care patients with complex pediatric diseases. *depends on availability*
4. **Inpatient care** – Students will spend half of their time with Med/Peds faculty and residents seeing and evaluating patients on inpatient wards.
**Sample Weekly Schedule**

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
</tr>
</tbody>
</table>
| **Noon** | Med/Peds Noon Conference  
PICU 5009E                                                   | Peds Grand Rounds  
MCCD 8th Floor Auditorium                                                | Internal Med Grand Rounds  
RMSB 3rd floor auditorium                                                  | Peds Academic Half Day (until 3:00pm)  
MCCD 8th Floor Auditorium OR  
- Ambulatory Medicine Academic Half Day (Obtain weekly location from MedPeds Chiefs) | IM NC Central 2 Auditorium  
OR Peds Staff Conference  
MCCD 8th Floor Auditorium                                                   |
| **PM** | Med/Peds Resident Clinic  
1PM  
ACC West 5A                                                               | Med/Peds Resident Clinic 1pm  
ACC West 5A                                                               | Med/Peds Resident Clinic 1pm  
ACC West 5A                                                               | Med/Peds Resident Clinic 1pm  
ACC West 5A                                                               | Med/Peds Resident Clinic 1pm  
ACC West 5A                                                               |
| Goals: | 1. The students will receive exposure to the Med/Peds specialty and the unique opportunities the career can provide. | 2. The student will receive broad clinical training in the care of adult and pediatric outpatients and inpatients in a major urban setting. | 3. The student will receive exposure and training in transitional care of the complex pediatric patient. |
| Objectives: | 4. The student will learn and be able to apply age/gender appropriate screening, immunizations, and anticipatory guidance for the following populations: | 5. The student will be able to diagnosis and provide initial management of the following primary care problems: | 6. The student will know the following with regard to transitional care: | | |
|       | • Newborn                                                                                 | • Gastroesophageal Reflux                                              | • The definition of healthcare transition                              |
|       | • Infant/Toddler                                                                          | • Allergic Rhinitis                                                    | • The importance of providers to understand the specific issues regarding healthcare transition |
|       | • School Aged Child                                                                       | • Asthma/COPD                                                         | • Specific tools and resources they can utilize to help youth and their families develop a long-term transition plan |
|       | • Adolescent                                                                              | • Obesity                                                            | • Specific strategies that can be used with young patients to empower them to be more responsible for their own healthcare. |
|       | • Adult                                                                                  | • HTN                                                                | | |
• The importance of multispecialty (pediatrics, internal medicine, subspecialists) coordination in the transition of healthcare from pediatric to adult care.

Location:
• Primary Location- Jackson Memorial Hospital Ambulatory Care Center Med Peds Primary Care Practice (ACC West 5A) (JMH 100%)
• Students may be asked to attend meetings/conferences in other parts of ACC, Jackson Memorial Hospital or University of Miami Hospital and/or Clinics.

Participating Faculty:
• Med Peds Faculty and Faculty from Division of Internal Medicine and Division of Pediatrics

Prerequisite:
• Completion of both Internal Medicine and Pediatric Core Clerkships

Expectations:
• The student is expected to participate in all activities (primary care clinic, noon conferences) in the course curriculum. They are expected to be on time, and to give appropriate notice to clerkship director for all absences or tardiness. Students are expected to follow the codes of professionalism as mandated by the School of Medicine
• Progress notes on patients that are evaluated by the student are to be completed by the end of the same day the patient was seen.

References (suggested materials)
Online references (commonly used in clinic):
• Clinical USPSTF Prevention Guidelines: http://epss.ahrq.gov/PDA/index.jsp. Also available as an Android/iPhone app.
• CDC immunization schedules: https://www.cdc.gov/vaccines/schedules. Also available as an Android/iPhone app.

Online Modules/Training:
• Florida Health and Transition Services Education and Training for Health Care Professionals- http://www.floridahats.org/?page_id=2206

Suggested Readings:

Student Evaluation and Grading:
• The medical student will receive a written evaluation at the end of the month based on the six ACGME core competencies. This will be reviewed with the student by the faculty evaluator.
• The student will complete an evaluation of the overall rotation and of the faculty with whom they worked.
• Grading will be given as pass/fail.

Revised October 2019
NEUROLOGICAL SURGERY
INTRODUCTION TO NEUROSURGERY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 924</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Howard Landy, MD and Ricardo Komotar, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6751</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:nrstraining@med.miami.edu">nrstraining@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Andrea Jimenez (<a href="mailto:axj589@med.miami.edu">axj589@med.miami.edu</a>)</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine, Surgery, and Neurology; If Neurology not possible, see below for links to three videos to view beforehand</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>4</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year EXCEPT 1A, 3B, 6B, 8A, 12B</td>
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<tr>
<td>U.S VISITING STUDENTS:</td>
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</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</table>

This course is intended for two groups of students:
- Third year students to provide an exposure to NRS in helping them decide their career specialty
- Fourth year students who are not going into NRS to provide them exposure to NRS without a full subinternship

A student may take this course as a third year student and then take the NRS Sub-I as a fourth year student. However, as this course provides a similar experience as the NRS Sub-I, a student may not take both this course and the NRS Sub-I as a fourth year student.

Overview:
This 2 week elective is intended to give the third year or fourth year medical student an initial acquaintance to neurosurgery including the pathophysiology, evaluation, and management of the spectrum of disorders that confront the modern neurosurgeon. The UM neurosurgery service covers virtually the entire gamut of neurosurgical practice. The clinical service is divided into teams that focus primarily on specific subspecialty areas. The spine team cares for patients with tumors, trauma, degenerative disease, and other disorders. The general cranial team deals with cerebrovascular disease, tumors, epilepsy, movement disorders, and other pathology. A separate team cares for patients with head injuries. The pediatric division cares for patients at both Jackson Memorial Hospital and Miami Children’s Hospital. A separate team cares for a busy neurosurgical service at UHealth Tower that includes both cranial and spinal patients.

Course Design:
Didactic lectures will cover fundamentals of the different categories of neurosurgical diseases including pathophysiology, evaluation, and management. The student will spend segments of time on the spine, general cranial, and head trauma teams. Interested students may also be exposed to the pediatric service. Students will participate in the daily activities of the service including work rounds and care of patients on the floors and in the Neuroscience Intensive Care Unit. Students will attend morning report and other conferences and weekly grand rounds. Students will observe in the operating room and, in appropriate circumstances, may participate as surgical assistants.

**Goals:**
1. Familiarize the student with the major categories of disease encountered by the neurosurgeon.
2. Review the pertinent anatomy and physiology of the nervous system and its supporting and covering structures as they relate to neurologic diseases.
3. Familiarize the student with the process of evaluation of neurologic diseases including careful history taking and physical examination, along with imaging techniques such as computed tomography and magnetic resonance imaging.
4. Familiarize the student with the surgical and nonsurgical management of patients seen by the neurosurgeon.
5. Familiarize the student with the systemic ramifications of neurosurgical diseases and the necessary general medical management.

**Objectives:**
The student will understand the basics of the pathophysiology, evaluation, and management of the following topics:
1. Increased intracranial pressure: intracranial compartments, herniation syndromes
2. Head injury: skull fracture, intracranial hematoma, brain injury
3. Spinal injury and degenerative disease: neurologic examination of spinal levels, spinal fracture/dislocation, spinal cord and root injury, spondylosis
4. Tumors of the nervous system: benign and malignant tumors of the brain and spine
5. Functional disorders: movement disorders, epilepsy, pain
6. Cerebrovascular disease: ischemic disease, subarachnoid hemorrhage

For each category of disease above:
1. The student should become familiar with the use of the neurologic exam in addition to the use of modern imaging. The student should be able to discuss likely physical findings and appropriate selection of imaging techniques
2. The student should be able to discuss management options and prognoses.
3. The student should be familiar with the systemic ramifications of neurosurgical diseases and the necessary general medical management.

**Location:**
JMH (90%) and UHealth Tower (10%). Students may rotate at Miami Children’s Hospital (if student rotates on the pediatric team, approximately 20% of the time would be deducted from JMH time).

**Participating Faculty:**
Faculty of the Department of Neurological Surgery

**Prerequisite:**
Internal Medicine, Surgery, and Neurology. If Neurology cannot be scheduled beforehand, the student must review the following three videos prior to the beginning of the rotation. You may find links to the three videos in the “STANDARIZED CURRICULUM” section on page 3 of the Syllabus for the Neurology Clerkship found online under Course Materials.
- Essential Neurologic Exam
- Essential Neurologic Findings
- Neuroanatomy Review

**Expectations:**
The student will be expected to actively participate in all didactic activities and all clinical activities of the assigned teams including work rounds, morning report and other conferences, and grand rounds. The student
will participate in the care of patients under the supervision of housestaff and faculty. Students will observe in the operating room and, in appropriate circumstances, may participate as surgical assistants.

**Student Evaluation and Grading:**
Students will be evaluated as to the level of initiative in obtaining exposure to the service and in participation in clinical team activities.

Reviewed October 2019
**NEUROSURGERY SUB-I**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 852</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Howard Landy, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6751</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:nrstraining@med.miami.edu">nrstraining@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Andrea Jimenez (<a href="mailto:axj589@med.miami.edu">axj589@med.miami.edu</a>)</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVES:</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all Core Clerkships and Neurology; If Neurology not possible, see below for links to three videos to view beforehand</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>4</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<td>U.S VISITING STUDENTS:</td>
<td>Yes</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
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</table>

**Overview:**
The neurosurgery service covers virtually the entire gamut of modern neurosurgical practice. The clinical service is divided into teams that focus primarily on specific subspecialty areas. The spine team cares for patients with tumors, trauma, degenerative disease, and other disorders. The general cranial team deals with cerebrovascular disease, tumors, epilepsy, movement disorders, and other pathology. A separate team cares for patients with head injuries. The pediatric division cares for patients at both Jackson Memorial Hospital and Miami Children’s Hospital. A separate team cares for a busy neurosurgical service at UHealth Tower that includes both cranial and spinal patients. The JMH Neuroscience Intensive Care Unit is one of the largest such facilities in the world and is an important center of the department’s clinical activities.

**Course Design:**
This senior level clinical clerkship is appropriate for students considering careers in neurological surgery as well as those intending to pursue related fields such as neurology, orthopedics, otorhinolaryngology, general surgery, and neuroradiology. It may also be of interest to students planning careers in primary care. Primary care physicians have significant contact with patients having neurologic disease, and the patients on the neurosurgery service expose the student to a very wide spectrum of neurologic diseases.

During the four weeks, students will generally be expected to rotate through one-week each on the spine, general cranial, and UHealth Tower teams. The fourth week will be the student’s choice between a week on the head trauma team, a week on the pediatric service, or a second week on the UHealth Tower team.

**Goals:**
1. Familiarize the student with the major categories of disease encountered by the neurosurgeon.
2. Involve the student in the process of evaluation of neurologic diseases including careful history taking and physical examination, along with imaging techniques such as computed tomography and magnetic resonance imaging.
3. Involve the student in the surgical and nonsurgical management of patients seen by the neurosurgeon.
4. Familiarize the student with the systemic ramifications of neurosurgical diseases and the necessary general medical management.
Objectives:
The student will understand the basics of the pathophysiology, evaluation, and management of the following topics:
1. Increased intracranial pressure: intracranial compartments, herniation syndromes
2. Head injury: skull fracture, intracranial hematoma, brain injury
3. Spinal injury and degenerative disease: neurologic examination of spinal levels, spinal fracture/dislocation, spinal cord and root injury, spondylosis
4. Tumors of the nervous system: benign and malignant tumors of the brain and spine
5. Functional disorders: movement disorders, epilepsy, pain
6. Cerebrovascular disease: ischemic disease, subarachnoid hemorrhage

For each category of disease above:
1. The student should become familiar with the use of the neurologic exam, in addition to the use of modern imaging. The student should be able to discuss likely physical findings and appropriate selection of imaging techniques
2. The student should be able to discuss management options and prognoses.
3. The student should be familiar with the systemic ramifications of neurosurgical diseases and the necessary general medical management.

Location:
JMH (50-75%); UHealth Tower (25%-50%); Miami Children’s Hospital (0-25%)

Participating Faculty: Faculty of the Department of Neurological Surgery

Prerequisite: Completion of all core clerkships and Neurology. If Neurology cannot be scheduled beforehand, the student must review the following three videos prior to the beginning of the clerkship. You may find links to the three videos in the “STANDARIZED CURRICULUM” section on page 3 of the Syllabus for the Neurology Clerkship found online under Course Materials.
- Essential Neurologic Exam
- Essential Neurologic Findings
- Neuroanatomy Review


Expectations:
Students will be expected to participate in the daily activities of the service including work rounds, morning report and other conferences, and grand rounds. Students will observe in the operating room and, in appropriate circumstances, may participate as surgical assistants. Students will be expected to participate in night call approximately once per week while on the rotation. Students will follow patients from admission through surgical or other treatment to discharge planning; outpatient clinics will also be attended. Each student will be responsible for a formal case presentation in a small group session.

In special circumstances, tailored rotations may be considered. Satisfactory performance and worthwhile experience require significant effort by the student.

Student evaluations and grading:
The student will be evaluated on the basis of level of effort, development of a basic fund of knowledge, and quality of case presentation.

Revised October 2019
# NEUROLOGY CLERKSHIP

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 707</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Yolanda Reyes-Iglesias, M.D.</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Y.ReyesIglesias@miami.edu">Y.ReyesIglesias@miami.edu</a></td>
</tr>
<tr>
<td>CLERKSHIP COORDINATOR:</td>
<td>Damianie Montero, 305-243-4633, [CRB 1383]</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:dxj113@med.miami.edu">dxj113@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>U.S VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
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**Overview:**
The Neurology Clerkship is a 4-week required rotation to be taken anytime during the 3rd or 4th year of medical school with the goal to help the student acquire an understanding of clinical neurology. We emphasize active, collaborative, learner-centered methodologies to prioritize the knowledge, skills, and attitudes required of physicians to practice in today's health care system. The clerkship experience will allow students to follow their patients mostly through their inpatient care and treatment and participate in the medical, diagnostic and therapeutic aspects of their care. The clinical model is designed to emphasize the interdisciplinary, team-based, complex disease management integral for caring for patients with acute and chronic illnesses.

**Course Design:**
The Neurology Clerkship is a 4-week rotation in the 3rd or 4th year of medical school. The students rotate in two different clinical sites. The students spend an average of 40 hours per week on campus. During the course formal lectures and hand-on- training on the neurological exam are provided. Expected activities consist of ward rounds, inpatient responsibilities, consultations, outpatient clinic and grand rounds.

**Clerkship Objectives:**
1. Describe the pathophysiology, clinical presentation, and management of patients with common neurologic conditions and key neurologic emergencies (IEO 1)
2. Perform a reliable “focused” neurologic history and examination on a patient in < 12 minutes (IEO 2)
3. Perform a reliable complete neurologic examination (IEO 2)
4. Identify and describe the neuroanatomy, neuropathology, pathophysiology, diagnostic evaluation, and management associated with these 30 clinical findings(IEO 1):
   1. Normal eye movements
   2. Normal arm coordination
   3. Flexor plantar response
   4. Normal gait
   5. Lateral rectus palsy
   6. Neglect
   7. Expressive aphasia
   8. Receptive aphasia
   9. Dysarthria
   10. Swollen optic disk
   11. Hemianopsia
12. Cranial nerve 3 palsy
13. Facial weakness
14. Atrophy and fasciculations
15. Pronator drift
16. Wrist drop
17. Foot drop
18. Sensory level to pinprick
19. Distal pinprick loss
20. C6 pinprick loss
21. L5 pinprick loss
22. Ankle clonus
23. Extensor plantar response
24. Intention tremor
25. Essential tremor
26. Resting tremor
27. Choreaathetosis
28. Ataxic gait
29. Parkinsonian gait
30. Romberg sign

5. Present a thorough and accurate oral evaluation of a patient with neurologic disease (IEO 2)
6. Create a thorough and accurate written evaluation of a patient with neurologic disease (IEO 2)
7. Identify and describe the significance of key neurologic history and physical exam findings in localizing a neurologic lesion. (IEO 3)
8. Describe differential diagnosis, initial evaluation, and basic management in patients presenting with neurologic chief complaints. (IEO 3)
9. Identify normal neurologic structures on brain CT and MRI scans (IEO 1)
   Identify neurologic structures on brain CT and MRI scans, including:
   1. Brainstem (medulla, pons, and midbrain) and cerebellum
   2. CSF structures: all 4 ventricles, Sylvian aqueduct, quadrigeminal plate cistern, perimesencephalic cistern, suprasellar cistern, Sylvian fissure, interhemispheric fissure
   3. Deep white matter: corpus callosum, internal capsule, corona radiata, and centrum semiovale
   4. Subcortical gray matter: thalamus, lentiform nucleus (globus pallidus and putamen), caudate nucleus
   5. Cortex: frontal, parietal, temporal, and occipital lobes; insula
   6. Arteries: circle of Willis and arterial branches (middle cerebral, anterior cerebral, posterior cerebral arteries)
10. Distinguish normal and abnormal brain CT & MRI scans and identify mass lesion, ischemia, & hemorrhage. (IEO 3)
11. Describe the appropriate use, and indications for, diagnostic tests for patients with neurologic conditions, including EMG/NCV, EEG, CT scan, and MRI scan (IEO 3)
12. Recognize neurological emergencies and describe initial steps in their evaluation and management. (IEO 3)
13. Demonstrate the ability to utilize the medical literature to develop an evidence-based diagnostic and therapeutic plan (IEO5)
14. Demonstrate self-directed learning by reading about their patient's disease processes and presenting this information to the team. (IEO6)
15. Recognize personal limitations in knowledge, skills, and attitudes, be receptive to feedback, and be willing to improve these deficiencies. (IEO6)
16. Demonstrate the basic precepts of the medical profession including altruism, respect, compassion, honesty, integrity, and confidentiality in relationships and interactions with patients, families, and colleagues. (IEO7)

17. Demonstrate a commitment to carrying out professional responsibilities, acceptable attendance and punctuality, and a professional image in manner, dress, and grooming. (IEO7)

18. Demonstrate adherence to ethical principles, cultural humility, and sensitivity and respect to a diverse patient population. (IEO7)

19. Describe ethical and psychosocial issues encountered in the care of neurologically ill patients. (IEO7)

20. Demonstrate interpersonal and communication skills that result in effective information exchange and collaboration with patients, their families, and other healthcare providers. (IEO8)

21. Collaborate effectively with colleagues and other healthcare personnel in the care of their patients. (IEO9)

**Participating Faculty:** Faculty from the Neurology Department

**Location:** JMH (33%), VA (33%), UHT (33%)
JMH / VA / UMH / NeuroICU / Outpatient Clinics / Neuro-Pediatrics

**Prerequisite:** None

**Expectations:**

1. Arrive on time (8am).
2. Review patient’s laboratory test results, vitals and nursing notes every morning.
3. Participation in initial evaluations and daily rounds with attending.
4. Documentation in patient’s charts according to hospital policy.
5. Communication with family members and participation in family meetings.
6. Coordinate care with other specialties as needed (consultations).
7. All patients must be discussed with a supervising attending.
8. The rotation coordinator needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

**Student Evaluation and Grading:**

**Summary of Required Assignments to be turned in at end of rotation:**

1. One case summary/journal article discussion form signed by attending/faculty. **Note:** (1) **Case Summary is due on the 2nd Friday of the rotation.**
2. One Ward-Based Teaching (WBT) presentation (Oral presentation form signed by the resident)
3. One full write-up (H & P or Consult note)
4. Neuro Exam Observation Index Card (signed clinic attendance)
5. Case Log Completion (E*Value)
6. Four evaluation forms (E*Value):
   a. Two from residents (at least one from each block)
   b. Two from attending physicians (one from each block)
7. Completion of the Following surveys at the end of the rotation:
   a. Survey Monkey
   b. E-Value (Neurology Clerkship Evaluation)
• Final Exam (Cognitive & Key Clinical Findings) 30.0%
• Attendance, Effort, & Ward Performance 50.0%
  (Case summary/journal article discussion, Quizzes [brain imaging & ENF],
   evaluations, WBT & write-up, clinic attendance)
• Mid-Final and Final OSCE Neuro Exam 20.0%

Maximum possible percent 100%

Reviewed October 2019
NEUROLOGY CONSULTATION

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 849</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Yolanda Reyes-Iglesias, M.D.</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Y.ReyesIglesias@miami.edu">Y.ReyesIglesias@miami.edu</a></td>
</tr>
<tr>
<td>CLERKSHIP COORDINATOR:</td>
<td>Damianie Montero, 305-243-4633, [CRB 1383]</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:dxj113@med.miami.edu">dxj113@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 / 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Neurology</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>U.S VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
</tr>
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<td>TYPE:</td>
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</table>

Overview/Course Design:
On this rotation, students who have completed the neurology clerkship are provided the opportunity to evaluate patients with the neurology consulting resident and attending assigned to the service.

Goals:
1. Improve competence in taking a neurological history and performing a neurological exam.
2. Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiology examinations and cognitive skills as they relate to the diagnosis and treatment of diverse neurological diseases.
3. Reinforce a critical approach to the medical literature.

Objectives
1. Improve accuracy in localization of diverse neurological diseases.
2. Formulate a differential diagnosis for patients with neurological complaints evaluated on the consult service.
3. Improve recognition of neurological emergencies.
4. Generate appropriate referrals.
5. Generate appropriate neurological documentation in the medical record.

Participating Faculty: Faculty from the Neurology Department

Location: JMH and /or UMH (if assigned to one location 100%, if assigned to two locations 50% for each location)

Prerequisite: Neurology Clerkship

Expectations:
1. Students will participate in the evaluation of patients consulted to the neurology service.
2. Students will document a neurology consult response and a neurology consult follow-up note in patients charts according to hospital policy.
3. All patients evaluated by the student will be discussed with a supervising attending.
4. Students will attend Neurology Grand Rounds and other didactic sessions as delineated by the Academic Chief Residens.
5. The rotation coordinator needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

**Student evaluations and grading:**
Supervising attending and residents will complete evaluation forms documenting student performance on the elective in the following categories: (1) attendance & interest, (2) medical knowledge, (3) clinical ability, and (4) additional comments.

On the first day of the elective rotation, students should report to the Coordinator of Senior Electives, Damianie Montero, at 9 AM at the Clinical Research Building (CRB), 13th Floor, 1383. Students are expected to meet with the neurology clerkship director before the beginning of their rotation.

Revised October 2019
ADVANCED NEUROLOGY

<table>
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<tr>
<th>COURSE CODE:</th>
<th>MDR 850</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Yolanda Reyes-Iglesias, M.D.</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Y.ReyesIglesias@miami.edu">Y.ReyesIglesias@miami.edu</a></td>
</tr>
<tr>
<td>CLERKSHIP COORDINATOR:</td>
<td>Damianie Montero, 305-243-4633, [CRB 1383]</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:dxj113@med.miami.edu">dxj113@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 / 4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Neurology</td>
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<td>NUMBER OF STUDENTS:</td>
<td>2</td>
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<td>AVAILABLE:</td>
<td>All year</td>
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<td>U.S VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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<td>TYPE:</td>
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</table>

Overview:
Third- or fourth-year students who have completed the clinical clerkship in neurology may perform an elective rotation on the General Neurology service at Jackson Memorial Hospital, University Medical Hospital, or the Veterans Administration Medical Center with an array of university-run or private physician clinic choices to complement this experience. Clinic choices include Epilepsy, Veterans Administration Neurology, Neuro-ICU, Neuromuscular, Stroke, Pediatric Neurology, Cognitive Disorders, Multiple Sclerosis, Movement Disorders, Neuro-Oncology, Sleep and Headache. Experience in EMG and Neurophysiology can be arranged based on director approval and availability.

Course Design: During this course students are expected to care for patients with diverse neurological diseases and be active members on a Neurology team. A customized Outpatient Neurology clinic schedule can be offered.

Goals:
1. Improve competence in taking a neurological history and performing a neurological exam.
2. Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiology examinations and cognitive skills as they relate to the diagnosis and treatment of diverse neurological diseases.
3. Reinforce a critical approach to the medical literature.

Objectives:
1. Develop and improve accuracy in lesion localization and diagnosis of diverse neurological diseases.
2. Improve neurological documentation in the medical record
3. Develop and/or improve the skills necessary to identify and treat neurological emergencies.
4. Understand the technological aspects and clinical correlation of several procedures performed in neurology such as electromyograms, transcranial dopplers, nerve conduction studies, polysomnograms and electroencephalograms.

Participating Faculty: Faculty from the Neurology Department

Location: JMH (33%), VA (33%), UMH (33%)
JMH / VA / UMH / Outpatient clinics / Neuro-ICU / Neuro-Peds

Prerequisite: Neurology Clerkship
**Expectations:** Students should attend Neurology Morning Report at the Jackson Central 2 Auditorium each morning at 7:15 AM and Neurology Grand Rounds 12:15 PM – 1:15 PM each Friday. The student is expected to take at least one nighttime call per week from 4:00 PM-11:00 PM, or weekend call. Students in the outpatient exposure are not required to do call. Students will participate in the evaluation of patients with diverse neurological diseases and in the performance of applicable neurological procedures. The rotation coordinator needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

**Student evaluations and grading:** Supervising attending and residents will complete evaluation forms documenting student performance on the elective in the following categories: (1) attendance & interest, (2) medical knowledge, (3) clinical ability, and (4) additional comments.

On the first day of the elective rotation, students should report to the Coordinator of Senior Electives, Damianie Montero, at 9 AM in the Clinical Research Building (CRB) 13th Floor, 1383. Students are expected to meet with the neurology clerkship director before the beginning of their rotation.

Revised October 2019
STROKE NEUROLOGY

COURSE CODE: MDR 851
CLERKSHIP DIRECTOR: Yolanda Reyes-Iglesias, M.D.
EMAIL: Y.ReyesIglesias@miami.edu
CLERKSHIP COORDINATOR: Damianie Montero, 305-243-4633, [CRB 1383]
EMAIL: dxj113@med.miami.edu
LENGTH OF ELECTIVE: 2 / 4 weeks
PREREQUISITE: Neurology
NUMBER OF STUDENTS: 2
AVAILABLE: Only Blocks 00, 1A/B, 2A/B, and 12 A/B
U.S VISITING STUDENTS: No
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

Overview:
Third- or fourth-year medical students who have completed the clinical clerkship in Neurology may perform a 2- or 4-week rotation on the stroke neurology service at Jackson Memorial Hospital under the supervision of a stroke neurology attending and a neurovascular fellow.

Course Design:
During the course, the student is expected to care for patients with cerebrovascular disorders and to be an active member of the stroke team. The student will respond to stroke codes and participate in all aspects of the care of stroke patients.

Goals:
1. Improve competence in taking and documenting a neurological history and performing a neurological exam in patients with stroke.
2. Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiology examinations and cognitive skills as they relate to the diagnosis and treatment of diverse neurological diseases.
3. Reinforce a critical approach to the medical literature.

Objectives:
1. Recognize the indication for vascular studies such as carotid and transcranial dopplers.
2. Participate in stroke codes and state the indication for intravenous thrombolitics and mechanical thrombectomy.
3. Describe the management for primary prevention in cerebrovascular diseases.
5. Describe the indications for CT/MRI imaging and angiographic studies in patients with stroke.
6. Describe the etiologies and management of patients with intracerebral and/or subarachnoid hemorrhages.

Participating Faculty: Faculty from the Stroke Division, Department of Neurology. The stroke pager is 1-888-867-8765.

Location: JMH (50%) and UMH (50%) Stroke Units
Prerequisite: Neurology Clerkship

Expectations:
1. Students will participate in the evaluation of stroke patients admitted to JMH stroke service and outpatient stroke clinics.
2. Students will document the patient’s findings, differential diagnosis and plan of treatment in the medical chart according to hospital policy.
3. Students will participate in stroke codes.
4. Students will attend Neurology Grand Rounds and weekly stroke conferences.
5. Students will take one night-time call per week from 4pm-11:00pm or weekend call.
6. All patients evaluated by the student will be discussed with a supervising attending.
7. The rotation coordinator needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

Student evaluations and grading:
Supervising attending and residents will complete evaluation forms documenting student performance on the elective in the following categories: (1) attendance & interest, (2) medical knowledge, (3) clinical ability, and (4) additional comments.

On the first day of the elective rotation, students should report to the Coordinator of Senior Electives, Damianie Montero, at 9 AM in the Clinical Research Building (CRB) 13th Floor, 1383. Students are expected to meet with the neurology clerkship director before the beginning of their rotation.

Revised October 2019
JFK NEUROLOGY CLERKSHIP

<table>
<thead>
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<th>COURSE CODE:</th>
<th>MDR 757</th>
</tr>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Dr. Casandra Mateo</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-548-1550</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Casandra.Mateo@mspbhealth.com">Casandra.Mateo@mspbhealth.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Erica Simms, <a href="mailto:ESimms@med.miami.edu">ESimms@med.miami.edu</a>, 561-548-1550</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
<td>All year</td>
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<td>U.S. VISITING STUDENTS:</td>
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</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval, 2 weeks advance notice</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

Overview:
The purpose of the JFK Neurology clerkship at JFK Medical Center is to provide students with an opportunity to acquire a foundation of knowledge and skills to care for patients with neurological conditions. The primary goals of the Neurology Clerkship are for you to gain competence in taking a neurologic history and performing a neurologic exam, and use them to aid in localization and diagnosis of neurologic disease. Also, it is hoped students will develop knowledge, attitudes, and skills necessary to assess, diagnose and refer patients presenting in the primary care setting with neurologic complaints. Students will have the opportunity to explore the field of neurology as a potential career path through exposure to a variety of complaints, diagnoses, patient encounters, and case-based didactics. Students are evaluated on their knowledge of neurology, their interpersonal skills, and their professionalism.

A detailed syllabus will be provided. The Neurology rotation will include:
- Orientation
- Student assignment to the inpatient consultation service and outpatient clinic
- Required classroom sessions (lectures, case conferences) followed by quizzes
- Neuroimaging/brain quiz
- Ethics lecture/discussion
- One written case summary presentations accompanied by one article pertinent to the diagnosis
- One ward base teaching written presentation
- Mid rotation feedback session with Clerkship Director
- Final computer based exam
- Mid OSCE and Final Focused OSCE

Location: JFK Hospital and MSPB Neurology office (100%)

Prerequisite: None

Scheduling/Attendance:
Students are expected to attend all clinic sessions, inpatient rounds, and clerkship teaching activities. Accommodations may be made for no more than 2 interviews. Students must make up any missed shifts either during the rotation or within 4 weeks of its end. Orientation day, final exam and OSCE cannot be missed or rescheduled. If you will be late for or absent from any activities, you are required to inform Dr. Mateo.

**Orientation: MANDATORY SESSION**
You must report to orientation at 8:30 AM at the start of the rotation at the MSPB Neurology office 140 JFK Drive, Atlantis, FL. Orientation materials, reading lists, and evaluation forms will be provided.

**Classroom: REQUIRED ATTENDANCE**
- Lectures/Quizzes
- Ethics lecture/Discussion
- Final exam and OSCE

**Course Completion:**
Students will be required to submit all assignments: i.e. patient logs, case presentations, and course evaluation forms in order to complete the rotation. A final examination will be given at the last Friday of the rotation (or TBD). **All other documentation must be turned in within 5 business days after the rotation ends, or your grade will be submitted as an incomplete.**

Reviewed November 2019
OBSTETRICS & GYNECOLOGY

NOTE: ANY schedule changes involving ALL Obstetrics and Gynecology rotations, must be authorized by Tameka Collins before your schedule can be officially changed.
AMBULATORY OBSTETRICS & GYNECOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>COURSE DIRECTOR:</td>
<td>Jorge Garcia, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5160</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jgarcia3@med.miami.edu">jgarcia3@med.miami.edu</a></td>
</tr>
<tr>
<td>COORDINATOR:</td>
<td>Tameka Collins; <a href="mailto:tcollins@med.miami.edu">tcollins@med.miami.edu</a>; 305-585-5586</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Obstetrics and Gynecology Clerkship</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
<td>All year</td>
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<td>U.S VISITING STUDENTS:</td>
<td>Yes</td>
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<tr>
<td>INTERVIEWING TIME:</td>
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<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

**NOTE:** ANY schedule changes involving ALL Obstetrics & Gynecology rotations must be authorized by Tameka Collins (see above for contact information) before your schedule can be officially changed.

**Overview:**
The objective is for the student to gain experience in the diagnostic and therapeutic approaches for general obstetric and gynecologic conditions by participating in direct patient care and resident didactic activities. Students will enhance interpersonal skills and professional conduct in the female patient encounter setting. Students will learn the basic ambulatory management of medium and high risk obstetrical patients, the management of ambulatory gynecologic conditions, and prevention and screening in women’s reproductive health. This rotation is ideal for the student considering a career in obstetrics and gynecology as he or she will be exposed to multiple aspects of the field. The rotation will also provide a strong foundation in outpatient women’s reproductive health for those going into internal medicine, family medicine, pediatrics and psychiatry.

**Course Design:**
During this four week course, the student will see patients in the obstetrical clinic on Mondays and Wednesdays or Tuesdays and Thursdays depending on their team placement, and in the Gynecology clinics on Mondays and Wednesdays or Tuesdays and Thursdays depending on their team placement. In addition, the student will go to the OR and Labor & Delivery on the days they are not in clinic. The course is split into 2 weeks of GYN and 2 weeks of OB. They will assist Dr. Garcia in seeing colposcopy and LEEP patients on Friday mornings. Friday afternoons, they will attend didactic sessions with the residents. The student may also assist in gynecologic consultations and admissions from the emergency room.

**Goals/Objectives:**
- Perform the complete obstetric and gynecologic history and physical examination, including sexual, contraceptive, and menstrual history
- Counsel patients regarding sexually transmitted infections
- Perform a pap smear, endometrial biopsy, colposcopy, and IUD insertion
- Perform complete contraceptive counseling and provision, including the appropriate use of evidence based resources to guide shared contraceptive decision making,
- Identify the indications for inpatient versus outpatient management and referral for specialty/subspecialty consultation
• Describe the systematic approach to a female patient with abnormal uterine bleeding, acute and chronic pelvic pain, and pelvic masses, and to understand the appropriate use of medical and surgical management of menorrhagia and pelvic pain
• Demonstrate the complete pre and postoperative evaluations required for common gynecologic surgical procedures
• Develop teaching skills by assisting in the orientation of third year students on gynecology and developing a short five minute presentation of a gyn topic to the third year students
• Expand basic gynecologic knowledge through reading materials, case discussions and direct patient care
• Perform literature searches related to clinical questions from the residents and faculty
• Be able to diagnose pregnancy by history, physical exam, and laboratory values
• Know the components of routine antepartum and postpartum care
• Understand the implications of the following conditions for the mother and the fetus:
  • Chronic hypertension
  • Multiple gestation
  • Pre-eclampsia/eclampsia
  • Diabetes mellitus
  • Substance abuse
  • Preterm rupture of membranes and preterm labor
• Know the differential diagnosis for
  • First trimester bleeding
  • Third trimester bleeding
  • Post-partum hemorrhage
• Understand the principles of assessing the effects on the developing fetus of chronic maternal disease, genetic conditions, medications, and environmental exposures
• Interpret fetal heart rate tracings and recognize abnormal patterns
• Participate in the care of patients in active labor and attend cesarean sections

Location: JMH (100%)
ACC – West 4A, 4B
Labor & Delivery
JMH OR

Participating faculty:
Jorge Garcia, MD

Prerequisite:
• Successful completion of the third year OB-GYN clerkship
• An interest in Obstetrics and Gynecology and Women’s Health
• Desire to deepen fund of knowledge and hone procedural skills particular to the specialty

Expectations:
• Complete short presentation for third year students
• Complete a small project (either literature search pertaining to a research topic or presentation of a topic of interest), due at the end of the rotation
• Meet with Dr. Garcia during the rotation to review the project
• Attend Grand Rounds weekly
• Attend clinics as assigned
• Attend resident didactics on Fridays
• Submit a written evaluation of the rotation, faculty and overall educational experience
Student evaluations and grading:
Grading will be Pass/Fail and based on:
- Attendance to assigned activities
- Evaluation from faculty and residents
- Completion of project/presentation

Reviewed October 2019
GYNECOLOGIC ONCOLOGY SUB-I

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Matthew Schlumbrecht, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-2233</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:mschlumbrecht@med.miami.edu">mschlumbrecht@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Tameka Collins; <a href="mailto:tcollins@med.miami.edu">tcollins@med.miami.edu</a>; 305-585-5586</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
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<td>TYPE:</td>
<td>Clinical</td>
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</table>

**NOTE:** ANY schedule changes involving ALL Obstetrics & Gynecology rotations must be authorized by Tameka Collins (see above for contact information) before your schedule can be officially changed.

**Overview:**
The objective is for the student to gain experience in the diagnostic and therapeutic approaches for various gynecologic cancers through participating in direct patient care and Resident/Fellow didactic activities. Students will enhance interpersonal skills and professional conduct in the female patient encounter setting. After completing the rotation, students should feel comfortable with both pre and postoperative management of women having complex gynecologic procedures, and have an understanding of the postoperative and medical management of women with gynecologic malignancies.

**Course Design:**
During this four week course, the student will act as a substitute intern and will be directly involved in patient care. The student must attend the weekly Fellow’s Conference, Tumor Board, Grand Rounds and daily rounds (this includes AM and PM rounds) with the team. After morning rounds, the student will have certain days that he/she is assigned to the operating room. On these days, the student will assess the patient preoperatively and assist in preparing the patient for surgery under the supervision of the Resident/Fellow. When not assigned to the operating room, the student will attend clinic where he/she will improve clinical and procedural skills. The student will also be expected to assist in the evaluation of patients being admitted from the emergency room for surgery or treatment on the floor. There are 2 positions available within each allotted 4 week rotation period. Time will be split between Jackson Memorial Hospital and University of Miami Hospital/Sylvester Comprehensive Cancer Center. Students will report directly to the Chief Resident/Fellow for daily clinical assignments.

**Goals/Objectives:**
- Perform the complete gynecologic history and physical examination, including sexual, contraceptive, menstrual and targeted obstetric history, and family history to screen for genetic predisposition to gynecologic or other malignancy.
- Counsel patients regarding HPV and precancerous lesions.
- Perform a pap smear and pelvic examination
- Describe the initial workup, surgical and medical treatments, staging and prognosis for common gynecologic malignancies
Identify the indications for inpatient versus outpatient management and referral for specialty/subspecialty consultation
Demstrate the complete pre and post-operative evaluations required for common gynecologic oncology surgical procedures
Expand basic gynecologic oncology knowledge through reading materials, case discussions and direct patient care

Location:
- Jackson Memorial Hospital (Holtz Center 7007A, Ward 7A, DTC operating rooms, and ACC 4A) (50%)
- Sylvester Comprehensive Cancer Center (Fellow’s Conference, Tumor Board, operating rooms) (variable %)
- University of Miami Hospital (operating rooms) (50%)

Participating faculty:
- Gynecologic Oncology Faculty
  - Brian Slomovitz
  - J. Matthew Pearson
  - Matthew Schlumbrecht
  - Marilyn Huang
  - Abdulrahman Sinno
- Course coordinator - Tameka Collins; 305-585-5586

Prerequisite:
- Successful completion of the third year OB-GYN clerkship
- An interest in Obstetrics and Gynecology and Women’s Health
- Desire to deepen fund of knowledge and hone procedural skills particular to the specialty

Expectations:
- Complete a small project (either literature search pertaining to a research topic or presentation of a topic of interest), due at the end of the rotation to be presented at Fellow’s Conference (PowerPoint)
- Attend rounds daily
- Attend Grand Rounds weekly
- Attend weekly Tumor Board
- Attend clinic when assigned
- Attend assigned surgical cases
- Attend Fellow’s Conferences
  - Chemotherapy Conference
  - GYO Site Disease Group Conference
  - Pre-op and Inpatient Conference
  - Didactics
- Function as a substitute intern with patient care responsibilities
- Submit a written evaluation of the rotation, faculty and overall educational experience

Student evaluations and grading:
Grading will be Pass/Fail and based on:
- Attendance to assigned activities
- Evaluation from faculty, fellows, and residents
- Completion of project/presentation.

Revised October 2019
MATERNAL FETAL MEDICINE SUB-I

COURSE CODE: MDR 857
CLERKSHIP DIRECTOR: Gene Burkett, MD
TELEPHONE: 305-243-7481
EMAIL: GBurkett@med.miami.edu
CONTACT: Tameka Collins; tcollins@med.miami.edu; 305-585-5586
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Completion of Core Clerkships
NUMBER OF STUDENTS: 2
AVAILABLE: All year
U.S VISITING STUDENTS: Yes
INTERVIEWING TIME: 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: ANY schedule changes involving ALL Obstetrics & Gynecology rotations must be authorized by Tameka Collins (see above for contact information) before your schedule can be officially changed.

ALL students MUST contact Dr. Gene Burkett before starting the Sub-I, NO EXCEPTIONS!

Overview:
The objective is for the student to gain experience in the diagnostic and therapeutic approaches for various obstetrical scenarios through participating in direct patient care. Students will enhance interpersonal skills and professional conduct in the female pregnant patient encounter setting. After completing the rotation, students should feel comfortable with the management of an uncomplicated vaginal delivery and also gain insight into the management of the complicated obstetrical patient.

Course Design:
- This is a four week course where the student is expected to be directly involved in patient care and act as a substitute intern. The student is expected to attend the daily morning report. The student will be primarily assigned to the antepartum floor and high risk obstetrical clinics. The student will be expected to assist the resident with rounds of the antepartum and postpartum patients. The student will alternate between the high risk obstetrical clinic and the antenatal testing including ultrasound and non-stress tests and biophysical profiles. The student should spend one half day per week in the ultrasound department. The student is also expected to attend the monthly fetal board and may be asked to present a patient there. The student will be expected to take three overnight calls on the labor floor where she/he will act as the intern under direct supervision of the third year resident and be responsible for the management and delivery of at least one patient per week. In managing a laboring patient the student has the option of staying until 10pm on that day. There will be no post-call responsibilities.
- The student will be expected to perform one case report each week on an antepartum or laboring patient, (including a discussion of the subject) and to discuss this with the director of the clerkship or a faculty mentor of the student’s choice.
- If the student is interested, the rotation can also include a special interest in management of the obstetrical patient with HIV. If the student chooses this path, the student will attend the HIV clinic and work on a project with Dr. Yasin.

Goals/Objectives:
• Expand knowledge of the obstetrical patient with reading materials and case discussions as well as
direct patient care
• Develop triage skills, indications for inpatient versus outpatient management and referral for
specialty/subspecialty consultation
• Develop a systematic approach and management plan for patients in labor
• Expand the knowledge outpatient and inpatient management of the complicated obstetrical patient
including patients with gestational diabetes, pregestational diabetes, preeclampsia, preterm labor,
preterm rupture of membranes, placenta previa, pyelonephritis, and fetuses with congenital anomalies
• Perform basic obstetrical examination including Leopold’s maneuver and fetal presentation
• Understand antepartum fetal surveillance tests available and learn some of the indications for these
tests
• Obtain a history and admit a laboring patient
• Develop teaching skills by developing a short five minute presentation of an obstetrical topic to the third
year students
• These goals can be discussed with the course director or faculty mentor of the student’s choice at the
beginning or throughout the rotation as the student perceives their attainment.

Location: Jackson Memorial Hospital (Holtz Center Labor and Delivery fourth floor, Floors 3A and 3B
postpartum, and Ward 7B antepartum, and ACC 4A) (100%)

Participating faculty:
• Director – Gene Burkett, MD, and other faculty from Maternal Fetal Medicine
• Course coordinator – Tameka Collins (305-585-5586)

Prerequisite:
• All Core Clerkships (students interested in OBGYN preferred)
• An interest in Obstetrics and Gynecology and Women’s Health
• Desire to deepen fund of knowledge and hone procedural skills particular to the specialty

Expectations:
• Complete short presentation for third year students
• Complete a small project (either literature search pertaining to a research topic or presentation of a
topic of interest) by the end of the rotation
• Meet with the coordinator during the rotation to review the project
• Attend rounds daily
• Attend morning report
• Attend clinic when assigned
• Labor and Delivery Call (minimum 3 calls) as assigned
• Attend resident didactics on Thursdays
• Function as a substitute intern with patient care responsibilities
• Submit a written evaluation of the rotation, faculty and overall educational experience

Student evaluations and grading:
Grading will be Pass/Fail and based on:
• Attendance to assigned activities
• Evaluation from faculty and residents
• Completion of project/presentation

Reviewed October 2019
MINIMALLY INVASIVE GYNECOLOGIC SURGERY

COURSE CODE: MDR 1031
CLERKSHIP DIRECTOR: Dr. Jose Carugno
TELEPHONE: 305-585-5586
EMAIL: jac209@med.miami.edu
CONTACT: Tameka Collins; tcollins@med.miami.edu 305-585-5586
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Obstetrics and Gynecology Clerkship
NUMBER OF STUDENTS: 1
AVAILABLE: All year
U.S VISITING STUDENTS: Yes
INTERVIEWING TIME: 1 day (2wks), with prior approval
TYPE: Clinical

Overview:
This rotation is an intensive experience with the faculty dedicated to Minimally Invasive Gynecologic Surgery (MIGS) in the Department of Obstetrics and Gynecology. It is geared for students interested in the fields of Obstetrics and Gynecology and/or General Surgery. The emphasis of the rotation is surgical and will provide the senior medical student with exposure to laparoscopic and robotic procedures in benign gynecology. The student will observe, and depending on their competence and interest, participate in robotic and laparoscopic procedures and will participate in outpatient office procedures. This will be complemented by time in the outpatient clinics. Students are expected to display a high level of intellectual curiosity and perform as a self-motivated learner.

The student is required to participate in simulation based learning. This will allow the student to acquire and develop basic fundamental laparoscopic and robotic skills.

For students with an interest in Obstetrics and Gynecology there will be opportunities to become involved with research with the attending physicians.

Course Design:

<table>
<thead>
<tr>
<th></th>
<th>AM</th>
<th>PM</th>
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</thead>
<tbody>
<tr>
<td>MONDAY</td>
<td>The student will participate as first or second assist in robotic and laparoscopic GYN cases at UMH.</td>
<td>The student will participate as first or second assist in robotic and laparoscopic GYN cases at UMH.</td>
</tr>
<tr>
<td>TUESDAY</td>
<td>The student will participate in gynecologic surgery at JMH under the supervision of Dr. Andrade. *</td>
<td>The student will participate in gynecologic surgery at JMH under the supervision of Dr. Andrade. *</td>
</tr>
<tr>
<td>WEDNESDAY</td>
<td>Outpatient clinic at UMH suite 3 with Dr Andrade ^</td>
<td>Outpatient clinic at UMH suite 201 with Dr Carugno ^</td>
</tr>
<tr>
<td>THURSDAY</td>
<td>The student will participate as first or second assist in robotic and laparoscopic GYN cases at UMH.</td>
<td>The student will participate in the academic activities of the residency program</td>
</tr>
<tr>
<td>FRIDAY</td>
<td>Outpatient clinic at UMH suite 201 with Dr Carugno ^</td>
<td>Outpatient clinic at UMH suite 3 with Dr Andrade ^</td>
</tr>
</tbody>
</table>

* The first Tuesday of the month the student will participate in the pelvic pain and vulvar pathology clinic at JMH ACC under the supervision of Dr. Carugno
^ The student will participate in outpatient care and outpatient procedures like office hysteroscopy, colposcopy, vulvar biopsies, contraception implant placements among others.
Goals:
- By the end of this rotation, each student will:
  - Participate in the weekly surgical meeting
  - Review a topic related to MIGS and prepare a presentation for the faculty and resident during the weekly surgical meeting.
  - Participate in a minimum of three 1h laparoscopic skills lab.
  - Complete the basic online training available at the Robotic Training Network website (the student will be granted access at the beginning of the rotation)
  - Complete a 2h introduction to robotic surgery using the training robotic console.
  - Participate in a minimum of two 1h basic robotic skills lab.
  - Participate as first or second assist in the majority of the surgeries scheduled by the supervising faculty.
  - Participate in outpatient clinic work and office procedures.
  - NOTE – If the student chooses a 2 wk rotation, they may not be able to complete all these skill lab trainings.

Objectives:
- By the end of the rotation, each student will be able to:
  - Demonstrate knowledge of surgical anatomy of abdomen and pelvis including genital, urinary, gastrointestinal, musculoskeletal and bony structures.
  - Elicit comprehensive gynecologic and menstrual history.
  - Perform a focused gynecologic physical exam.
  - Discuss the medical and surgical management of fibroid uterus, adenomyosis, endometriosis, adnexal pathology, acute and chronic pelvic pain.
  - Discuss general concepts related to perioperative management
  - Identify common postoperative complications
  - List the principles of energy sources used in MIGS.
  - Describe the operating room organization in robotic and laparoscopic surgery
  - Demonstrate appropriate patient positioning and preparation for robotic & laparoscopic surgery
  - Perform safe abdominal access for robotic & laparoscopic surgery
  - Describe different tissue extraction techniques used in robotic & laparoscopic surgery
  - Demonstrate basic laparoscopic skills and hand-eye coordination
  - Demonstrate basic robotic skills

Location:
- University of Miami Hospital: 70%
- Jackson Memorial Hospital: 30%

Participating Faculty:
- Dr. Fausto Andrade
- Dr. Jose Carugno

Prerequisite:
- Obstetrics and Gynecology Clerkship
Expectations:

- By the end of the rotation, each student is expected to:
  - Complete the online training of the robotic training network
  - Demonstrate proficiency in Fundamental Laparoscopic Skills tasks.
  - Demonstrate proficiency in Fundamental Robotic Skills tasks
  - Prepare a presentation for the faculty on a topic related to MIGS

Student Evaluation and Grading:

- Students will be evaluated by the faculty members noted above
- The evaluation will be on a Pass-Fail basis, and will be based upon attendance and participation in all aspects of the elective.

Revised October 2019
OB/GYN BOOT CAMP – TRANSITION TO RESIDENCY

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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Ian J. Bishop, MD MPH</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5586</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:ibishop@med.miami.edu">ibishop@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Tameka Collins; <a href="mailto:tcollins@med.miami.edu">tcollins@med.miami.edu</a>; 305-585-5586</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of Core Clerkships, Senior Boot Camp Preferred</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<td>TYPE:</td>
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Overview:
The purpose of this course is to allow all M4 students who match in OB/GYN or related residencies to enter their intern year with a solid knowledge base and set of procedural skills related to women’s health, obstetrical care and gynecologic surgery. Participation in the two-week course will allow students to practice procedural and basic surgical skills, enhance their OB/GYN knowledge, and review APGO practice guidelines. Portions of this course will be in collaboration with students who have matched into General Surgery residencies. This course is intended to consolidate and expand upon skills learned on the core clerkship and OB/GYN M4 electives.

Course Design:
This two-week elective is designed to combine didactic, case-based, simulation, procedural and team-based education experiences. Activities and lectures that are relevant to all surgical specialties will be taught in collaboration with General Surgery. Real-time self-assessment using the Milestones in OB/GYN will provide students with an understanding of their preparedness for internship. A novel pager exercise will improve communication skills, triaging of patient management and experience with common clinical scenarios.

Goals:
- The goal of this course is to ensure students entering a career in OB/GYN have the clinical competencies necessary to be prepared for their first year of residency.
- This course will focus on the American Congress of Obstetrics and Gynecology (ACOG) and Association of Professors of Gynecology and Obstetrics (APGO) milestones and American College of Graduate Medical Education (ACGME) Milestones in Obstetrics and Gynecology Milestones Project.
- The content areas will align with the Association of American Medical Colleges (AAMC) Core Entrustable Professional Activities (EPAs). Three EPAs will be the focus:
  - EPA 2: Prioritize a differential diagnosis following a clinical encounter
  - EPA 9: Collaborate as a member of an interprofessional team
  - EPA 10: Recognize a patient requiring urgent or emergent care and initiate evaluation and management

Objectives:
- Introduce MS4 students to internship roles and general responsibilities
- Consolidate and solidify fundamental skills and knowledge relevant to an internship in OB/GYN
- Expand upon core experiences in anatomy, surgical procedures, office procedures and emergent case management in line with APGO resident milestones
• Evaluate the course through pre- and post-surveys
• Complete self-assessments based on APGO milestones
• Collaborate with students who have matched into General Surgery residencies in preparation for working in multidisciplinary environment

**Location:**
• CRB Departmental Conference Room
• Holtz Building Departmental Conference Room
• Holtz Building Labor and Delivery Suites, Operating Suites
• Rosenstiel Medical Science Building, Classrooms
• Patient Safety Center, Simulation Rooms

**Participating Faculty:**
• Core faculty: Ian J Bishop MD MPH
• Supporting faculty: Jorge Garcia MD, Carlos Medina MD
• Elective Coordinator: Tameka Collins

**Prerequisite:**
• Completion of all core clerkships
• Completion of the Senior Boot Camp (occurs the two weeks prior to this course) – Transition to Residency is preferred and recommended

**Expectations:**
• Attend and participate in all classes and skills sessions during the two-week program
• Complete a written evaluation at the end of the course
• Complete an oral examination on the final day of the course
• Excused absence based on Miller School of Medicine Criteria and with prior permission

**Student Evaluation and Grading:**
Grading will be Pass/Fail and based on:
• Attendance to and participation in assigned activities
• Completion of pre-course and post-course knowledge evaluation
• Completion of written evaluation of the course

Revised November 2019
REPRODUCTIVE ENDOCRINOLOGY & INFERTILITY

<table>
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<tr>
<th>COURSE CODE:</th>
<th>MDR 952</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>George Attia, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-1622 or 305-243-8542</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:GAttia@med.miami.edu">GAttia@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Tameka Collins; <a href="mailto:tcollins@med.miami.edu">tcollins@med.miami.edu</a>; 305-585-5586</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of Core Clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks), with prior approval</td>
</tr>
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<td>TYPE:</td>
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</table>

NOTE: ANY schedule changes involving ALL Obstetrics & Gynecology rotations must be authorized by Tameka Collins (see above for contact information) before your schedule can be officially changed.

Overview:
This rotation will provide you with the unique opportunity to learn about the subspecialty of reproductive endocrinology and infertility. During this rotation student will learn the basics of menstrual cycle, hormonal regulation and different causes of infertility. Students will be exposed to a wide variety of endocrinological disorders such as amenorrhea, polycystic ovarian syndromes, thyroid dysfunction, and hyperprolactinemia. Opportunity will be given to attend and observe the different techniques of advanced reproductive technology, including in vitro fertilization, intracytoplasmic sperm injection, intrauterine insemination. You will also be able to scrub-in and observe a wide variety of endoscopic surgeries.

Course Design:
Students will follow the assigned physician during their rotation. This will include:
  a. Seeing private patients with the attending physician at UMH office
  b. Students will be encouraged to scrub on surgical cases and be present during the different stages of in vitro fertilization and intra-uterine insemination.
  c. Students will be encouraged to attend the OB/GYN Department Grand round every Thursday morning and residents academic day on Thursday afternoon
  d. Student will be asked to prepare a case report on a case or condition they observed during their REI rotation and present it to assigned attending physician

Goals/Objectives:
This rotation will provide you with unique opportunity to learn about the subspecialty of reproductive endocrinology and infertility. During this rotation student will
  a. Understand the basics of menstrual cycle and hormonal regulation
  b. Appreciate different causes of infertility, basic work up and basic treatment options
  c. Understand the basics for wide variety of endocrinological disorders such amenorrhea, polycystic ovarian syndromes, thyroid dysfunction, and hyperprolactinemia.
  d. Attend and observe different techniques of advanced reproductive technology, including in vitro fertilization, intracytoplasmic sperm injection, and intrauterine insemination.
  e. Scrub and observe a wide variety of endoscopic surgeries.

Location: UMH, Suite 5 (100%)
**Prerequisite:**
- All core clerkships (students interested in OBGYN are preferred)

**Expectations:**
Student will be required to attend private office hours and Monday reproductive endocrinology and infertility clinic at University of Miami Hospital. Student will also be involved in some aspects of research taking place in the Division.

Student must attend weekly departmental Grand Rounds on Thursday mornings.

**Student evaluations and grading:**
The faculty will use a written evaluation comparable to the one used by other sub-specialties at the OB/GYN Department to evaluate students’ clinical skills,

**NO CREDIT WILL BE GIVEN FOR THE COURSE UNLESS YOUR EVALUATION IS ON FILE**

Reviewed January 2019
REPRODUCTIVE AND PREVENTIVE HEALTH

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 858</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Karla Maguire, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5160</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:KMaguire@med.miami.edu">KMaguire@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Tameka Collins; <a href="mailto:tcollins@med.miami.edu">tcollins@med.miami.edu</a>; 305-585-5586</td>
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<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Obstetrics and Gynecology Clerkship</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<tr>
<td>U.S VISITING STUDENTS:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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**NOTE:** ANY schedule changes involving ALL Obstetrics & Gynecology rotations must be authorized by Tameka Collins (see above for contact information) before your schedule can be officially changed.

**Overview:**
The objectives are for the student to improve knowledge and skills in managing contraceptive cases that are routine and complex and to learn about pregnancy options including surgical and medical abortion techniques. The student should become proficient in recognizing and managing the complications arising from contraception and abortion. They will incorporate preventative medicine and public health into daily clinical practice. Participation in the 2 to 4 week course will allow the introduction of other material including sexual assault, addiction, reproductive infectious disease and other issues of reproductive health.

**Course Design:**
- During this two or four week course, the student will rotate through the UM reproductive Health Clinic with Drs. Maguire, Curry and Torres-Ochoa; also Dr. Norris’s Miami Beach Repro Health Office. The student will observe counseling of patients involving pregnancy options, abortion counseling, patient selection and anesthesia available for surgical abortions, the procedure for abortions and postoperative care for these patients. The student will assist in managing contraception in both the normal and complicated patients. The student will interact extensively with OB/GYN faculty and residents.
- During this rotation, the student will also have the opportunity to generate research on contraception or abortion. This may involve a literature search of a selected topic or participation in an ongoing research project.

**Goals/Objectives:**
- Understand the options for unplanned pregnancy
- Perform complete contraceptive counseling and provision, including the appropriate use of evidence based resources to guide shared contraceptive decision making,
- Identify the indications for medical versus surgical abortion
- Identify complications arising from abortion and contraception
- Expand basic reproductive health through reading materials, case discussions and direct and observed patient care
- Recognize the role of preventative medicine and public health in reproductive healthcare

**Location:**
- Reproductive Health Clinic at University of Miami Hospital West Buiding, Suite 201 (XX%)
• Professional Arts Center (PAC) – 5th floor (XX%)
• Jackson Memorial Hospital, ACC West OB clinic (XX%)
• Dr. Norris OB/GYN office, Miami Beach (XX%)

**Participating faculty:**
Drs. Karla Maguire, Chris Curry, Cecila Torres-Ochoa, Paul Norris
Clerkship coordinator - Tameka Collins; 305-585-5586

**Prerequisite:**
• Successful completion of the third year OB-GYN clerkship
• An interest in Obstetrics and Gynecology and Women’s Health
• Desire to deepen fund of knowledge and hone procedural skills particular to the specialty

**Expectations:**
• Attend assigned clinics
• Submit a written evaluation of the rotation, faculty and overall educational experience
• Attend Departmental Grand Rounds on Thursday mornings

**Student evaluations and grading:**
Grading will be Pass/Fail and based on:
• Attendance to assigned activities
• Evaluation from faculty

Revised January 2018
ULTRASOUND IN GYNECOLOGY AND OBSTETRICS

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<tr>
<th>COURSE CODE:</th>
<th>MDR 800</th>
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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Usha Verma, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5586</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:UVerma@miami.edu">UVerma@miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Tameka Collins; <a href="mailto:tcollins@med.miami.edu">tcollins@med.miami.edu</a> 305-585-5586</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<tr>
<td>PREREQUISITE:</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>U.S VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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</table>

NOTE: ANY schedule changes involving ALL Obstetrics & Gynecology rotations must be authorized by Tameka Collins (see above for contact information) before your schedule can be officially changed.

Overview:
This rotation is an intensive experience with the faculty of the Division of Ultrasound in the Department of Obstetrics and Gynecology. It is geared for students interested in the fields of Obstetrics and Gynecology. The emphasis of the rotation is on the use of ultrasound as a diagnostic and therapeutic tool in women’s health. The student will observe and participate in diagnostic ultrasound for gynecologic problems, routine and complicated obstetrics, and ultrasound guided procedures for gynecologic and obstetrical indications. This will be complemented by time in the operating room for general gynecologic surgery and on labor and delivery. Students are expected to display a high level of intellectual curiosity and perform as a self-motivated learner. For students with an interest in Obstetrics and Gynecology or Radiology there may be opportunities to become involved with research with the attending physicians.

Course Design:
- Monday: OB/GYN Ultrasound at PAC
- Tuesday: OB/GYN Ultrasound at PAC
- Wednesday: OB/GYN Ultrasound at PAC
- Thursday: OB/GYN Ultrasound at PAC
- Friday: OB/GYN Ultrasound at PAC

Goals:
- By the end of this rotation, students will be able to:
  - Discuss the indications for diagnostic gynecologic ultrasound and ultrasound guided procedures
  - Describe the techniques utilized for ultrasound guided procedures
  - Define the routine schedule for obstetrical ultrasounds in the normal, healthy patient
  - Discuss the use of ultrasound for monitoring abnormal pregnancies

Objectives:
- By the end of the this rotation, each student will need to complete a log of all cases to include:
  - 10 OB Ultrasounds
  - 5 Detailed (Complete OB scanned)
  - 15 GYN Ultrasounds
- Review basic ultrasound protocols with Ultrasound attending.

**Location:**
- PAC (100%)

**Participating Faculty:**
- Dr. Ryan Longman
- Dr. Richard Strassberg
- Dr. Freddy Montero
- Dr. Usha Verma

**Prerequisite:**
- All Core Clerkships (students interested in OBGYN preferred)

**Expectations:**
- Students must turn in the complete log of cases by the Monday following the last day of the elective; (email Tameka Collins) for template
- Students are expected to be self-motivated learners with an interest in the fields of Obstetrics and Gynecology
- Students will be active participants in procedures
- Interested students may become involved in research projects with course faculty (optional)

**Student Evaluation and Grading:**
- Students will be evaluated by the faculty members noted above
- The course is Pass/Fail

Revised November 2019
NOTE: ANY schedule changes involving ALL Ophthalmology rotations, must be authorized by Damarys Menendez before your schedule can be officially changed.
# OPHTHALMIC PATHOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 971</th>
</tr>
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</table>
| CLERKSHIP DIRECTOR:| Sander Dubovy, M.D.  
Alicia Cabrera (Clinical Program Manager) |
| TELEPHONE:         | 305-326-6032     |
| EMAIL:             | d.menendez3@med.miami.edu |
| CONTACT:           | Damarys Menendez |
| LENGTH OF ELECTIVE:| 4 weeks          |
| PREREQUISITE:      | None             |
| NUMBER OF STUDENTS:| 1                |
| AVAILABLE:         | All Year         |
| U.S VISITING STUDENTS: | Yes            |
| INTERVIEWING TIME: | N/A              |
| TYPE:              | Clinical         |

**NOTE:** ANY schedule changes involving ALL Ophthalmology rotations must be authorized by Damarys Menendez (see above for contact information) before your schedule can be officially changed.

### Overview/Course Design:
Students will review cases received in the lab, participate in daily teaching sessions and sign out at the multi-headed microscope and participate in the complete work-up of these pathologic specimens. The observer will learn how ocular structure and function are affected by the major ocular diseases through the study of current and teaching slide sets of pathologic specimens. The students will learn how to examine ocular specimens using a microscope and learn the value of ancillary techniques to include immunohistochemistry and molecular studies. It is expected that they will have a functional vocabulary of ophthalmic terms, a working knowledge of ocular anatomy, and a rational approach to eye disease at the completion of this course. Clinical-pathologic correlation and therapy will be emphasized.

### Goals/Objectives:
The goals of the ophthalmic pathology elective are to acquire a basic understanding of the pathology of diseases of the eye commonly presented to the pathologist, to become acquainted with the gross and microscopic findings of common ocular diseases, and to become acquainted with the role of the pathologist in evaluating ophthalmic pathology specimens.

### Location:
The Bascom Palmer Eye Institute

### Participating Faculty:
Dr. Sander Dubovy, Residents and Fellows from the Department of Ophthalmology at the Bascom Palmer Eye Institute

### Prerequisite:
None

### Expectations:
Students will attend ophthalmic pathology gross and microscopic sessions. Additionally, the resident will study slides in the ophthalmic pathology study set, take responsibility for adding current interesting cases to the study set, and do reading in the area of ophthalmic pathology.
**Student Grading and Evaluation:**
Students will be evaluated (pass/fail) by their attendance, participation in the clinical setting, and a quiz at the end of the rotation.

**Report at 7:30 a.m. to the Bascom Palmer Eye Institute, 2nd floor Conference Room.**

Reviewed November 2019
OPHTHALMOLOGY

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<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Kara Cavuoto, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-326-6032</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:d.menendez3@med.miami.edu">d.menendez3@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Damaris Menendez [ABLEH]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks (4 weeks with approval – see below)</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None</td>
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<td>NUMBER OF STUDENTS:</td>
<td>8 (minimum of 5)</td>
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<td>AVAILABLE:</td>
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<td>U.S. VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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</table>

**NOTE: ANY schedule changes involving ALL Ophthalmology rotations must be authorized by Damaris Menendez (see above for contact information) before your schedule can be officially changed.**

**Overview/Course Design:**
The two week clinical elective in ophthalmology is geared toward medical students with a particular interest in obtaining an in depth understanding of fundamental ophthalmology. Aspects of ophthalmology that are pertinent to the practice of internal medicine, neurology, pediatrics, family practice and other primary care specialties will also be taught. Students will rotate through the emergency room, operating room, and various subspecialty clinics at the Bascom Palmer Eye Institute where they will shadow attendings and housestaff. A comprehensive didactic course will be conducted concurrently during this two week block which includes interactive case based presentations. A final examination will be administered at the conclusion of the course. Students are also welcome to attend weekly grand rounds and fluorescein conferences, as well as daily resident lectures during the rotation.

An additional two weeks is offered for students considering ophthalmology as a career. These additional two weeks are intended as a clinical shadowing experience in which students will rotate through the emergency room, operating room, and all subspecialty clinics at the Bascom Palmer Eye Institute. All students wishing to be part of the four week course must have approval of the course coordinator.

**Goals/Objectives:**
Students will learn how to perform a basic eye exam and gain competence using ophthalmic instruments. Students will be exposed to and participate in the care of patients with eye disorders.

Upon completion of this elective, the students will be able to:

- Differentiate indicators of when to refer patients to an ophthalmologist
- Perform an orderly eye examination, including proper use of the ophthalmoscope and different lenses.
- Evaluate ancillary ocular tests abnormalities (i.e. visual fields and optical coherence tomography)
- Evaluate pupil abnormalities.
- Learn the management of common ocular problems and emergencies (conjunctivitis, superficial foreign body, chemical burns, trauma, etc.).
- Examine a patient with red eye and initiate management when appropriate.
- Discuss types of cataracts
- Detect and describe disorders of ocular motility and describe prevention and treatment of amblyopia.
- Recognize different types of glaucoma – risk factors and management (medications/laser/surgery)
j. Identify retinal pathology: retinal detachment, age-related macular degeneration and uveitis
k. Be familiar with ocular changes in diabetes mellitus, hypertension, and optic neuropathy
l. Demonstrate a professional and systematic approach in working with a patient with an ocular injury.
m. Use the indirect ophthalmoscope, 90 D lens and 20D lens to evaluate the optic nerve and retina
n. Use the slit lamp to examine the cornea and anterior segment of the eye

**Location**
The Bascom Palmer Eye Institute

**Participating Faculty**
Faculty from the Department of Ophthalmology at the BPEI and the VA Hospital

**Prerequisite:**
None

**Expectations:**
Lectures are held daily and lecture and clinic attendance is mandatory. Students are required to spend time in the general ophthalmology, subspecialty, and emergency care clinics and to observe different surgery procedures including at least one intraocular procedure (cataract, glaucoma or retinal surgery) and an extraocular procedure (strabismus, orbit, or eyelid surgery).

The students are encouraged to attend our daily Residents Morning lectures, Grand Rounds (Thursdays: Jose Berrocal Auditorium) and the Fluorescein angiography conference (Tuesdays Jose Berrocal Auditorium). Professionalism as mandated by the School of Medicine is expected.

**Student evaluations and grading:**
Evaluation is ongoing during the two weeks. The final evaluation by the coordinator is based on final written exam, presentation of case studies, feedback from instructors, performance in the clinic, and attendance.

**Report at 7:30 a.m. to the Bascom Palmer Eye Institute, 2nd floor Conference Room.**

Reviewed November 2019
OPHTHALMOLOGY FOR THE NON-OPHTHALMOLOGIST

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<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Kara Cavuoto, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-326-6032</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:KCavuoto@med.miami.edu">KCavuoto@med.miami.edu</a>; <a href="mailto:d.menendez3@med.miami.edu">d.menendez3@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Damarys Menendez [ABLEH]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of Core Clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
<td>8A, 9B &amp; 10B</td>
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<td>U.S VISITING STUDENTS:</td>
<td>No</td>
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<td>INTERVIEWING TIME:</td>
<td>case by case scenarios</td>
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<td>TYPE:</td>
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**NOTE:** ANY schedule changes involving ALL Ophthalmology rotations must be authorized by Damarys Menendez (see above for contact information) before your schedule can be officially changed.

**Overview/Course Design:**
The two week clinical elective in ophthalmology is geared toward fourth year medical students with an interest in obtaining a basic understanding of fundamental ophthalmology for students NOT pursuing a career in ophthalmology. Aspects of ophthalmology that are pertinent to the practice of internal medicine, neurology, pediatrics, family practice and other primary care specialties will also be taught. Students will rotate through the emergency room, operating room, and various subspecialty clinics at the Bascom Palmer Eye Institute where they will shadow attendings and housestaff. Students will be required to keep a patient log and will be expected to complete an online course. A case presentation session based on the patient pathology seen throughout the course will take place at the end of the rotation. Students are also welcome to attend weekly grand rounds and fluorescein conferences as well as daily resident lectures during the rotation.

**Goals/Objectives:**
Students will learn how to perform a basic eye exam and gain competence using ophthalmic instruments. Students will be exposed to and participate in the care of patients with eye disorders.

Upon completion of this elective our students will:

a. Acquire the diagnostic skills to evaluate common eye conditions
b. Possess the knowledge and skills necessary to manage common ocular problems and emergencies (conjunctivitis, superficial foreign body, chemical burns, trauma, etc.).
c. Be able to identify those ophthalmologic conditions that require consultation and referral.
d. Perform an orderly eye examination, including proper use of the ophthalmoscope and different lenses.
e. Become familiar with different ophthalmology subspecialties: Glaucoma, Retina, Cornea, Oculoplastics and Neuro-ophthalmology.

**Location**
The Bascom Palmer Eye Institute

**Participating Faculty**
Faculty from the Department of Ophthalmology at the BPEI and the VA Hospital
Prerequisite:
Completion of all the Core Clerkships
University of Miami Fourth year medical student (no exceptions)

Expectations:
Students are required to observe surgical procedures and to spend time in the general ophthalmology, subspecialty, and emergency care clinics. Students are also required to complete an online course http://www.aao.org/theeyeshaveit/ (please print quiz results at the end of each question block to receive credit) and to keep a patient log.

Student evaluations and grading:
Evaluation is ongoing during the two weeks. The final evaluation by the coordinator is based on presentation of case studies, feedback from instructors, performance in the clinic, and attendance.

Report at 7:30 a.m. to the Bascom Palmer Eye Institute, 2nd floor Conference Room.

Revised November 2019
OPHTHALMOLOGY @ BPEI / NAPLES

<table>
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<tr>
<th>COURSE CODE:</th>
<th>MDR 802</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Jaclyn L. Kovach, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>239-659-3937</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jkovach@med.miami.edu">jkovach@med.miami.edu</a></td>
</tr>
</tbody>
</table>
| CONTACT:        | Jaclyn L. Kovach, MD  
Damyars Menendez; d.menendez3@med.miami.edu 305-326-6032 |
| LENGTH OF ELECTIVE: | 2 weeks         |
| PREREQUISITE:   | None. Email to clerkship director required 2 weeks prior to starting |
| NUMBER OF STUDENTS: | 2               |
| AVAILABLE:      | All year, EXCEPT Blocks 1A, 2A, 2B, and 6A |
| U.S VISITING STUDENTS: | Yes            |
| INTERVIEWING TIME: | 1 day (2wks), with prior approval |
| TYPE:           | Clinical         |

NOTE: ANY schedule changes involving ALL Ophthalmology rotations must be authorized by Damarys Menendez (see above for contact information) before your schedule can be officially changed.

Overview / Course Design:
The primary goal of this elective is to provide medical students with a basic understanding of fundamental ophthalmology. Aspects of Ophthalmology that are pertinent to the practice of Internal Medicine, Neurology, Family Practice, and other primary care specialties will also be taught. Emphasis is placed on the ocular exam and findings related to common eye pathology such as conjunctivitis, cataracts, glaucoma, macular degeneration, retinal vascular occlusion, and diabetic retinopathy. Some exposure to more unusual cases in ophthalmology as a subspecialty will be obtained in clinics. Didactic sessions and patient care in clinics with attending faculty, and coordinated self teaching make up the majority of the elective. Students will also have the ability to go to the OR to observe ophthalmic surgery. Opportunity to assist faculty in writeup of case reports will also be available for the students considering ophthalmology as a career goal.

Goals / Objectives:
Students will be exposed to and participate in the care of patients with eye disorders.

Location:
Bascom Palmer Eye Institute at Naples. Note, funding is not available for housing. The student will be responsible for their housing. Discount rates are available from nearby hotels. Information is available from Dr. Kovach.

Participating Faculty: Students will be exposed to several faculty members during their rotation

Prerequisite: None. Email to Dr. Kovach required 2 weeks prior to starting rotation.

Expectations: Students are expected to attend clinics and observe ophthalmic operations in the OR.

Student Evaluation and Grading:
Students will be evaluated (pass/fail) by their attendance and participation in the clinical setting.

Reviewed October 2019
### MIA VAMC OPHTHALMOLOGY

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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Anat Galor, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-324-4455 ext 4178</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Damarys Menendez 305-326-6032</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:d.menendez3@med.miami.edu">d.menendez3@med.miami.edu</a></td>
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<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 / 4 weeks</td>
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<td>PREREQUISITE:</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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**NOTE:** ANY schedule changes involving ALL Ophthalmology rotations must be authorized by Damarys Menendez (see above for contact information) before your schedule can be officially changed.

### Goals/Objectives:
- To provide medical students the opportunity to shadow residents and attendings in the clinic and emergency room setting, and thereby become familiar with instrumentation utilized in standard eye examinations.
- To provide medical students the opportunity to watch ophthalmic surgery (cataract surgery, glaucoma surgery, retinal surgery) to provide initial exposure to microsurgical techniques.

### Prerequisite:
None

### Course Design:
- Students will spend 50% of their time in the ophthalmology clinic (clinic 4 at the VA eye clinic) and 50% of their time observing ophthalmic surgery (both at the VA and at Bascom Palmer). In addition, students will have the opportunity to shadow residents in the Bascom Palmer ER.

### Participating Faculty:
- Students will be exposed to a variety of faculty members and resident’s during their rotation

### Expectations:
- Students are expected to attend clinics and observe ophthalmic operations in the OR.
- Students are expected to attend grand rounds.
- Students are expected to give one presentation to Dr. Galor.

### Student Evaluation and Grading:
- Students will be evaluated (pass/fail) by their attendance and participation in the clinical setting.

Reviewed November 2019
OPHTHALMOLOGY @ PALM BEACH GARDENS

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 898</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Arindel Majaraj, MD, PhD <a href="mailto:a.majaraj1@med.miami.edu">a.majaraj1@med.miami.edu</a></td>
</tr>
<tr>
<td></td>
<td>Administrative assistant Margie Maietto <a href="mailto:mmaietto@med.miami.edu">mmaietto@med.miami.edu</a></td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-326-6032</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:d.menendez3@med.miami.edu">d.menendez3@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Damarys Menendez</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 / 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Email to clerkship director</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>N/A</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

**NOTE:** ANY schedule changes involving ALL Ophthalmology rotations must be authorized by Damarys Menendez (see above for contact information) before your schedule can be officially changed.

**Overview / Course Design:**
The primary goal of this elective is to familiarize the student with general concepts of Ophthalmology, and how to conduct a basic eye examination. Aspects of Ophthalmology that are pertinent to the practice of Internal Medicine, Neurology, Family Practice, and other primary care specialties will also be taught. Emphasis is placed on the ocular exam and findings related to common eye pathology such as cataracts, glaucoma, macular degeneration, diabetic retinopathy, and conjunctivitis. Some exposure to more unusual cases to ophthalmology as a subspecialty will be obtained in clinics. Didactic sessions with attending faculty, patient care with fellows in the clinics and coordinated self-teaching make up the majority of the elective. Students will also have the ability to go to the OR to observe ophthalmic surgery. Opportunity to assist faculty in write-up of case reports will also be available for the students considering ophthalmology as a career goal.

**Goals / Objectives:**
Students will be exposed to and participate in the care of patients with eye disorders.

**Location:**
Bascom Palmer Eye Institute at Palm Beach Gardens

**Participating Faculty:**
Students will be exposed to a variety of faculty members and fellows during their rotation

**Prerequisite:**
Email to the course coordinator

**Expectations:**
Students are expected to attend clinics and observe ophthalmic operations in the OR.

**Student Evaluation and Grading:**
Students will be evaluated (pass/fail) by their attendance and participation in the clinical setting.

Reviewed November 2019
ORTHOPEDIC SURGERY

NOTE: ANY schedule changes involving ALL Orthopedics rotations, must be authorized by Viveka Spivey before your schedule can be officially changed.
INTRODUCTION TO ORTHOPEDIC SURGERY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1033</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Amiethab Aiyer MD &amp; Seth Dodds MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3315</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:orthoapp@med.miami.edu">orthoapp@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Viveka Spivey / Carmen Fuente [JMT East Suite 1021]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None Demonstrated interest in orthopedics, prior submission of a CV and a Personal Statement, and approval by the director is required in advance</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All Year – Offered only to MS3s</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks), with prior approval</td>
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<tr>
<td>TYPE:</td>
<td>Clinical / Mentorship</td>
</tr>
</tbody>
</table>

NOTE: ANY schedule changes involving ALL Orthopedic Surgery rotations must be authorized by Viveka Spivey or Carmen Fuente (see above for contact information) before your schedule can be officially changed.

Overview:
Orthopedic Surgery is an increasingly competitive field for medical students to match into. Appropriate evaluation of the students’ aptitude, interest in the field, compassion for patient treatment and strength of application is important to thoroughly guide students through the residency application process. While there are multiple facets considered in an application, many students applying to residency often lack insight into their relative competitiveness and need more concrete advice as how to improve their chances of matching.

The goal of this rotation is to provide qualified students who are interested in pursuing a career in Orthopaedic Surgery an opportunity to work clinically with faculty mentors (Associate Program Director/Faculty Advisor to Orthopaedic Surgery Interest Group), both of whom have special interest in student education. In addition to this clinical experience, the faculty will provide recommendations, guidance, and mentorship towards a possible application to orthopedic residency programs. The mentors will provide comments regarding the students’ performance to the Chairman/Program Director of the Orthopaedic Surgery program here at the University of Miami.

Goals/Course Design:
- Evaluate patients in clinic, with an emphasis on history/physical examination skills in both Foot & Ankle and Hand & Upper Extremity
- Assist during surgeries in the operating room on each service, with a particular emphasis on anatomy and surgical approaches
- Review 1-2 journal articles selected by the faculty mentor, with a dedication presentation of the journal article to be completed at the end of each segment of the rotation. (one for Hand and one for F&A)
- Receive feedback with regards to potential of matching into orthopaedic surgery, from an application standpoint as well form a clinical skills perspective
- Engage in research projects that faculty mentors are conducting (ie: review articles, case reports, clinical studies, etc; this is an optional component)
Objectives:
- The students will learn basics of history and physical examination skills from an extremity standpoint.
- The student will develop skills in bedside manner from time in clinic.
- The student will develop diagnostic and treatment modalities from time in clinic.
- The student will have an opportunity to review surgical applications of anatomy in preparation and scrubbing in on operative cases.

Location:
- Bascom Palmer—50%
- Jackson Memorial—50%

Participating Faculty:
- Seth Dodds, Associate Program Director
- Amiethab Aiyer, Orthopaedic Surgery Interest Group Faculty Advisor

Prerequisite:
Please forward CV and personal statement of interest in the rotation (1 paragraph) to Orthoapp@med.miami.edu.
Demonstrated interest in Orthopaedic Surgery (ie. shadowing, research, etc; not an absolute, but will be evaluated on a case by case basis).

Expectations:
- Reliability and Promptness
- Initiative
- Judgment
- Ability to perform an accurate orthopaedic history and physical
- Ability to apply knowledge in clinical setting
- Ability to relate to patients
- Ability to relate to peers and staff
- Professionalism

Student Evaluation and Grading:
- Student’s performance will be evaluated with respect to their clinical skills, evaluations of patients, interactions with staff, residents, faculty, and staff, sense of initiative, development of fund of knowledge through reading, ability to identify anatomic landmarks in the operating room, and ability to analyze the current literature through completion of a journal club.

Reviewed October 2019
ORTHOPEDIC TRAUMA ELECTIVE

COURSE CODE: MDR 862
CLERKSHIP DIRECTOR: Fernando Vilella, MD
TELEPHONE: 305-234-3315
EMAIL: orthoapp@med.miami.edu
CONTACT: Viveka Spivey / Carmen Fuente [JMT East Suite 1021]
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: 6 months of core clerkships including Surgery
NUMBER OF STUDENTS: 2 total between MDR 862 & MDR 863
AVAILABLE: All year (Only students applying to ORTHO approved from June-Dec)
U.S VISITING STUDENTS: Yes
INTERVIEWING TIME: 1 day (2wks), with prior approval
TYPE: Clinical

NOTE: ANY schedule changes involving ALL Orthopedic Surgery rotations must be authorized by Viveka Spivey or Carmen Fuente (see above for contact information) before your schedule can be officially changed.

NOTE: Scheduling from June thru December is limited to students applying to Orthopedics only.

Overview/Course Design:
The student will participate in the management of traumatic injuries of the musculoskeletal system, excluding hand, and spine. The participation will be directed to acquiring an adequate history and physical examination and management of trauma through conservative and surgical approaches. The student will be asked to assist in the operating room to learn surgical skills, how to set up traction and to do closed reductions with cast applications.

Goals/Objectives:
Students will be exposed to and participate in the care of patients with traumatic injuries of the musculoskeletal system.

Prerequisite:
Students must have completed 6 months of core clerkships including surgery prior to signing up for this elective.

Location:
The student will spend 100% of their time at Jackson Memorial Hospital.

Expectations:
The student is required to attend the morning rounds and all conferences related to the Trauma Service as well as the clinics. All students will be required to take Ortho E.R. call with the PGY2 resident.

Student evaluations and grading:
- Reliability and Promptness
- Initiative
- Judgment
- Ability to perform an accurate orthopedic history and physical
- Ability to apply knowledge in clinical setting
- Ability to relate to patients
- Ability to relate to peers and staff
- Professionalism

Report at 6:45 a.m. to the first year (PGY1) Ortho Trauma Resident JMH beeper 2175

Revised October 2019
**ORTHOPEDIC TRAUMA SUB-I**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Fernando Vilella, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3315</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:orthoapp@med.miami.edu">orthoapp@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Viveka Spivey / Carmen Fuente [JMT East Suite 1021]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2 total between MDR 862 &amp; MDR 863</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year, EXCEPT BLOCK 7AB (Only students applying to ORTHO approved from June-Dec)</td>
</tr>
<tr>
<td>U.S VISITING STUDENTS:</td>
<td>No</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
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<td>TYPE:</td>
<td>Clinical</td>
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</tbody>
</table>

*NOTE: ANY schedule changes involving ALL Orthopedic Surgery rotations must be authorized by Viveka Spivey or Carmen Fuente (see above for contact information) before your schedule can be officially changed.*

*NOTE: Scheduling from June thru December is limited to students applying to Orthopedics only.*

**Overview/Course Design:**
The student will participate in the management of traumatic injuries of the musculoskeletal system, excluding hand, and spine. The participation will be directed to acquiring an adequate history and physical examination and management of trauma through conservative and surgical approaches. The student will be asked to assist in the operating room to learn surgical skills, how to set up traction and to do closed reductions with cast applications.

**Goals/Objectives:**
Students will be exposed to and participate in the care of patients with traumatic injuries of the musculoskeletal system.

**Prerequisite:**
Students must have completed all core clerkships.

**Location:**
The student will spend 100% of their time at Jackson Memorial Hospital.

**Expectations:**
The student is required to attend the morning rounds and all conferences related to the Trauma Service as well as the clinics. All students will be required to take Ortho E.R. call with the PGY2 resident.

**Student evaluations and grading:**
- Reliability and Promptness
- Initiative
- Judgment
- Ability to perform an accurate orthopedic history and physical
- Ability to apply knowledge in clinical setting
- Quality of differential diagnostic reasoning
- Quality of patient follow-up and progress notes
- Interpretation of lab and diagnostic imaging tests
- Ability to relate to patients
- Ability to relate to peers and staff
- Professionalism

Report at 6:45 a.m. to the first year (PGY1) Ortho Trauma Resident JMH beeper 2175

Revised January 2019
HAND SURGERY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Patrick Owens, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3315</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:orthoapp@med.miami.edu">orthoapp@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Viveka Spivey / Carmen Fuente [JMT East Suite 1021]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Must have completed 6 months of core clerkships including Surgery</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year (Only students applying to ORTHO approved from June-Dec)</td>
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<tr>
<td>U.S VISITING STUDENTS:</td>
<td>Yes</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks), with prior approval</td>
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<td>TYPE:</td>
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</table>

NOTE: ANY schedule changes involving ALL Orthopedic Surgery rotations must be authorized by Viveka Spivey or Carmen Fuente (see above for contact information) before your schedule can be officially changed.

NOTE: Scheduling from June thru December is limited to students applying to Orthopedics only.

Overview/Course Design:
The student will be provided with the opportunity to become familiar with acute injuries, chronic conditions and congenital deformities of the hand. They will learn to take a history and do a physical examination of the hand, as well as assist in the conservative and surgical management of hand problems. The student will be expected to attend rounds, clinics, surgery and conferences, both hand and general orthopedic conferences. All Students will be required to take Ortho E.R. call with the PGY2 on the hand service.

Goals/Objectives:
Students will be exposed to and participate in the care of patients with acute, chronic or congenital disorders of the hand.

Prerequisite:
Students must have completed 6 months of core clerkships including the surgery clerkship prior to signing up for this elective.

Location:
The student will spend 50% of their time at Jackson Memorial Hospital and 50% of their time at Bascom Palmer Eye Hospital.

Student evaluations and grading:
Students rotating through the Department of Orthopedic Surgery will be evaluated on a pass/fail basis. They will be evaluated by either a faculty member or the most senior level resident on the service with whom the student has had the most contact.

Evaluation: Students will be evaluated on the following:
- Reliability and Promptness
- Initiative
- Judgment
- Ability to perform an accurate orthopedic history and physical
- Ability to apply knowledge in clinical setting
- Ability to relate to patients
- Ability to relate to peers and staff
- Professionalism

**Report at 6:45 a.m. to the PGY2 Ortho Hand resident, JMH beeper 2182**

Revised October 2019
MUSCULOSKELETAL ONCOLOGY

<table>
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<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Sheila Conway, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-234-3315</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:orthoapp@med.miami.edu">orthoapp@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Viveka Spivey / Carmen Fuente [JMT East, Suite 1021]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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<td>NUMBER OF STUDENT:</td>
<td>1</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<tr>
<td>(Only students applying to ORTHO approved from June-Dec)</td>
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<tr>
<td>U.S VISITING STUDENTS:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks), with prior approval</td>
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<tr>
<td>TYPE:</td>
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</table>

NOTE: ANY schedule changes involving ALL Orthopedic Surgery rotations must be authorized by Viveka Spivey or Carmen Fuente (see above for contact information) before your schedule can be officially changed.

NOTE: Scheduling from June thru December is limited to students applying to Orthopedics only.

Overview/Course Design:
Students on the orthopedic oncology service are expected to become familiar with the differential diagnoses of bone and soft tissue tumors and the principles of staging for orthopedic neoplasms. The student will evaluate patients in the outpatient and inpatient setting and be responsible for the management of these patients pre- and post-operatively with close resident, fellow and attending supervision. The student will develop history and physical examination skills, as they pertain to oncologic patients, as well as actively participate in their non-operative and operative management. The student will participate in the regular educational conferences including a bi-weekly didactic orthopedic oncology small group conference, a weekly multidisciplinary oncology conference, and a weekly pre-operative planning conference. In the second week, the student is encouraged to lead a brief, 30-minute educational presentation from a list of provided orthopedic oncology topics. There are a number of potential research projects, which are available to interested investigators through this division - both clinical and laboratory. Dr. Conway is the Program Director and member of the Orthopedic Residency Selection Committee.

Goals/Objectives:
Students will be exposed to and participate in the care of patients with tumors of bone and soft tissue.

Prerequisite:
Completion of all core clerkships.

Location:
The student will send 30% of their time at Jackson Memorial Hospital and 70% of their time at UMH. Students must get processed at UMH prior to start of the rotation. Contact course coordinator.

Student evaluations and grading:
Evaluation: Students will be evaluated pass/fail by the attending or senior resident on service using the UMMSM evaluation form. Evaluation will be based on the following:
 Reliability and Promptness
 Initiative
 Judgment
 Ability to perform an accurate orthopedic history and physical
 Ability to apply knowledge in clinical setting
 Ability to relate to patients
 Ability to relate to peers and staff
 Professionalism

Revised October 2019
ORTHOPEDIC SPINE

<table>
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<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Frank Eismont, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3315</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:orthoapp@med.miami.edu">orthoapp@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Viveka Spivey / Carmen Fuente [JMT East Suite 2021]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Must have completed 6 months of core clerkships including Surgery</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
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</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year (Only students applying to ORTHO approved from June-Dec)</td>
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<tr>
<td>U.S VISITING STUDENTS:</td>
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</tr>
<tr>
<td>INTERVIEWING TIME:</td>
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<td>TYPE:</td>
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</table>

**NOTE:** ANY schedule changes involving ALL Orthopedic Surgery rotations must be authorized by Viveka Spivey or Carmen Fuente (see above for contact information) before your schedule can be officially changed.

**NOTE:** Scheduling from June thru December is limited to students applying to Orthopedics only.

**Overview/Course Design:**
This rotation provides exposure to traumatic and degenerative affections of the spine. Students will participate in all rounds, clinics, and conferences.

**Goals/Objectives:**
Students will be exposed to and participate in the care of patients with traumatic and degenerative disorders of the spine.

**Prerequisite:**
Students must have completed 6 months of core clerkships including the surgery clerkship prior to signing up for this elective.

**Expectations:**
Students will be pre-assigned a spine topic which they will be expected to present, with appropriate hand-outs, at the weekly spine didactic conference. All students will be required to take Ortho ER call with the PGY2 resident.

**Location:**
The student will send a 50% of their time at JMH and 50% of their time at UMH. Students must get processed at UMH prior to the start of the rotation. Contact the course coordinator for processing.

**Student evaluations and grading:**
Evaluation: Students will be evaluated pass/fail by the attending or senior resident on service using the UMMMSM evaluation form. Evaluation will be based on the following:
- Reliability and Promptness
- Initiative
- Judgment
- Ability to perform an accurate orthopedic history and physical
- Ability to apply knowledge in clinical setting
- Ability to relate to patients
- Ability to relate to peers and staff
- Professionalism

Report at 6:30 a.m. to the first year Ortho Spine resident, JMH beeper 2184

Revised October 2019
WPB VAMC ORTHOPEDIC HIP & KNEE SURGERY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Mamun Al Rashid, MD, FACS</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-886-1202</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito, 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Surgery Clerkship</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
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<tr>
<td>AVAILABLE:</td>
<td>All Year except when Surgeon is away from facility.</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4 wks), with prior approval</td>
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<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</table>

Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

Overview:
This is a 4-week elective to provide a broad based exposure to general orthopedic surgery with special emphasis in lower limb joint reconstruction surgery. During the rotation, the student will spend approximately 50% of the time in an office clinical setting evaluating patients with hip and knee disorders and 50% of the time in the operating room gaining surgical experience and insight. This may vary based on the student’s desire to spend more operative time with other surgeons in the department. The surgical experience will be 80% hip and knee surgery and 20% general orthopedic surgery. The elective will be under the direction of one surgeon. For those students that are interested, there will be the possibility to work on a quality improvement project and the opportunity to work with other orthopedic specialists within the group to expand the horizon of exposure to different surgical procedures. We have five orthopedic surgeons in the department covering the breadth and depth of orthopedic surgery, except for pediatric and spine surgery.

Course Design:
The student will spend time operating at West Palm Beach VAMC on Tuesday and Friday all day. In this setting, students will have a chance to participate in open hip and knee surgery including hip and knee replacements, arthroscopic knee surgery, outpatient hand surgery cases, as well as other general orthopedic cases. On Thursdays, the student will be expected to attend to emergency consults, inpatient rounds, and personal study time during the day. On Mondays and Wednesdays, student will spend time in outpatient clinic, gaining exposure to and learning joint injection techniques or alternatively operating with other attendings based on cases that provide the best learning value for the student. Each week, there will be a 30-minute case presentation or journal review presentation by the student to faculty and department staff. One weekend in the rotation, the student may be placed be on an optional call from home, if there are expected trauma surgeries that weekend.

Goals & Objectives:
1. Review hip and knee anatomy and its relationship to various orthopedic disorders
2. Demonstrate efficient patient history taking and examination of common orthopedic conditions
3. Review and apply principles of pathophysiology, anatomy, patient examination, and radiology evaluations as they relate to the diagnosis of lower limb joint disorders
4. List the principles of non-operative treatment of hip, knee, and ankle disorders including joint aspiration and injection techniques
5. Observe and participate in hip and knee replacement surgery, complex joint reconstruction, and revision surgery following failure of primary joint replacements
6. Observe and participate in arthroscopic surgery, outpatient hand surgery, and general orthopedic trauma surgery such as hip fractures, wrist fractures, and ankle fractures
7. Utilize technologies such as customized patient-specific joint surgery, minimally invasive muscle sparing hip surgery, and minimally invasive partial knee replacements
8. List the indications for hip & knee procedures
9. List the risks involved with orthopedic procedures

Location:
- West Palm Beach VAMC 100%

Participating Faculty:
- Mamun Al Rashid, MD, FACS

Prerequisite:
- Completion of Surgery Clerkship

Expectations:
- Participate in all activities (consultations, rounds, clinics, and procedures).
- Be on time for all activities or give advance notice of absence.
- Demonstrate professionalism.
- Dress appropriately and wear a lab coat.
- Properly introduce themselves to every patient and health care provider they come in contact with.
- Obey all HIPPA regulations.
- Read up before cases and engage in personal study after being exposed to clinical cases.

Student Evaluation and Grading:
The medical student will receive a written evaluation at the end of the rotation. Based on this evaluation as well as demonstration of professionalism throughout the rotation, the student will receive a pass or fail. The student will be asked to complete an evaluation of the rotation.

Reviewed November 2019
OTOLARYNGOLOGY
# OTOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 871</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>David Rosow, M.D.</td>
</tr>
<tr>
<td></td>
<td>(<a href="mailto:drosow@med.miami.edu">drosow@med.miami.edu</a> / 305-243-2587)</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6466</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:JMDunn@med.miami.edu">JMDunn@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Jenine Dunn</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 / 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Otolaryngology Elective or Sub-I</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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**Overview:**
Otology is the surgical sub-specialty of hearing, balance, skull base and cochlear implant surgery, and facial nerve dysfunction.

**Course Design:**
During this rotation, the senior clerk will have the opportunity to participate in the clinical evaluation, auditory and vestibular testing, medical and surgical treatment of disorders of the ear and facial nerve. The rotation will be split into three portions: clinic, operating room, and didactic sessions. Hands on anatomical dissection of the temporal bone and preparation of a clinical Grand Rounds presentation are included. Active participation in weekly Otology journal club is offered.

**Goals/Objectives:**
Students will be exposed to and participate in the medical and surgical care of patients with ear and facial nerve disorders.

**Location:** Clinical Research Building Clinic (50%); JMH (25%); ABLEH (25%)

**Prerequisite:** Otolaryngology Elective or Sub-I
OTOLARYNGOLOGY ELECTIVE

COURSE CODE: MDR 873
CLERKSHIP DIRECTOR: David Rosow, M.D. (drosow@med.miami.edu / 305-243-2587)
TELEPHONE: 305-243-6466
EMAIL: JMDunn@med.miami.edu
CONTACT: Jenine Dunn
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: None
NUMBER OF STUDENTS: 2
AVAILABLE: All year
U.S VISITING STUDENTS: NO
INTERVIEWING TIME: 1 day (2wks), with prior approval
TYPE: Clinical

Overview:
The rotation gives an overview of the scope of activities covered by Otolaryngology. Students are expected to get exposed to both clinical and surgical aspects of Otolaryngology and explore the variety of different subspecialties within this field. Students are encouraged to start if possible with this course before taking MDR875.

Course Design:
Students will be assigned to subspecialty teams on a daily basis, with a custom made schedule for each student to maximize the educational experience and ensure good exposure to various clinical and surgical aspects of Otolaryngology. Hospital activities include inpatient rounds and surgeries under the supervision of residents, fellows and attending physicians. Participation in surgical procedures is encouraged beyond simple observation, with the condition of being prepared for the specific cases performed. When assigned to a subspecialty team, the student is expected to contact the team ahead of time to be prepared to participate. Students are also assigned to clinics under the supervision of clinical instructors and attending physicians. Students are expected to attend grand rounds on Thursday morning and are encouraged to attend subspecialty didactic meetings (Tumor board and thyroid cancer conference, Skull base weekly conference, journal clubs, neuroradiology conference, coclia review, in-service review). Students are not required to participate in night and weekend call duties but they are welcome to do so if interested.

Goal:
The goal of this course is to offer a first broad exposure to Otolaryngology for medical students interested in learning about the specialty, through direct participation in clinical activities and didactic sessions. Students are expected to understand the scope of conditions and diseases covered by Otolaryngology and develop interest and knowledge in basic sciences as well clinical, technical and surgical aspects of the specialty.

Objectives:
1- Describe Otolaryngology as a specialty and recognize its different subspecialties (Rhinology, Laryngology, Head and Neck, Otology, Facial plastics, Pediatric otolaryngology, Sleep surgery, Skull base surgery etc) and related disciplines (Audiology, Speech pathology etc).
2- Acquire basic skills for problem focused history and clinical examination for common Otolaryngologic complaints.
3- Initiate diagnostic workup and management for common Otolaryngologic complaints.
4- Demonstrate the ability to work as member in a team of healthcare providers.
5- Learn and apply the basic principles of surgery relevant to Otolaryngologic procedures.
6- Deepen the knowledge about head and neck anatomy, physiology and pathology.

**Location:** possible locations are as follows: JMH (30%), UMH (30%, SCCC (20%), CRB (10%), and BPEI (10%) - the exact distribution of time depends on individual attending case load and student interest during the clerkship period.

**Participating faculty:**
Students will be directly supervised by residents, fellows, clinical instructors and attending faculty members of the department of Otolaryngology.

**Prerequisite:** None

**Expectations:**
Students are required to contact the clerkship coordinator the week before starting the rotation to get their schedule and clerkship documents.

Students are expected to actively participate in the activities of the medical team or clinic they are assigned to on a daily basis. It is the student’s responsibility to contact the team or the clinic to make sure activities are as scheduled. In case of emergencies and unanticipated cancellations, students are expected to adjust their schedule to optimize their educational experience. This is done with subspecialty teams, faculty members and/or clinical clerkship coordinator who are always available to assist.

Students are expected to attend Thursday morning’s grand rounds (CRB 9th floor 7:45 am) and are encouraged to attend subspecialty didactic sessions.

Students are expected to adopt professional behavior throughout the rotation and abide by the rules and regulations of the environment they rotate in.

An Otolaryngology booklet for medical students will be provided at the beginning of the rotation and will serve as a pocket reference and reading material. Students are encouraged to read on a daily basis about conditions/diseases encountered during the rotation and will be provided guidance by the supervising physicians for level appropriate references.

**Student evaluations and grading:**
Rotation performance will be assessed through evaluations from residents, fellows, clinical instructors, faculty members and ancillary clinic staff. Attendance and participation to different activities will be documented on a sheet signed daily by the supervising physician. Students are encouraged to meet with the clinical clerkship coordinator before or early on during the rotation to discuss the goal and objectives, as well as at the end of the rotation to give and get feedback.

Reviewed December 2019
OTOLARYNGOLOGY SUB-I

COURSE CODE: MDR 875

CLERKSHIP DIRECTOR: David Rosow, M.D. (drosow@med.miami.edu / 305-243-2587)

TELEPHONE: 305-243-6466

EMAIL: JMDunn@med.miami.edu

CONTACT: Jenine Dunn

LENGTH OF ELECTIVE: 4 weeks

PREREQUISITE: Completion of Core Clerkships

NUMBER OF STUDENTS: 2

AVAILABLE: All year

U.S VISITING STUDENTS: Yes

INTERVIEWING TIME: 2 days (4wks), with prior approval

TYPE: Clinical

Overview:
This rotation is a clinical and surgical Otolaryngology clerkship. Students are expected to get involved in both clinical and surgical aspects of Otolaryngology. Students are encouraged to start if possible with MDR873 before taking this course.

Course Design:
Students will be assigned to subspecialty teams on a daily basis, with custom made schedule for each student to maximize the educational experience and ensure good exposure to various clinical and surgical aspects of Otolaryngology.

The four week rotation is usually subdivided as follows:
- one week on head and neck
- one week on general / rhinology / laryngology
- one week on plastics / pediatrics
- one week on neurotology

Students who take MDR871 or MDR873 either before or after may request to have their schedule modified for more exposure to as many different aspects of Otolaryngology as possible, with prior approval from the clerkship coordinator.

Hospital activities include inpatient rounds and surgeries under the supervision of residents, fellows and attending physicians. Participation in surgical procedures is encouraged beyond simple observation, with the condition of being prepared for the specific cases performed. When assigned to a subspecialty team, the student is expected to contact the team ahead of time to be prepared to participate. Students are also assigned to clinics under the supervision of clinical instructors and attending physicians. Students are expected to attend grand rounds on Thursday morning and are strongly encouraged to attend subspecialty didactic meetings (Tumor board and thyroid cancer conference, Skull base weekly conference, journal clubs, neuroradiology conference, coelia review, in-service review). Students are not required to participate in night and weekend call duties but they are welcome to do so if interested.

Goal:
The goal of this course is to offer interested medical students the opportunity to participate in the care of Otolaryngology patients, through clinical activities and didactic sessions. Students are expected to deepen their interest and fund of knowledge in basic sciences as well clinical, technical and surgical aspects of the specialty.
Objectives:
1. Recognize Otolaryngology and its different subspecialties and related disciplines.
2. Facilitate patient care through active participation in team approach management of Otolaryngologic patients.
3. Acquire basic skills for comprehensive history and clinical examination for common Otolaryngologic complaints.
4. Formulate diagnostic workup and management for common Otolaryngologic complaints.
5. Interpret commonly used diagnostic tests including hearing / vestibular tests, fiberoptic evaluations, imaging studies, etc.
6. Facilitate preoperative, surgical and post operative care of patients undergoing otolaryngologic procedures.
7. Deepen the knowledge about head and neck anatomy, physiology and pathology.

Location: possible locations are as follows: JMH (30%), UMH (30%), SCCC (20%), CRB (10%), and BPEI (10%) - the exact distribution of time depends on individual attending case load and student interest during the clerkship period.

Prerequisite: Completion of Core Clerkships

Participating faculty:
Students will be directly supervised by residents, fellows, clinical instructors and attending faculty members of the department of Otolaryngology.

Expectations:
Students are required to contact the clerkship coordinator the week before starting the rotation to get their schedule and clerkship documents.

Students are expected to actively participate at the level of an intern in the activities of the medical team or clinic they are assigned to on a daily basis. It is the student’s responsibility to contact the team or the clinic to make sure activities are as scheduled. In case of emergencies and unanticipated cancellations, students are expected to adjust their schedule to optimize their educational experience. This is done with subspecialty teams, faculty members and/or clinical clerkship coordinator who are always available to assist.

Students are expected to attend Thursday morning’s grand rounds (CRB 9th floor 7:45 am) and are encouraged to attend subspecialty didactic sessions.

While there is no specific code of conduct, students are expected to adopt professional behavior throughout the rotation and abide to the rules and regulations of the environment they rotate in.

There is no assigned reading material. An Otolaryngology booklet for medical students will be provided at the beginning of the rotation and will serve as a pocket reference and reading material. Students are encouraged to read on a daily basis about conditions/diseases encountered during the rotation and will be provided guidance by the supervising physicians for level appropriate references.

Student evaluations and grading:
Rotation performance will be assessed through evaluations from residents, fellows, clinical instructors, faculty members and ancillary clinic staff. Attendance and participation to different activities will be documented on a sheet signed daily by the supervising physician. Students are strongly encouraged to meet with the clinical clerkship coordinator before or early on during the rotation to discuss the goal and objectives, as well as at the end of the rotation to give and get feedback.

Reviewed December 2019
RMC PEDIATRIC OTOLARYNGOLOGY
(Listed under both Otolaryngology and Pediatrics)

<table>
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<tr>
<th>COURSE CODE:</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTORS:</td>
<td>Zorik Spektor, MD, FAAP</td>
</tr>
<tr>
<td></td>
<td>David J. Kay, MD, MPH, FAAP</td>
</tr>
<tr>
<td></td>
<td>David L. Mandell, MD, FAAP, FACS</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-736-8141</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito, <a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>, 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Core Surgery and Core Pediatrics</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All Year – Please contact Joseph Sollecito a minimum of two weeks prior to the requested start date to obtain approval. Schedule is not final until approval has been given.</td>
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<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
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<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

Overview:
1. This clinical elective will expose students to the subspecialty of Pediatric Otolaryngology—Head and Neck Surgery.
   i) Students will have the opportunity to learn by seeing patients in our private office as well as assisting in the operating room.
2. This elective is designed with two different types student interests in mind, and will be individually tailored to the individual students interests
   i) PRIMARY CARE TRACK
      (1) For students interested in entering medical fields with a primary focus on treating children
          (a) E.g. Pediatrics, Family Practice, etc.
          (2) Students will learn evidence-based medical management of acute and chronic problems of the ears, nose, and throat in children
          (3) Students will hone their diagnostic skills in pediatric otoscopy, rhinoscopy, and throat examinations with direct feedback
          (4) Student will be exposed to common Pediatric ENT surgical procedures, so they can understand firsthand exactly what they involve
   ii) SURGICAL SPECIALTY TRACK
       (1) For students interest in becoming Otolaryngologists, or other related surgical fields
           (a) E.g. pediatric surgery, neurosurgery, ophthalmology, plastic and craniofacial surgery, neuroradiology
           (2) Students will complete all the objectives of the Primary Care Track
           (3) Students will be exposed to surgical decision making and the criteria for medical vs. surgical management of Pediatric ENT disorders
(4) Students will experience performing pre-operative work-up and post-operative management of surgical cases
(5) Students will assist in more complicated Pediatric ENT surgical procedures
(6) Students will have the option of performing inpatient Pediatric ENT consultations

Course Design:
1. Students will be exposed to the practice of pediatric otolaryngology, including
   i) The medical management of patients in the clinic/office
   ii) The surgical management of patients in the operating room
2. Schedule for the ten-day course
   i) PRIMARY CARE TRACK
      (1) Students will spend 2-3 mornings a week in the operating room, watching routine surgeries, and learning about their indications, alternatives, risks, benefits and complications
      (2) Students will spend the remaining mornings and every afternoon in the office, examining and treating patients, with a focus on the most common pediatric otolaryngology conditions
      (3) Students will spend one half day with the pediatric audiologist, learning about the various modalities of pediatric hearing evaluation
   ii) SURGICAL SPECIALTY TRACK
      (1) Students will spend every morning in the operating room, assigned to the attending performing the most interesting cases of the day
      (2) Students will be hands-on in the operating whenever they can; however, in the interest of patient safety, the majority of the surgical training will be observational
      (3) Students will spend every afternoon in the office, examining and treating patients, with a focus on the most complicated pediatric otolaryngology cases
      (4) Students will spend one half day with the pediatric audiologist, learning about the various modalities of pediatric hearing evaluation
      (5) Students will have the option of rounding with the attending seeing hospital consults in the evening and weekends (definitely not required; just available if there is a strong interest)

Goals/Objectives:
1. The goals of this course are to:
   i) PRIMARY CARE TRACK
      (1) Familiarize students with treatments for pediatric ear, nose, and throat disorders
      (2) Improve students’ accuracy and validity of their pediatric ear physical examinations
      (3) Familiarize student with pediatric audiologic testing
   ii) SURGICAL SPECIALTY TRACK
      (1) All the above, plus
      (2) Familiarize students with functional pediatric otolaryngology
      (3) Introduce students to pediatric otolaryngology surgical procedures
2. After this elective, the student should be able to:
   i) PRIMARY CARE TRACK
      (1) Understand the medical treatments for recurrent acute and chronic otitis media and for acute and chronically draining ears
      (2) Distinguish between otitis media and otitis externa on physical examination
      (3) Distinguish between conductive and sensorineural hearing loss, and understand the implications on diagnostic and therapeutic interventions
      (4) Understand the indications for tympanostomy tube placement
      (5) Distinguish allergic from infectious sinusosal disease based on history and physical exam
      (6) Understand the medical treatment algorithm for rhinosinusitis in children
      (7) Distinguish obstructive sleep apnea from primary snoring based on history, and appreciate the role and results of pediatric polysomnography
      (8) Understand the indications for tonsillectomy and adenoidectomy
      (9) Recognize the signs and symptoms of stridor
(10) Recognize abnormal findings in the pediatric head and neck examination as distinct from normal variants

ii) SURGICAL SPECIALTY TRACK
(1) All the above, plus become introduced to evaluation of and the surgical treatment algorithm and/or management for the above conditions.
(2) Appreciate the roles and techniques of pediatric sinus endoscopy, nasopharyngoscopy, and laryngoscopy
(3) Understand the anatomy of the pediatric larynx and its implications for phono-aero-digestive disorders
(4) Have the opportunity to participate in a clinical research project
   (a) May extend beyond the timeframe of the elective itself

Location:
1. All patients will be seen at the Center for Pediatric ENT—Head and Neck Surgery
   i) Located in Bethesda Health City in Boynton Beach, Palm Beach County
2. The majority of the surgeries will occur at the following facility
   i) West Boca Medical Center

Participating Faculty:
- Zorik Spektor, MD, FAAP
- David J. Kay, MD, MPH, FAAP
- David L. Mandell, MD, FAAP, FACS
- All are board-certified fellowship-trained pediatric otolaryngologists

Prerequisite: Core Surgery and Core Pediatrics

Student Evaluation and Grading:
1. The participating faculty will subjectively evaluate the students.
2. Grading will be pass/fail based on
   i) Attendance
   ii) Motivation
   iii) Ability to apply learned information to new patient encounters

Reviewed November 2019
PATHOLOGY
MT. SINAI PATHOLOGY

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<thead>
<tr>
<th>COURSE CODE:</th>
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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Robert J. Poppiti, Jr., M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-674-2277</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:luisa.cruz@msmc.com">luisa.cruz@msmc.com</a>; <a href="mailto:robert.poppiti@msmc.com">robert.poppiti@msmc.com</a> <a href="mailto:Guerline.duverson@msmc.com">Guerline.duverson@msmc.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Coordinator: Luisa Cruz 305 674 2277 MSMC Medical Education Coordinator: Guerline Duvertern, 305-674-2251</td>
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<tr>
<td>LENGTH OF ELECTIVE:</td>
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<td>INTERVIEWING TIME:</td>
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<tr>
<td>TYPE:</td>
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</table>

Please contact a minimum of two weeks before the start of the rotation to complete hospital specific orientation requirements. Please contact Guerline Duvertern in the Mt. Sinai Medical Education Office at guerline.duverson@msmc.com (305-674-2251).

The Medical Education office is open from 830a-500p. If you arrive early, wait in the cafeteria for the office to open. You will need to park in the employee parking lot. On the first day, hit the call button for access.

Overview/Course Design:
The Department of Pathology at Mount Sinai Medical Center offers an elective in either clinical or anatomic pathology. The program will be tailored to the particular interest and level of training of the individual. The student will be supervised by staff pathologists working with the resident staff and participate in inter-and intradepartmental conferences.

Goals/Objectives:
Students will be exposed to the various disciplines in pathology not only to enhance their fund of knowledge but also to experience the practice of pathology as a possible career choice.

Location: Mt. Sinai Medical Center (100%)

Prerequisite: None

Please report at 8:30 am to:

Mt. Sinai Medical Center
Office of Medical Education
De Hirsch Meyer Tower, Main Bldg. Suite #2065
4300 Alton Road
Miami Beach, Florida 33140

Revised November 2019
PATHOLOGY

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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Carmen Gomez-Fernandez, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-9695</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:cgomez3@med.miami.edu">cgomez3@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Carmen Gomez-Fernandez, MD  UMH, Rm# 4058</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 / 4 weeks</td>
</tr>
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<td>PREREQUISITE:</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
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</table>

**Overview:** This elective is geared towards students who wish to explore Pathology as a career option or who seek to better understand and utilize clinical and anatomic pathology services in their clinical practice. Students select week-long rotations from the list below and attend all Pathology Teaching Conferences and rounds. Anatomic Pathology rotations are at JMH or UMH and Clinical Pathology rotations are at JMH.

This elective in Pathology may be taken as a two- or four-week rotation.

**Course Design:**

**General:**
Students will attend all teaching conferences at 12:00 pm as well as conferences pertaining to the specific rotations.

Mandatory 12:00 noon teaching conferences:
- Daily Teaching Conferences (Tuesday, Wednesday, Friday)
- Anatomic/Clinical Pathology case conference (Monday)
- Pathology Grand Rounds and Journal Clubs (Thursdays).

**Anatomic Pathology**
2 week rotations: One or two students work in the frozen section laboratory at UMH or at JMH under the direct supervision of the FS resident. Students will use the hospital's EMR to access clinical history, lab data and prior pathology reports on the day’s operative cases for which FS are likely, assist the pathology resident in grossing and pull up the appropriate imaging studies on the FS computer. Students will utilize teaching slide sets of normal histology to compare with the patient’s biopsy material.

Four week elective: Students will select one of surgical pathology subspecialty and participate in grossing, previewing and case signout, working closely with the assigned pathology resident.

**Clinical Pathology**
Two week electives: Students are assigned to Hematology/hematopathology or Transfusion Medicine/blood banking. Under the direction of the pathology resident, the student will obtain pertinent clinical histories and laboratory data and attend all sign out sessions with the attending pathologist.

Four week electives: Students have one week each in the above rotations.
Goals:
- Obtain hands-on experience in the practice of Pathology
- Learn the skills and attitudes required in the discipline of Pathology
- Understand the role of the pathologist as a member of the health care team in patient care, as consultant and in relevant systems-based practices to enhance patient safety and care quality.

Objectives:
- to be a thoughtful member of the pathology health care team
- to responsibly perform assigned patient care-related responsibilities that include presenting patient information at the time of sign outs, assisting with gross descriptions at the time of frozen sections, performing skill-appropriate dissections.
- to enhance medical knowledge related to laboratory medicine
- to appreciate the integration of pathology and laboratory medicine in clinical practice
- to appreciate the central role played by neuropathology in all aspects of pathology and laboratory medicine.

Locations:
Jackson Memorial Hospital (50%)
- Diagnostic Treatment Center, Rm. D304
- Holtz, Large Conference Room, Rm. 2034
- Holtz, Residents multi-headed microscope, 2051B
University of Miami Hospital (50%)
- Carmen Gomez-Fernandez MD, Director, UMH Rm# 4058
- Surgical Pathology Reading Room 4076
- Frozen section room: 4th floor

Participating Faculty:
All house staff and teaching faculty participate in this elective. Students work closely with the house staff and faculty on the specific rotations selected at the time of the introductory meeting with Dr. Gomez. Dr. Gomez is responsible for ensuring the student’s involvement in the daily activities of the rotation and participation with the assigned faculty.

Prerequisite:
None

Expectations:
- Day One, meet with Dr. Gomez at 8:30 am (UMH Rm 4058) to review learning plan and rotations
- Participation in pathology-related patient care duties as assigned
- Reliable and on-time attendance on rotations and at mandatory conferences

Student Evaluation and Grading:
A passing grade includes attendance, documented in part by signed record of attendance at the daily 12:00 noon conference, and an evaluation by the supervising faculty or resident. The Faculty/Resident evaluation rates attendance, participation, and medical knowledge on a 1 (poor) to 5 (excellent) scale. Unexcused absences are not permitted.

Reviewed November 2019
**WPB VAMC PATHOLOGY**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1008 – ON HOLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Dr. Sundara Sridhar</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-422-6820</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:sundara.sridhar@va.gov">sundara.sridhar@va.gov</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito, <a href="mailto:JSollecito@med.miami.edu">JSollecito@med.miami.edu</a>, 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine and Surgery</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Anatomic and Clinical Pathology</td>
</tr>
</tbody>
</table>

Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a fee for the background check.

All students are required to contact Dr. Sridhar and Joseph Sollecito one month prior to requested rotation via email to confirm date availability and to receive final approval to officially register.

**Overview:**
This is a 2 or 4 week rotation intended to give the student a global concept of how the ancillary medical discipline of Pathology integrates into the patient’s diagnosis and ongoing management. The student, who already has a basic working knowledge of clinical medicine, will be able to appreciate the value of appropriate choice of laboratory tests to help patient management from a laboratory perspective.

**Course Design:**
The elective is set up to have exposure to both Anatomic and Clinical Pathology. For Anatomic Pathology, the student will spend half the day participating in the microscopic examination and diagnosis of various biopsy materials. The student will also be expected to attend and participate in the interdepartmental patient management conferences. For Clinical Pathology, the student will spend a day in each of the laboratory subdivisions including Clinical Chemistry, Hematology, Microbiology, Blood Banking, and Point of Care testing to learn the basic laboratory principles in clinical diagnostic testing.

Sample Schedule:

<table>
<thead>
<tr>
<th>DAY</th>
<th>AM/PM</th>
<th>SUBJECT</th>
<th>GUIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEK#1:</td>
<td>AM</td>
<td>GENERAL ORIENTATION</td>
<td>Dr.SS/Lab Mgr / PA</td>
</tr>
<tr>
<td>Monday</td>
<td>PM</td>
<td>Intro. To Anatomic Pathology/Gross Lab</td>
<td>Dr.SS/PA</td>
</tr>
<tr>
<td>WEEK#1:</td>
<td>AM</td>
<td>Chest Conference/Slide Review</td>
<td>Dr.SS/Sign out Pathologist</td>
</tr>
<tr>
<td>Tuesday</td>
<td>PM</td>
<td>Slide Review</td>
<td></td>
</tr>
<tr>
<td>WEEK#1:</td>
<td>AM</td>
<td>Liver Conference</td>
<td>Dr.SS Sign Out Pathologist</td>
</tr>
<tr>
<td>Wednesday</td>
<td>PM</td>
<td>Slide Review</td>
<td></td>
</tr>
<tr>
<td>WEEK#1:</td>
<td>AM</td>
<td>Slide Review</td>
<td>Sign Out Pathologist</td>
</tr>
<tr>
<td>Thursday</td>
<td>PM</td>
<td>Slide Review</td>
<td>Sign Out Pathologist</td>
</tr>
</tbody>
</table>
Goals:
- Better understanding of the process of pathologic diagnosis, limitations and potentials of different modalities of obtaining specimens for diagnosis and the value of prognostic markers.
- Better utilization of routine and esoteric laboratory tests.

Objectives:
The student will have the benefit of “one-on-one” learning experience with the Attending Pathologist during the Microscopic examination and “sign-out” process. In the Clinical laboratory, the Division Supervisors will provide the students with the appropriate guidance to learn the basic laboratory principles.

Location: West Palm Beach VA Medical Center, Pathology & Laboratory Medicine Service

Participating Faculty: Dr. Sundara Sridhar

Prerequisite: Core rotations in Internal Medicine and Surgery.

Expectations:
At the end of the rotation, the student is expected to have a basic knowledge in the pathologic diagnosis of diseases, specifically the most common types of cancers. The student should have a better understanding of the newer modalities of tissue testing such as molecular diagnosis and its relevance in patient management. It is also hoped that the student will appreciate the importance of discriminative approach in laboratory test utilization as it relates to escalating health care costs.

Student Evaluation and Grading:
- Pass/Fail dependent upon attendance and participation.
- The student will receive an evaluation with written comments addressing strengths and weaknesses.
- The student will be asked to complete a general evaluation of the learning experience.
- Exceptional performance will be duly noted.

Reviewed December 2018
PEDIATRICS
ADOLESCENT MEDICINE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 880</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Marcela Nur, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-5880</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Merida M. Pelier; <a href="mailto:mmp161@miami.edu">mmp161@miami.edu</a>; 305-585-6364</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Pediatrics Clerkship</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1 (rare exceptions may be considered)</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

NOTE: ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

Overview/Course Design:
The goals of this elective clinical rotation are to broaden the student’s general knowledge of Adolescent Medicine, with emphasis on learning diagnosis and treatments of unique physical, developmental, and psychosocial problems of patients ages 10 – 25 years. The student will participate in the multidisciplinary team approach to adolescent health care, gain experience in communicating and interacting with a wide variety of inpatient and outpatient adolescents, and attend all aspects of the Adolescent Medicine teaching program.

ADOLESCENT INPATIENTS
The student will have opportunities to perform consultation examinations of adolescent patients at Holtz Children's Hospital, as well as participate in multidisciplinary care. The student also will participate in consultations at Ryder Trauma Center and at the psychiatric inpatient unit for adolescents at JMH's Behavioral Health Hospital.

ADOLESCENT OUTPATIENT CLINICS
The student will attend and participate actively in the General Adolescent Medicine Clinics, as well as the Adolescent Specialty Clinics (Gynecology, STD/HIV, Sports Medicine, Chronic Diseases, High School) and outreach educational events. Students will be required to do health education topic discussions in the clinic and/or community settings also.

Goals/Objectives:
Goal 1 – Know Tanner Stages and physical maturational processes
Goal 2 – Practice HEADS mnemonic for psychosocial history-taking and assessment
Goal 3 – Know precepts of confidentiality and conditions associated for the age group
Goal 4 – Understand mature minor/emancipated minor concepts
Goal 5 – Know different aspects of school health services
Goal 6 – Become familiar with basic knowledge of adolescents’ health complaints

1. Increase knowledge about adolescent physical and psychosocial growth and development
2. Understand unique aspects of adolescent health care (e.g. psychosocial screening, confidentiality issues, cognitive changes, behavioral maturation, etc.)
3. Increase awareness of different adolescent health care delivery models through active participation or discussions (e.g. academic clinics, school clinics, health department clinics, etc.)
4. Understand diagnosis and management of some common adolescent conditions (e.g. acne, STDs, menstrual disorders, chronic diseases, behavioral issues, traumas, etc.)

**Location:** JMH ACC 5B (20%), BCRI 2nd Floor (60%), High School Clinic (20%)

**Prerequisite:** Completion of Pediatrics core clerkship

**Expectations:**
The student will attend daily Adolescent Medicine activities, small group dialogues and case discussions, and weekly Pediatric conferences (Grand Rounds, M&M, Staff Conference, Academic Half-Day). The student also will function as a member of the multidisciplinary Adolescent Team. Additional preceptorial teaching sessions will be held with Adolescent Medicine faculty. The student will be required to do independent reading on adolescent-related topics, and may be asked to present an adolescent health topic to the team.

Students should report to the Adolescent Medicine Office at the Batchelor Children’s Research Institute—Suite 267 on the 2nd Floor at 8:30 a.m. on the first day of the rotation to pick up a schedule and reading packet, as well as to meet the team.

**Student evaluations and grading:**

**EVALUATION WILL CONSIST OF:**
1. 10 question pre and post test
2. Completion of reading materials
3. Brief lecture on specific topic in adolescent health
4. Quality of verbal and written patient care interactions
5. General attendance and participation

Revised November 2019
CHILD PROTECTION TEAM

COURSE CODE: MDR 881
CLERKSHIP DIRECTOR: Walter F. Lambert, M.D.
TELEPHONE: 305-243-7550
CONTACT: Merida M. Pelier; mmp161@miami.edu; 305-585-6364
LENGTH OF ELECTIVE: 2/4 weeks
PREREQUISITE: None, Pediatrics Core Clerkship is strongly encouraged
NUMBER OF STUDENTS: 2
AVAILABLE: All year
U.S VISITING STUDENTS: Yes
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

Overview/Course Design:
The Child Protection Team elective is designed to familiarize the students to all aspects of child abuse. The students will learn to assess and document physical abuse and neglect, attend court hearings and participate in case staffing. This elective is geared to meet the needs of all medical students (independent of their career goals) and introduce them to the community resources available for children and their families.

Goals/Objectives:
Clinical Goals
A. Identification and documentation of patterns of child abuse and neglect
B. Exposure to child abuse identification and documentation
C. Psychosocial assessments of victims and their families
D. Exposure to a multidisciplinary team approach

Juvenile Court/Department of Children & Families
A. Familiarization to the DCF and juvenile court systems
B. Case preparation and medical expert testimony
C. Acquaintance with the shelter/foster care system

Location: UM Child Protection Team offices and hospitals throughout the area
Prerequisite: The Pediatrics Core Clerkship is strongly encouraged but not required.

Reviewed November 2019
DEVELOPMENTAL-BEHAVIORAL PEDIATRICS

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1035</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Janellie Azaret MD; Jeffrey P. Brosco, MD PhD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6123; 305-243-3371</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jra154@miami.edu">jra154@miami.edu</a>; <a href="mailto:jbrosco@miami.edu">jbrosco@miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Dr. Azaret</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks (will consider special requests for 2 week rotations)</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Pediatrics</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All Year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

**Overview:**
This is a 4-week elective to expose the medical student to a spectrum of experiences in developmental and behavioral pediatrics. The student will rotate through different clinic/community settings and see patients based on the emphasis at that location.

**Course Design:**
The student will spend time at the Mailman Center for Child development as well as the pediatric University of Miami Hospital Clinics. The student will gain exposure to developmental-behavioral pediatrics through observation and participation in the Behavioral Pediatrics Clinic, the Interdisciplinary Developmental Service, the Developmental Screening clinic, and various aspects of the Leadership Education in Neurodevelopmental and related Disabilities (LEND) trainee program. At the various clinics, the student will learn the aspects included in a comprehensive developmental pediatrics history as well as participate in discussions to help decide treatment options. Finally, the student will complete the LEND program by attending weekly classes at the Mailman Center and creating a leadership/advocacy project.

**Goals:**
1. Describe the medical and psychosocial dimensions of diseases with neurodevelopmental components, such as Down’s syndrome, autism, spina bifida, cancer, HIV, extreme prematurity, externalizing disorders such as ADHD, Conduct Disorder, etc., and internalizing disorders such as depression and anxiety.
2. Understand the importance of and participate in an interprofessional team.
3. Communicate with children and families of varying cultural backgrounds, especially in delivering diagnostic news, following the principles of family-centered care.
4. Discuss the role of the physician as a leader and serve as an advocate for systems change, particularly regarding policies and systems of care that affect people with disabilities.

**Objectives:**
- Interprofessional Evaluation Services (IDES)
  - Obtain a medical history and perform a physical exam to determine the underlying medical cause of developmental or behavioral concerns
  - Evaluate when medical interventions (e.g. medications) are indicated
o Decide which disciplines should be included in the evaluation of a child with developmental and/or behavior concerns

- General Pediatrics Practice
  o Recognize common dev-beh conditions such as ADHD, autism, oppositional-defiant behavior, and learning disorders

- Developmental Screening Clinic
  o Conduct a history and physical examination of a child with a developmental or behavioral chief complaint
  o Assess likely diagnosis and deliver diagnostic news

- Behavioral Pediatrics Clinic (BPC)
  o Know how to diagnose using common tools to evaluate a child suspected of ADHD
  o Know the risks, benefits, and alternatives of medications for ADHD

- IDES Team
  o Describe the role of disciplines such as psychology and speech-language pathology in the evaluation and treatment of children with neurodevelopmental disabilities
  o Participate in an interprofessional team approach to complex clinical cases (see “rubric”)

- Tour of Debbie School and Audiology Clinic
  o Recognize the value of an inclusive, center-based B-2 (birth to two-years-old) program
  o Know the criteria for referral for a formal hearing evaluation
  o Describe the different types of hearing testing, including those used for screening

- Feedback Sessions
  o Self-monitor progress towards meeting learning objectives

- Understanding a Family’s Perspective
  o Appreciate some aspects of the perspective of a person with a disability and/or chronic healthcare need
  o Appreciate some aspects of a family perspective on living with a child with a developmental disability and/or chronic healthcare need
  o Contrast family-centered care in a medical home to traditional doctor-patient interactions
  o Incorporate an understanding of a family’s culture when communicating with children and their families
  o Provide comfort to families confronting issues of loss, death and dying
  o Describe the challenges of transition to adult systems of care

**Location:**
90% Mailman Center for Child Development
5% University of Miami Hospital and Clinics (Dr. Brosco’s General Pediatrics Practice)
5% Community Experiences

**Participating Faculty:**
Developmental-Behavioral Pediatrics & Mailman Center Faculty

**Prerequisite:**
Completion of Pediatrics Core Clerkship

**Expectations:**
The student will be expected to participate in all activities (consultations, procedures, rounds, clinics, conferences) and be on time. The rotation coordinator (Dr. Azaret) needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

**Student Evaluation and Grading:**
- Formative feedback- Students will receive formative feedback regarding their performance throughout the rotation
- Friday mornings with Drs Azaret and Brosco- each student will review specific learning goals. In order to develop self-directed learners, this conversation should be initiated by the students, as they consider what they see as specific areas for learning in the coming week.
- Mid-point of the rotation: student self-assessment- Each student should present Dr. Azaret with a completed self-evaluation form (“milestones” document provided at the start of the rotation). Dr. Azaret will provide feedback (one or more faculty opinions) on the accuracy of the student’s self-assessment.
- End of the rotation feedback (summative feedback)- Similar to the mid-point self-assessment, the student will present Dr. Brosco with a completed self-assessment, and Dr. Azaret will provide feedback. This interaction will lead to Dr. Azaret completing the standard on-line student evaluation form provided by the residency director’s office.

<table>
<thead>
<tr>
<th>Monday (Clinical)</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am</td>
<td>BPC - Azaret</td>
<td>Students’ Choice</td>
<td>Mailman Gr Rds (4th Fri of calendar month)</td>
<td></td>
</tr>
<tr>
<td>9:00 am</td>
<td>Open</td>
<td></td>
<td>Development Screening</td>
<td></td>
</tr>
<tr>
<td>10:30 am</td>
<td>IDES</td>
<td></td>
<td>Feedback/ Review</td>
<td></td>
</tr>
<tr>
<td>Noon</td>
<td>Grand Rounds</td>
<td></td>
<td>Staff Conf</td>
<td></td>
</tr>
<tr>
<td>1:00 pm</td>
<td>IDES team</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:00 pm</td>
<td>Students’ Choice</td>
<td>Independent Study</td>
<td>BPC- Hershorin</td>
<td></td>
</tr>
</tbody>
</table>

Revised October 2019
## MED-PEDS
(Listed under Medicine, Pediatrics, and Med-Peds)

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1013</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Dr. Kendra Van Kirk</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-7476</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:kxv192@med.miami.edu">kxv192@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Sadiz Torres, <a href="mailto:storres3@med.miami.edu">storres3@med.miami.edu</a>; 305-585-5954</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine and Pediatrics Core Clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year – Students going into MedPeds preferred during the first half of the year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days / 4 weeks, with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

**NOTE:** ANY schedule changes must be authorized by Dr. Van Kirk or the Med/Peds Residency Coordinator before your schedule can be officially changed.

### Overview:
Combined Internal Medicine and Pediatrics is a unique specialty that trains physicians in the care of patients of all ages. The elective aims to give students interested in our specialty exposure to Med/Peds in an urban primary care practice setting. Students will see routine care of newborns, infants, children, adolescents and adults, as well as care of patients with complex pediatric diseases as they transition into adulthood. Students interested in Med/Peds as a career are preferred between June and January and other students will be scheduled thereafter.

### Course Design:
The rotation will comprise of the following experiences:

1. **Med/Peds Primary Care Practice** - Students will spend a majority of their time with Med/Peds faculty and residents seeing and evaluating patients in the primary care practice. This will include patients that are being transitioned from pediatrics to adult care.


3. **Transitional Care Clinics*** - Students will have exposure to adolescent/ transitional care patients with complex pediatric diseases. *depends on availability

4. **Inpatient care** – Students will spend half of their time with Med/Peds faculty and residents seeing and evaluating patients on inpatient wards.
### Sample Weekly Schedule

<table>
<thead>
<tr>
<th>AM</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
<td>Inpatient with MP resident or faculty</td>
</tr>
<tr>
<td>Noon</td>
<td>Med/Peds Noon Conference PICU 5009E</td>
<td>Peds Grand Rounds MCCD 8th Floor Auditorium</td>
<td>Internal Med Grand Rounds RMSB 3rd floor auditorium</td>
<td>Peds Academic Half Day (until 3:00pm) MCCD 8th Floor Auditorium</td>
<td>IM NC Central 2 Auditorium OR Peds Staff Conference MCCD 8th Floor Auditorium</td>
</tr>
<tr>
<td>PM</td>
<td>Med/Peds Resident Clinic 1pm ACC West 5A</td>
<td>Med/Peds Resident Clinic 1pm ACC West 5A</td>
<td>Med/Peds Resident Clinic 1pm ACC West 5A</td>
<td>Med/Peds Resident Clinic 1pm ACC West 5A</td>
<td>Med/Peds Resident Clinic 1pm ACC West 5A</td>
</tr>
</tbody>
</table>

### Goals:
1. The students will receive exposure to the Med/Peds specialty and the unique opportunities the career can provide.
2. The student will receive broad clinical training in the care of adult and pediatric outpatients and inpatients in a major urban setting.
3. The student will receive exposure and training in transitional care of the complex pediatric patient.

### Objectives:
1. The student will learn and be able to apply age/gender appropriate screening, immunizations, and anticipatory guidance for the following populations:
   - Newborn
   - Infant/Toddler
   - School Aged Child
   - Adolescent
   - Adult
2. The student will be able to diagnosis and provide initial management of the following primary care problems:
   - Gastroesophageal Reflux
   - Allergic Rhinitis
   - Asthma/COPD
   - Obesity
   - HTN
   - Diabetes Mellitus
   - Hyperlipidemia
   - Low Back Pain
3. The student will know the following with regard to transitional care:
   - The definition of healthcare transition
   - The importance of providers to understand the specific issues regarding healthcare transition
   - Specific tools and resources they can utilize to help youth and their families develop a long-term transition plan
   - Specific strategies that can be used with young patients to empower them to be more responsible for their own healthcare.
The importance of multispecialty (pediatrics, internal medicine, subspecialists) coordination in the transition of healthcare from pediatric to adult care.

Location:
- Primary Location- Jackson Memorial Hospital Ambulatory Care Center Med Peds Primary Care Practice (ACC West 5A) (JMH 100%)
- Students may be asked to attend meetings/conferences in other parts of ACC, Jackson Memorial Hospital or University of Miami Hospital and/or Clinics.

Participating Faculty:
- Med Peds Faculty and Faculty from Division of Internal Medicine and Division of Pediatrics

Prerequisite:
- Completion of both Internal Medicine and Pediatric Core Clerkships

Expectations:
- The student is expected to participate in all activities (primary care clinic, noon conferences) in the course curriculum. They are expected to be on time, and to give appropriate notice to clerkship director for all absences or tardiness. Students are expected to follow the codes of professionalism as mandated by the School of Medicine
- Progress notes on patients that are evaluated by the student are to be completed by the end of the same day the patient was seen.

References (suggested materials)
Online references (commonly used in clinic):
- Clinical USPSTF Prevention Guidelines: http://epss.ahrq.gov/PDA/index.jsp. Also available as an Android/iPhone app.
- CDC immunization schedules: https://www.cdc.gov/vaccines/schedules. Also available as an Android/iPhone app.

Online Modules/Training:
- Florida Health and Transition Services Education and Training for Health Care Professionals-http://www.floridahats.org/?page_id=2206

Suggested Readings:

Student Evaluation and Grading:
- The medical student will receive a written evaluation at the end of the month based on the six ACGME core competencies. This will be reviewed with the student by the faculty evaluator.
- The student will complete an evaluation of the overall rotation and of the faculty with whom they worked.
• Grading will be given as pass/fail.

Revised October 2019
NEONATOLOGY

COURSE CODE: MDR 883
CLERKSHIP DIRECTOR: Ilene Sosenko, M.D.
TELEPHONE: 305-585-6408
EMAIL:
CONTACT: Merida M. Pelier; mmp161@miami.edu; 305-585-6364
LENGTH OF ELECTIVE: 2/4 weeks
PREREQUISITE: Pediatrics
NUMBER OF STUDENTS: 2
AVAILABLE: All Year
U.S VISITING STUDENTS: No
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

Overview/Course Design:
This rotation in Neonatology can be taken as a 2 or 4 week elective.

The student will be part of the team headed by an attending, and will follow and manage one or two patients together with one of the residents on the team. Teaching rounds will be conducted 5 times a week, work rounds 7 days a week.

During the first 2 weeks of the rotation the student will refresh and refine his/her physical examination skills. He/she will become familiar with the nutritional needs of neonates and infants and with how these needs can be met by feedings and parental alimentation. How to prevent and correct imbalances in body water and electrolytes will be stressed. Problems with anemia, hyperbilirubinemia, infection (congenital or acquired after birth), hypoglycemia and hypocalcemia and their management will be explained.

During the second two weeks of the rotation the focus of training will change to infants with respiratory and cardiovascular failure. The student will become familiar with the different causes of respiratory failure, how to judge the severity of respiratory failure by interpreting arterial blood gases and acid base status, and how to support the infants with supplement O2 or mechanical ventilation. Furthermore, the students will be exposed to signs and symptoms of cardiovascular failure, impaired regulation of breathing, and the consequences of hypoxic ischemic brain injury.

Goals/Objectives:
- Describe the nutritional needs of neonates and infants
- Appreciate how to prevent and correct imbalances in body water and electrolytes
- Describe the causes of respiratory failure
- Interpret the severity of respiratory failure through blood gas analysis and assessment of acid base status

Location: JMH (100%)

Prerequisite: Completion of Pediatrics core clerkship
Expectations:
The students will keep a checklist to document their progress in understanding the above problems.

Student evaluations and grading:
Students will be evaluated based on part, or all of the following:
  • Patient evaluation skills
  • Data gathering and problem solving
  • Fund of knowledge
  • Case presentations and write-ups
  • Personal qualities
  • Clinic/Ward activities and responsibilities
  • Communication and interpersonal skills

Revised January 2019
PEDIATRIC ALLERGY AND IMMUNOLOGY

COURSE CODE: MDR 973
CLERKSHIP DIRECTOR: Gary Kleiner, M.D.
TELEPHONE: 305-243-4863
EMAIL: gary.kleiner@med.miami.edu
CONTACT: Merida Pelier [ET 6006], mmp161@med.miami.edu
305-585-6364
LENGTH OF ELECTIVE: 2 / 4 weeks
PREREQUISITE: Pediatrics Clerkship
NUMBER OF STUDENTS: 2
AVAILABLE: All year
U.S VISITING STUDENTS: Yes
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

Overview:
The pediatric allergy and immunology elective is designed to give senior medical students exposure to the spectrum of diseases seen in the field of Allergy and Immunology. The student will predominantly rotate through the outpatient clinic and inpatient consults, and see patients and procedures based on the emphasis of that location.

Course Design:
The student will spend the majority of their time in the outpatient Allergy/Immunology clinic at the BCRI (Batchelor Children’s Research Institute), seeing new patient visits and follow-ups. All patients seen by the student will be discussed with the attending. The student will also observe a variety of allergy testing, including skin testing to common aeroallergens and foods, and learn the basics of how to perform and interpret skin testing. Students may also have the opportunity to observe skin testing to penicillin, stinging insects and local anesthetics, depending on the variability of the week. Student will observe and be instructed on the interpretation of basic spirometry. The student will learn about the signs and symptoms of primary immunodeficiency, and how to conduct and interpret immunology screening tests. The student will have the opportunity to study more in depth about immunology and primary and secondary immunodeficiency as well. The student may also have the opportunity to perform inpatient Allergy/Immunology consultations at Holtz Children’s Hospital, as well as, round with the attending. A presentation regarding a topic of interest to the student relating to the field of allergy/immunology is expected by the end of the rotation.

Goals:
1. Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiology examinations and cognitive skills as they related to the diagnosis and treatment of allergic diseases.
2. Familiarize the medical student with allergy testing:
   a. Understand the major risks for the procedure
   b. Observe the skin testing being performed, especially if they were involved with the evaluation of the patient
   c. Spirometry
3. Reinforce a critical approach to the medical literature
4. Learn about primary immunodeficiency disorders and the approach to diagnosis and management as part of the Jeffrey Modell Research and Referral Center for Primary Immunodeficiency Diseases.

**Student Responsibilities:**
1. Return patient phone messages
2. Reading List
3. Pre and Post Test
4. Presentation

**Learning Objectives:**
The medical student will be by the end of the rotation to be familiar with the basic evaluation and management of the following disorders:
1. Allergic Rhinitis
2. Asthma
3. Chronic Sinusitis
4. Food Allergy
5. Medication Allergy
6. Angioedema
7. Eczema
8. Primary Immunodeficiency Diseases

**Participating Faculty:** Dr. Gary Kleiner

**Prerequisite:** Completion of the Pediatrics Clerkship

**Locations:**
1. BCRI – 60%
2. JMH/HOLTZ – 20%
3. Lennar – 10%
4. Alex Place/UMHC – 10%

**Examination and Grading:**
Evaluation is the responsibility of the attending. Students are evaluated on their professionalism, clinical skills and participation as well as attendance, reliability, initiative, and ability to relate to patients peers and staff. A post-test will be administered. Judgment and the ability to perform accurate history/physical are also evaluated.

Reviewed November 2019
### PEDIATRIC CARDIOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 885</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Sethuraman Swaminathan, M.D. (<a href="mailto:sswami@med.miami.edu">sswami@med.miami.edu</a>)</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-6683</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Merida Pelier (<a href="mailto:mmp161@med.miami.edu">mmp161@med.miami.edu</a>)</td>
</tr>
<tr>
<td>EMAIL:</td>
<td>see above</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Pediatrics</td>
</tr>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME:</td>
<td>No</td>
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</table>

**NOTE:** ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

**Overview/Course Design:**
The student is exposed to the physiology, clinical and laboratory diagnosis, and management of the infant and child with congenital and acquired heart disease. Physical examination skills are emphasized during participation in the out-patient clinics at Jackson Memorial Hospital. Cardiology ward rounds are conducted daily providing the opportunity to follow hospitalized patients from clinical diagnosis to cardiac catheterization to cardiac surgery. Interpretation of pediatric electrocardiograms and echocardiograms are included in the individual patient's evaluation. Fundamentals of cardiac electrophysiology and pulmonary physiology, as it relates to heart disease, will be discussed in scheduled tutored session.

**Goals/Objectives:**
Students will be exposed to and participate in the care of children with pediatric cardiac disorders.

**Location:** JMH (100%)

**Prerequisite:** Pediatrics core clerkship

**Expectations:**
Participation in didactic lectures and weekly Cardiac Center Conference is also part of this elective.

**Student evaluations and grading:**
Students will be evaluated based on part, or all of the following:
- Patient evaluation skills
- Data gathering and problem solving
- Fund of knowledge
- Case presentations and write-ups
- Personal qualities
- Clinic/Ward activities and responsibilities
- Communication and interpersonal skills

Reviewed November 2019
PEDIATRIC DERMATOLOGY
(Listed under both Dermatology and Pediatrics)

| COURSE CODE: | MDR 886 |
| CLERKSHIP DIRECTOR: | Lawrence Schachner, M.D. |
| TELEPHONE: | 305-243-6735 |
| EMAIL: | jptomares@miami.edu |
| CONTACT: | Jessenia Pomares - 305-243-4472 |
| LENGTH OF ELECTIVE: | 2 weeks (an additional two weeks may be added with approval) |
| PREREQUISITE: | None. Pediatrics Clerkship is preferred |
| NUMBER OF STUDENTS: | 1 |
| AVAILABLE: | All year EXCEPT Blocks 00B and 12A-12B |
| U.S. VISITING STUDENTS: | Yes |
| INTERVIEWING TIME: | 1 day (2wks), with prior approval |
| TYPE: | Clinical / Research |

Overview/Course Design:
The understanding of mechanisms of pathophysiology and effective therapy in pediatric dermatological diseases is stressed in this elective. The students will participate in management of in-patient and out-patient dermatological and connective tissue problems. Diagnostic techniques by light microscopy and immunologic techniques and standard dermatologic laboratory techniques will be emphasized.

The student will attend approximately 7 clinics per week, weekly management conferences and grand rounds, the Miami Dermatology Society meetings (which are held 6 times a year), journal club, and slide conferences. All students will be required to participate in slide reading session with Dr. Elgart and there will be a quiz at the end of the rotation.

Goals/Objectives:
The goals of this elective are to introduce the student to clinical and laboratory means of recognition of cutaneous diseases in children and adolescents.

Location: JMH (25%) and UMH (75%)

Prerequisite: Pediatrics Clerkship is preferred. Non-UM students must apply in order to participate in this rotation. This is done by submitting a CV to the clerkship directors for review.

Expectations:
The student will be expected to participate in all activities (clinics and educational conferences) and to be on time. The course director needs to be informed of all absences. Professionalism as mandated by the Miller School of Medicine is expected.

Student evaluations and grading:
Students will be evaluated based on part, or all of the following:
• Patient evaluation skills
• Data gathering and problem solving
• Fund of knowledge
• Case presentations and write-ups
• Personal qualities
• Clinic/Ward activities and responsibilities
• Communication and interpersonal skills

Revised January 2020
PEDIATRIC EMERGENCY MEDICINE

COURSE CODE: MDR 887
CLERKSHIP DIRECTOR: Dr. Sara Cortes (305-585-6042)
EMAIL: mmp161@med.miami.edu
TELEPHONE: 305-585-6364
CONTACT: Merida Pelier
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Pediatrics
NUMBER OF STUDENTS: 1
AVAILABLE: All year
U.S. VISITING STUDENTS: No
INTERVIEWING TIME: 1 day (2wks), with prior approval
TYPE: Clinical

NOTE: ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

Overview/Course Design:
The student will be the primary physician for pediatric patients presenting with acute problems in the emergency facility of Jackson Memorial Hospital. The student will evaluate and treat patients with an extensive variety of acute illnesses under supervision of pediatric faculty and house staff.

Goals/Objectives:
Students will be exposed to and participate in the care of children with pediatric emergencies.

Location: JMH Pedi ER (100%)

Prerequisite: Pediatrics core clerkship

Expectations:
The student is expected to participate eight hours a day for 9 shifts and attend pediatric staff conference and grand rounds each week.

Student evaluations and grading:
The student will be evaluated via a compilation of comments and observations made by the House staff and attendings in the Pediatric Dept. based on part, or all of the following:
• Patient evaluation skills
• Data gathering and problem solving
• Fund of knowledge
• Case presentations and write-ups
• Personal qualities
• Clinic/Ward activities and responsibilities
• Communication and interpersonal skills

Reviewed November 2019
# PEDIATRIC ENDOCRINOLOGY

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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Tosaporn Seeherunvong, M.D. (Mailman #3044A)</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-2920</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:TSeeherunvong@miami.edu">TSeeherunvong@miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Merida M. Pelier; <a href="mailto:mmp161@miami.edu">mmp161@miami.edu</a>; 305-585-6364</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME:</td>
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</table>

**NOTE:** ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

### Overview/Course Design:
This elective provides experience in Pediatric Endocrinology with emphasis on disorders of growth, diabetes mellitus, thyroid disease, puberty, and other endocrine problems. There are five clinics per week.

### Goals/Objectives:
Students will be exposed to and participate in the care of children with endocrine disorders.

### Location:
Mailman (100%)

### Prerequisite:
Completion of all core clerkships

### Student evaluations and grading:
Students will be evaluated based on part, or all of the following:
- Patient evaluation skills
- Data gathering and problem solving
- Fund of knowledge
- Case presentations and write-ups
- Personal qualities
- Clinic/Ward activities and responsibilities
- Communication and interpersonal skills

Reviewed November 2019
# PEDIATRIC GASTROENTEROLOGY, HEPATOLOGY & NUTRITION

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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Amanda Fifi, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6426</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Merida Pelier, 305-585-6364</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:mmp161@med.miami.edu">mmp161@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 / 4 weeks</td>
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<td>PREREQUISITE:</td>
<td>Pediatrics</td>
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<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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**NOTE:** ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

## Overview/Course Design:

The student will be able to participate in the care for inpatients and outpatients; to participate in daily rounds on inpatients as well as consults with the attending physician, fellow and pediatric resident team. Opportunities to conduct patient interviews and examinations as well as to observe/participate in GI procedures will be an integral part of the elective. The student will review indications/risks for particular procedures and surgeries as they relate to pediatric gastroenterology. Students will also participate in weekly outpatient clinics. Students will also learn care of gastrostomy tubes. The 4 week rotation will consist of 2 weeks inpatient and 2 weeks outpatient. For the 2 week rotation, the student will choose either the inpatient or outpatient component of the rotation.

## Goals/Objectives:

Students will be exposed to and participate in the care of children with gastrointestinal, hepatology, and nutrition disorders.

The medical student will be expected to be familiar with the basic evaluation and management of the following disorders.

1. GERD
2. Abdominal pain of childhood
3. Inflammatory bowel disease
4. Jaundice and cholestasis
5. Pancreatitis
6. Failure to thrive
7. Enteral versus parenteral feeds

**Location:** JMH (75%) and satellite outpatient clinics (25%)

**Prerequisite:** Pediatric Clerkship

**Expectations:**
Attendance is mandatory for all assigned fellow conferences, pathology and radiology rounds, didactics, journal club, rounds and/or presentations. The student should be prompt.

An oral presentation (15-30 minutes) on a topic of the student choosing is required at the end of the rotation.

**Student evaluations and grading:**
Evaluation is the responsibility of the attending on service and/or the clinical setting. Students are evaluated/judged on their professionalism, clinical skills and participation as well as reliability, initiative, and ability to relate to patients peers and staff. Judgment and the ability to perform accurate history/physical are also evaluated.

Reviewed January 2018
PEDIATRIC INFECTIOUS DISEASES AND IMMUNOLOGY

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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Ivan Gonzalez, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-2700</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:i.gonzalez2@med.miami.edu">i.gonzalez2@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Merida Pelier, <a href="mailto:mmp161@med.miami.edu">mmp161@med.miami.edu</a>, 305-585-6364</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None (encouraged to complete Pediatrics core clerkship prior to taking course, but not required)</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<tr>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
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NOTE: ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

Overview/Course Design:
The 4-week rotation in Pediatric Immunology and Infectious Disease is designed to give the student a broad experience in the immunological and infectious disease problems of children. The student will participate in both the inpatient and outpatient care of children with such problems by rounding daily with the attending fellow and the clinical pediatric infectious disease faculty. The student will also have the opportunity to assist in the care of children with HIV-1 infection as well as other immunodeficiency diseases.

Goals/Objectives:
Students will be exposed to and participate in the care of children with immunologic and infectious diseases.

Location: BCRI Clinics – 60%, Holtz Children’s Hospital Inpatient 40%

Prerequisite: Completion of core Pediatrics clerkship is encouraged but not required

Expectations:
Students will be expected to attend a variety of pediatric infectious disease conferences that occur weekly and will be asked to conduct an informal seminar on an infectious disease topic of their choice during the last week of their rotation.

Student evaluations and grading:
Students will be evaluated based on part, or all of the following:
- Patient evaluation skills
- Data gathering and problem solving
- Fund of knowledge
- Case presentations and write-ups
- Personal qualities
- Clinic/Ward activities and responsibilities
- Communication and interpersonal skills

Revised November 2019
PEDIATRIC INTENSIVE CARE UNIT SUB-I

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<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 892</th>
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</table>
| CLERKSHIP DIRECTOR: | Asumthia Jeyapalan, D.O.  
|                   | G. Patricia Cantwell, M.D. (Division Chief Pediatric Critical Care) |
| TELEPHONE:        | 305-585-6051 |
| EMAIL:            | ajeypalan@med.miami.edu; pcantwel@med.miami.edu |
| CONTACT:          | Merida Pelier, mmp161@med.miami.edu  
|                   | Office: Holtz Children’s Hospital (East Tower), Room 6006 |
| LENGTH OF ELECTIVE: | 4 weeks |
| PREREQUISITE:     | Completion of Core Clerkships |
| NUMBER OF STUDENTS: | 2 |
| AVAILABLE:        | All year, EXCEPT Block 7A/B |
| U.S VISITING STUDENTS: | Yes |
| INTERVIEWING TIME: | 2 days (4wks), with prior approval |
| TYPE:             | Clinical |

**NOTE:** ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

**Overview:**
The primary objective of this rotation is to promote the development and mastery of clinical critical care pediatric competencies. The environment of the PICU affords the student a broad exposure to clinically relevant physiological and pathophysiological principles and multisystem disease (Competencies: Patient Care, Medical Knowledge). The practice of evidence based medicine is promoted by encouraging students to conduct literature search for current guidelines (Practice-based Learning and Improvement), with an emphasis on the basic principles of recognition and management of respiratory failure and shock in the pediatric population (infancy to 21 years).

**Course Design:**
Subinterns are assigned to the Pediatric Critical Care team and assume primary and direct responsibility for patient care under close supervision by the critical care attending physician and fellow. They are afforded broad opportunity to navigate the complexities of collaborative management with other specialties, thereby gaining experience with multidisciplinary teamwork (System-based Practice). The PICU environment allows the student to become familiar with monitoring devices utilized in the care of critically sick or injured children. The rotation provides the opportunity for dealing with ethical challenges in decision making (Professionalism, Interpersonal Skills/Communication).

Subinterns will participate in weekly division conferences, attend weekly Pediatric Grand Rounds, required pediatric resident staff conferences and Academic Half Day (Thursdays starting at noon). They participate in daily clinical activities including handoffs, and multi-disciplinary rounds. Subinterns have two options: they may choose to participate in traditional in house overnight and weekend calls every fourth day/night and be relieved of duty by noon the next day. The other option is that they will stay until 11pm and admit and follow patients every fourth night including weekends; they will leave the PICU after 11pm but are expected to be present the next day in the PICU (unless a Saturday or Sunday). The subintern must choose one of the options and inform fellow/attending on service on Day 1 of the rotation.
Goals:
- Develop fundamental knowledge and skills to assess and identify physiologically deranged infants and children, learn when to seek assistance, and take proper initial steps in resuscitation and/or stabilization;
- Promote the practice of Evidence-Based Medicine in Pediatrics to improve quality of care and patient safety;
- Review common clinical conditions (e.g. respiratory failure, shock) with emphasis on diagnosis and management.

Learning Objectives:
1. Gather information through relevant and focused history taking
2. Conduct directed and complete physical examinations
3. Order appropriate tests and effectively interpret results
4. Engage in clinical reasoning, propose differential diagnoses and formulate appropriate therapeutic recommendations
5. Document encounters efficiently and accurately
6. Prioritize daily tasks for patient care and learn principles of triage when facing emergency or simultaneous urgent situations in the PICU
7. Anticipate patient needs and organize transfer or discharge planning
8. Develop skills in order to provide family centered care with focus upon the impact that a child’s critical illness/injury has on the entire family
9. Ensure safe transition of care by streamlining and prioritizing patient information in hand-offs; learn criteria for discharge from PICU to lower acuity area
10. Demonstrate understanding of the pathophysiology of multiple system disease
11. Understand the impact of cultural, psychosocial and environmental processes on complex goal setting and patient management for children with special health care needs
12. Review and apply current literature with an emphasis on the practice of evidence-based medicine
13. Effectively communicate with the patient, his/her caregiver and with other physician and non-physician members of the healthcare team
14. Efficiently coordinate multidisciplinary care through appropriate utilization of consultative and ancillary services
15. Use information technology to access online medical information, review evidence from scientific studies and formulate appropriate management decisions
16. Understand the risks and benefits of procedures and learn how to obtain informed consent
17. Recognize the importance of quality improvement, risk management and promotion of patient safety
18. Maintain timely communication with primary care physicians, sub-specialists and consulting physicians
19. Commit to excellence and to personal/professional growth through self directed learning; to perform evaluation of one’s performance and develop plan for improvement
20. Become familiarized with the basics of sedation and analgesia in Pediatrics (e.g. categories of medications, appropriate monitoring, side effects, pre-sedation clearance)

Location:
- Pediatric Intensive Care Unit, 5th floor, Holtz Children’s Hospital/Jackson Memorial Medical Center (100%)
- Notable features:
  - 24 bed, multidisciplinary medical/surgical unit, directed exclusively by critical care pediatricians;
    - Broad age range for maximal exposure (infancy to 21 years);
    - Outstanding, experienced nursing staff;
    - Full time, designated respiratory therapists and pharmacists;
    - Variable acuity (some “step-down” patients);
24/7 fellow and resident coverage; attendings are present at least 10-12 hours each day, typically more; Large population of multispecialty patients, e.g. need to interface with many pediatric subspecialists.

**Participating Faculty:**
- Department of Pediatrics, Division of Pediatric Critical Care (Faculty: Drs. G. Patricia Cantwell, Gwenn McLaughlin, Barry Gelman, Michael Nares, Juan Solano, Asumthia Jeyapalan, Brent Pfeiffer, Monica Alba-Sandoval, Amanda Alladin, Joseph Dayan)

**Prerequisite:**
- Completion of Core Clerkships

**Expectations:**
**Role and Responsibility of the Subintern:**
- The subintern is an integral part of the pediatric critical care team and works under the close supervision of the pediatric critical care attending and fellow. He/she participates in the following aspects of patient care:
  - Initial evaluation (admission note, on service note)
  - Daily management (order entry, progress notes, handoffs)
  - Coordination of care with other specialties and ancillary services
  - Final Disposition (off service note, discharge summary, transfer, outpatient follow up)
  - The subintern carries 1-2 patients
- Pre-Rounds 0700
- Attending Rounds 0800 to approximately 1200 noon.
- Sign Out 1700
- On-call schedule options as described above in Course Design
- The subintern attends workshops and all others conferences as outlined in the conference calendar.

**Conference Schedule:**
During the rotation, the subintern is required to attend the following conferences:
- Pediatric Grand Rounds, Mailman Center, Tuesdays, 1200
- Pediatric Staff Conference, Mailman Center, Fridays, 1200
- Pediatric Academic half day, Thursday 1200-3
- We encourage participation in the weekly Pediatric Critical Care Fellow Conference, Holtz Room 5009, Thursdays, 0730 to 0830

**Learning Materials:**
Reference textbooks are suggested. Basic review articles in Pediatric Critical Care are distributed. Online resources (e.g. NEJM instructional videos, teaching modules) are assigned.

**Student Evaluation and Grading:**
The supervising critical care physicians and pediatric residents will provide regular verbal feedback to the subintern over the course of the rotation and will submit a written evaluation of the subintern at the end of the rotation. This will be a composite evaluation from all attendings, fellows, and residents.

The subintern will complete an evaluation of the supervising attendings and the rotation at the conclusion of the rotation. These evaluations will be anonymous.

Revised October 2019
PEDIATRIC MOBILE CLINIC ELECTIVE

<table>
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<tr>
<th>COURSE CODE:</th>
<th>MDR 1018</th>
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<tbody>
<tr>
<td>COURSE DIRECTOR:</td>
<td>Lisa Gwynn, D.O., M.B.A.</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:lgwynn@med.miami.edu">lgwynn@med.miami.edu</a></td>
</tr>
<tr>
<td>COURSE COORDINATOR:</td>
<td>Jezahel Ochoa</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Jezahelochoa@med.miami.edu">Jezahelochoa@med.miami.edu</a></td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6131</td>
</tr>
<tr>
<td>LENGTH OF ROTATION:</td>
<td>2 / 4 weeks – 4 weeks is recommended</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Core Pediatrics Clerkship</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME:</td>
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Note – Prior Approval by Dr. Gwynn or Jezahel Ochoa is required.

Overview
This is an outpatient rotation on the University of Miami Pediatric Mobile Clinic (PMC). The PMC is a clinic on wheels that delivers comprehensive pediatric primary care primarily to uninsured children from birth to 21 years of age throughout Miami Dade County free of charge. The PMC provides care for some of the neediest children in communities including Little Havana, West Dade, Homestead, Florida City, Little Haiti/North Miami, Doral, Kendall and Miami Beach. Patients encountered reflect the diverse population of Miami-Dade County. Many are new immigrants and non-English speaking patients accessing medical care for the first time. Thirty percent of children served have complex medical needs; 20% of the children have disabilities or developmental concerns.

Clinic activities include sick and well-child care and follow-up for chronic conditions. Students will work independently and responsibilities will include taking histories, conducting physical exams and discussing assessment and plans of care with the entire unit team including resident and attending physicians, nurse practitioners, social worker, therapist, and psychologist. Students also have the opportunity to do basic procedures such as throat swab, urinalysis, phlebotomy and administration of immunizations and provide counseling and education to patients and families. The students will have an opportunity to participate in telehealth clinics on the unit as well as special projects that are taking place. In addition, students will learn about the public health issues related to caring for uninsured, underserved populations and the social determinants that play a role in health and accessing health care. They will also learn about community resources available to underserved populations.

Course Design / Expectations
Students will work directly with the PMC team. Students are expected to report prior to the start of clinic each day at the various sites (students must arrange for own transportation) and take an active role in seeing patients each day until the clinic ends. It is recommended that students take part in all clinic activities including documentation of the patient visit using the electronic medical record. They will also be expected to participate in scheduled didactic sessions and case presentations during the rotation.

Hours:
- M-F: 8:30 AM- 3:00 PM (plan on up to 1 hour travel time throughout Miami-Dade County)

Location:
- Mobile Unit
100% of student time will be spent off-campus at PMC clinic sites throughout Miami-Dade County. The clinic schedule can be accessed at www.pediatricmobileclinic.com.

Students must arrange their own transportation to the sites.

PMC clinic sites include (but not limited to):
- Center For Haitian Studies: 8260 NE 2nd Ave, Miami, FL 33138
- Kendale Lakes Elementary: 8000 S.W. 142nd Ave, Miami, FL 33183
- Good News Care Center: 101 S Redland Rd., Florida City, FL 33034
- San Juan Bosco: 1301 W. Flagler St, Miami, FL 33135
- Santa Barbara: 6801 W 30th Ave, Hialeah, FL 33018
- St Martin De Porres Church: 14881 SW 288th Street, Homestead, FL33033
- City Of Doral: 5401 NW 53rd Terrace, Doral, FL 33166
- Homestead Housing Authority: 29355 S Dixie Hwy, Homestead, FL 33033

Participating Faculty
- Lisa Gwynn, D.O., M.B.A.
- Michael J. Maurer, M.D.
- Ana Maria Melero, A.R.N.P., M.P.H.
- Evette Torres, A.R.N.P.

Prerequisite
- Core Pediatrics Clerkship

Student Evaluation and Grading
The student evaluation will be completed by Dr. Gwynn and the APRN’s. The evaluation will be on a Pass-Fail Basis, and will be based upon attendance and participation in all aspects of the elective, including medical knowledge, patient care, interpersonal and communication skills, professionalism, practice-based learning and improvement, and systems-based practice.

Revised November 2019
**PEDIATRIC NEPHROLOGY**

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<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Chryso Katsoufis, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-6726</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:ckatsoufis@med.miami.edu">ckatsoufis@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Merida M. Pelier; <a href="mailto:mmp161@miami.edu">mmp161@miami.edu</a>; 305-585-6364</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
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<td>INTERVIEWING TIME:</td>
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**NOTE: ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.**

**Overview/Course Design:**
This course will emphasize the clinical approach to health maintenance and diseased states of the renal and urologic systems. We aim to provide a review of renal pathophysiology through representative outpatient and consultative clinical encounters, as well as educational conferences. By the end of the course, you should have an understanding of the abnormal findings, diagnostic evaluation and therapeutic approach for a given disease process. In addition, we hope that you will develop an appreciation for the scientific evidence behind current clinical practice in pediatric nephrology.

**Goals/Objectives:**
Students will be able to describe diagnostic approaches and understand clinical decision paradigms related to pediatric renal problems through clinical case presentations and analysis of ancillary radiologic and pathologic services, including examination by histomorphometry, immunofluorescence and electron microscopy.

**Location:** JMH (80%); Mailman Center for Child Development (20%)

**Prerequisite:** Completion of core Pediatrics clerkship

**Student evaluations and grading:**
Students will be evaluated based on part, or all of the following:
- Patient evaluation skills
- Data gathering and problem solving
- Fund of knowledge
- Case presentations and write-ups
- Personal qualities
- Clinic/Ward activities and responsibilities
- Communication and interpersonal skills

Revised October 2019
# PEDIATRIC PALLIATIVE CARE

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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>G. Patricia Cantwell, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>Merida M. Pelier; <a href="mailto:mmp161@miami.edu">mmp161@miami.edu</a>; 305-585-6364</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:pcantwel@med.miami.edu">pcantwel@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>G. Patricia Cantwell, MD</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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**NOTE:** ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

## OVERVIEW

This is a 2-4 week elective intended to expose the senior medical student to a spectrum of life-threatening and complex medical illnesses in pediatrics. The student will work directly with a faculty physician and the Palliative Care Nurse Coordinator and interface with a broad spectrum of pediatric sub-specialties.

## COURSE DESIGN

The student will spend time at Holtz Children’s Hospital on the Palliative Care consult service, seeing patients in consultation and follow-up, and discussing them with the fellows and attending on rounds. Patients may also be seen in an Outpatient Clinic setting and during Home Visits as needed. All students will meet with Dr. Cantwell, the rotation coordinator, and interact with faculty overseeing the Palliative Care initiative. Students are expected to attend the weekly Palliative Care Interdisciplinary Conference.

## GOALS

- Instill the mission of palliative medicine which encompasses management of physical symptoms, psychological issues, social stressors, and spiritual dimensions.
- Understand the need to incorporate primary palliative medicine into daily practice and seek advanced palliative medicine consultation for challenging cases.
- Reinforce the importance of communication skills in dealing with patients/families who struggle with complex medical issues.
- Recognize the need to employ an interdisciplinary approach to patients living with life-threatening conditions (integration of Child Life, Pastoral Care, Social Work, Child Psychology, Nursing, Sub-specialists, and Primary Care Pediatricians)

## LEARNING OBJECTIVES

By the end of this experience, the medical student will be able to:

- Understand the evaluation and management of child/family facing complex medical conditions, such as:
  - Neonatal respiratory failure, prematurity, genetic syndromes
  - Children/Adolescents undergoing technologic support in the PICU for a myriad of diagnoses
  - Children/Adolescents with cancer
Assessment method: Students will perform consultations, and participate with initial evaluation and ongoing management of patients referred for palliative care.

- Understand the importance of communicating prognosis and delivering bad news, in settings such as:
  - Exposure to end-of-life experiences
  - Challenges with discussion of resuscitation guidelines from a medical provider perspective as well as family perspective
  - Potential to have direct exposure to determination of brain death
  - In collaboration with the Pediatric Bioethics Committee

Assessment method: Students will participate in and contribute to family and multi-disciplinary meetings.

4. Apply knowledge about pharmacological treatments (analgesics, adjuvants) and other modalities (e.g. distraction) to treat acute and chronic pain and anxiety.

Assessment method: Students will assist in creating therapeutic plans to treat pain and anxiety.

LOCATION
Holtz Children’s Hospital (90%), Alex’s Place/Sylvester Cancer Center (5%), Opportunity for Home Visit (5%)

PARTICIPATING FACULTY
Faculty from the Program in Pediatric Palliative Medicine, Division of Pediatric Critical Care Medicine; Division of Neonatology; Sub-specialty faculty determined by the pediatric diagnoses; Pediatric Palliative Care Nurse Coordinator.

PREREQUISITE
Completion of Pediatrics core clerkship

EXPECTATIONS
The student will be expected to participate in all activities (consultations, rounds, clinics, conferences) and be on time. The rotation coordinator (Dr. Cantwell) needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

STUDENT EVALUATION AND GRADING
- The medical student will receive a written evaluation at the end of the rotation. This will be reviewed with the student by the faculty evaluator.
- The student will be asked to complete an evaluation of the rotation as a whole upon completion to allow for continual improvement of the student experience.
- Faculty performance will be evaluated by the medical student (submitted anonymously).

Reviewed November 2019
PEDIATRIC PULMONARY

<table>
<thead>
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<th>COURSE CODE:</th>
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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Andrew Colin, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6162</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:acolin@med.miami.edu">acolin@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Merida M. Pelier; <a href="mailto:mmp161@miami.edu">mmp161@miami.edu</a>; 305-585-6364</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
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<td>PREREQUISITE:</td>
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<td>INTERVIEWING TIME:</td>
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<tr>
<td>TYPE:</td>
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</table>

NOTE: ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

Overview:
The objective of this rotation is to provide the students with the clinical exposure to acute and chronic, acquired and congenital, respiratory diseases from infancy to adolescence in both in-patient and out-patient venues. These conditions include but are not limited to asthma, chronic cough, chronic lung disease of infancy, cystic fibrosis, congenital lung abnormalities, recurrent and complicated pneumonia. The student will participate in the in-patient rounds or activities, ambulatory clinics and didactic conferences.

Course Design:
The students are assigned to the Division of Pediatric Pulmonology of the University of Miami and see patients with the pulmonary fellow under the close supervision of the pulmonary attending. The student will be given opportunities to conduct medical interviews and physical examinations and present findings and initial working impression to the assigned attending. The students will participate in didactic activities of the Division and may be asked to prepare a presentation for the pulmonary staff on a topic of interest. Moreover, the students will be asked to attend bronchoscopies and to observe and obtain basic skills in interpreting pulmonary function testing.

Goals:
To provide the clinical exposure and experience as aligned with the clinical core competencies that will enable the students to:

Objectives:
1. Conduct focused history taking and physical examination.
2. Propose an initial working impression and differential diagnoses and basic management plan based on the medical history and pertinent physical examination findings.
3. Document encounters efficiently and accurately. Focus is placed on generating a thoughtful, analytical, succinct yet comprehensive note for all encounters, as befits a tertiary center consultation service.
4. Use information technology to support diagnosis and management plan.
5. Recommend appropriate consults to other subspecialties.
6. Participate in patient education especially with regard environmental control for asthmatic patients.
7. Communicate compassionately yet professionally with patients and their caregivers.
8. Understand the pathophysiology, presentation and management of common respiratory conditions as given in the Overview.
9. Understand the indications for bronchoscopy; understand its risks and benefits and how to obtain consent.
10. Understand the indications for pulmonary function testing and basic interpretation.
11. Understand the indications for radiographic testing/imaging and basic interpretation.
12. Obtain exposure to patients with sleep-disordered breathing and understand interpretation of polysomnographies (Sleep studies).
13. Obtain exposure to patients with cystic fibrosis by participation in the Cystic Fibrosis Clinic.
14. Demonstrate respect for cultural differences and values among patients and cultural diversity in the medical staff.
16. Practice punctuality and reliability.

Location:
- Out-patient clinics at the Batchelor Research Institute of the University of Miami (50%).
- Out-patient clinics at the ACC-West of Jackson Memorial Hospital (10%).
- In-patient rounds at the Holtz’s Children’s Hospital at the Jackson Memorial Hospital (40%).

Prerequisite:
None.

Expectations:
1. The student is an integral part of the team and works closely with the pulmonary fellow under the supervision of a pulmonary attending.
2. The student is expected to practice professionalism, punctuality and reliability.
3. The student will participate in the inpatient rounds and consults under the supervision of the inpatient attending.
4. The student will participate in the outpatient clinics under the supervision of the out-patient attending(s).
5. The student will attend and participate in didactic conferences and will be provided a schedule of such.
6. The student may be asked to prepare a presentation on a topic of interest to be presented to the pulmonary staff.
7. The student will be given a set of prerequisite reading references; the student is encouraged to access other sources of information relevant to cases seen in the in-patient and out-patient venues.

Student evaluations and grading:
Students will be evaluated based on part, or all of the following:
- Patient evaluation skills
- Data gathering and problem solving
- Fund of knowledge
- Case presentations and write-ups
- Personal qualities
- Clinic/Ward activities and responsibilities
- Communication and interpersonal skills

Revised December 2018
**PEDIATRICS BOOT CAMP – TRANSITION TO RESIDENCY**

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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Monica Alba-Sandoval, MD, and Patricia Alvarez, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-6051</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:mxa508@miami.edu">mxa508@miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Merida M. Pelier; <a href="mailto:mmp161@miami.edu">mmp161@miami.edu</a>; 305-585-6364</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<td>PREREQUISITE:</td>
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<tr>
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</table>

**Overview:**
Our immersive course offers the unique opportunity to learn what it means and what is required to become a pediatrician. It includes review of key concepts and knowledge, common pediatric physiology and pediatric illnesses, practice of common procedures, and hopes to generate self-reflection and guidance on human aspects such as professionalism, communication with families, patients and team members, leadership, wellness and life management skills (coping with challenges and stress of residency).

**Course Design:**
This 2-week elective course uses highly interactive didactics such as small group case discussions, procedural skills labs and group based simulations, team building exercises, and lectures. It provides one on one conversations with current PGY1’s (who will be on the cusp of completion of their intern year), Chief Residents, and pediatric faculty. It is divided equally into one inpatient and one outpatient week. A sample schedule is provided with this course description (see below).

**Goals:**
1. Facilitate students’ transition to pediatric residency by reviewing key concepts and knowledge, and demonstrating skills and attitudes necessary to enter residency with confidence.
2. Identify individual performance gaps that can be improved before residency begins.

This course will use the AAMC Core Entrustable Professional Activities (EPA) for Entering Residency as the foundation of course content. Components of the following EPA’s will be emphasized:

- **EPA 2**: Prioritize a differential diagnosis following a clinical encounter.
- **EPA 4**: Enter and discuss orders and prescriptions.
- **EPA 7**: Form clinical questions and retrieve evidence to advance patient care
- **EPA 9**: Collaborate as a member of an interprofessional team.
- **EPA 10**: Recognize a patient requiring urgent or emergent care and initiate evaluation and management.
- **EPA 11**: Obtain informed consent for tests and/or procedures.
- **EPA 12**: Perform general procedures of a physician.


**Objectives:**
At the end of the course the students will be able to:
1. Understand roles and general responsibilities of internship.
2. Consolidate key concepts and specific pediatric knowledge.
3. Demonstrate familiarity with the indications, equipment, process, and expected outcomes from common pediatric procedures; IV access, IO access, basic airway management (bag and mask ventilation) and CPR.
4. Recognize common pediatric illnesses and design a management approach.
5. Recognize and initiate management for the pediatric patient in critical conditions.
6. Demonstrate the ability to interpret common diagnostic tests: acid/base status, electrolytes, ECG, radiology.
7. Reflect on one’s wellbeing and stress management during residency.
8. Understand support tools and strategies for individual challenges
9. Practice key concepts of “morning report” patient discussion by presenting a patient admitted the night before during the “night float experience”.
10. Practice triaging and prioritization of outpatient pager calls.
11. Demonstrate good communication skills when interacting with families and team members.
12. Evaluate and give feedback through pre and post-surveys.

**Location:**
- Holtz Children's Hospital (90%), Jackson Memorial Patient Safety Center (10%)

**Participating Faculty:**
- Core Faculty: Monica Alba-Sandoval, Patricia Alvarez, Teresa Del Moral, Barry Gelman, Nicole Torres.

**Prerequisite:**
- Completion of Core Clerkships, Senior Boot Camp Preferred

**Expectations:**
- Attend and participate in all scheduled activities during the two-week program.
- Participate in a “night float experience”. Students will be assigned to join the on-call in patient team from 4pm-11pm. In addition to be part of the team during those hours, the student will admit a patient and present it in “morning report” style debriefing next day.
- All readings and online (Blackboard) reflections/assignments
- Prepared for activities in advance when specified.

**Student Evaluation and Grading:**
- Pre and post-tests
- Verbal feedback during small group exercises and debriefing for simulation cases.
- After procedural skills sessions, there will be feedback based on performance checklists to be discussed with the student.
- Performance checklist based feedback for Mommy pagers and calls.

**Grading: Pass/Fail based on:**
- Attendance, participation, professionalism, and clinical skills demonstrated during the course.

Sample schedule below: subject to change
### Inpatient and ED

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<thead>
<tr>
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<th>Tuesday</th>
<th>Wednesday</th>
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<tbody>
<tr>
<td></td>
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<td>Holz</td>
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<td></td>
<td>Gelman/Alba</td>
<td>(EPA 4)</td>
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<td>Gelman 8:30</td>
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<td>Rehydrate</td>
<td>Child in</td>
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<td>10:15</td>
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<td>8:30 Holz</td>
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<td>Juan Solano</td>
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<td>Holz</td>
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<td>1-2</td>
<td>Blood Bank</td>
<td>Difficult</td>
<td>BLS and PALS</td>
<td>ED</td>
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<td>&quot;your child is getting</td>
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<tr>
<td></td>
<td></td>
<td>&quot;your child is getting</td>
<td>Jackson</td>
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<td>SKILLS: IV/IO</td>
<td>Difficult</td>
<td>Resuscitation</td>
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<td>lab</td>
<td>&quot;your child is getting</td>
<td>cycle deliberate practice PALS case)</td>
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<td>Sim Lab. Alba</td>
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<td>3 Gelman</td>
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### Outpatient week

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<td>am</td>
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<td>Newborn exam</td>
<td>Neonate,</td>
<td>School age,</td>
<td>Pediatric</td>
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<td></td>
<td>Ballard</td>
<td>Nicole.Holtz</td>
<td>Holtz</td>
<td>EGKs, Hunter</td>
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<td>10-11</td>
<td>common nursery problems</td>
<td>Infant.</td>
<td>Cultural Sensitivity and implicit bias</td>
<td>Unit 11 am</td>
</tr>
<tr>
<td>11-12</td>
<td>L&amp;D Treasure Hunt</td>
<td>Nicole.Holtz</td>
<td>Holtz</td>
<td>Pediatric EGKs, Hunter, Unit 11 am HOLTZ</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>12-1</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
</tr>
<tr>
<td>pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td>Breastfeeding</td>
<td>Radiology, Basics, Dr.</td>
<td>Note writing, Gelman</td>
<td>Newborn</td>
</tr>
</tbody>
</table>
| 2-3   | Dr.Perez surgery pearls, 2:30 | How to prep for Clinics 2:30 | LGBTQ, Brandon 2:30 Holz |              |}

Note: The document contains a detailed schedule for inpatient and ED, as well as an outline for the outpatient week. The schedule includes various medical activities, lectures, and training sessions.
<table>
<thead>
<tr>
<th>Inpatient and nursery week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-9 am</td>
<td>Orientation and pre test review, What does it mean to be a pediatrician, Geiman</td>
<td>shock review</td>
<td>Communication, how to obtain a consult, SBIAR</td>
<td>child in respiratory distress, (videos of different exam findings)</td>
<td>The child with altered mental status (with cases)</td>
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<tr>
<td>9-10 am</td>
<td>Rehydrate Me! Lecture (EPA 4)</td>
<td>shock interactive cases</td>
<td>Patient Hand Off, IPASS?</td>
<td>asthmatic bronchitis, pneumonia</td>
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<tr>
<td>10-11 am</td>
<td>IVF Cases and TPN basics (discuss different solutions, see different solution bags, write fluid orders)</td>
<td>shock interactive cases (until 10:30 am)</td>
<td>EMR</td>
<td>SKILLS: Bag Mask Ventilation, EPA 12</td>
<td>Simulation (status epilepticus) as rapid cycle delivery practice</td>
</tr>
<tr>
<td>11-12 pm</td>
<td>(start at 10:45 am) Team Dynamic Exercise, The Maze, Monics</td>
<td>LUNCH (invite interns to discuss how they management, struggles/strengths/coping skills) include lunch</td>
<td>SKILLS: obtaining consent, EPA 11</td>
<td>SKILLS: delivery room basics (treasure hunt), Liz</td>
<td></td>
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<tr>
<td></td>
<td>Blood Bank Lecture and Blood products</td>
<td>BLS and PALS refresher lecture</td>
<td>Librarian: EBM Searches, EPA 7</td>
<td>Normal baby exam, Bellard</td>
<td></td>
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<tr>
<td></td>
<td>Vascular Access Lecture (hands on)</td>
<td>resuscitation case, (rapid cycle delivery practice PALS case, EPA 12)</td>
<td>Consent Lecture, EPA 11</td>
<td>Common Nursery Problems (tachycardia, hypoglycemia, GBS, Jaundice), Difficult conversations: &quot;your child is getting admitted&quot; (Cantwell)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SKILLS: IV/IO, EPA 12</td>
<td>SKILLS: obtaining consent, EPA 11</td>
<td>SKILLS: Bag Mask Ventilation, EPA 12</td>
<td>Family Centered Rounds and Care (1 hour), Liz</td>
<td></td>
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<table>
<thead>
<tr>
<th>Outpatient week</th>
<th>Ambulatory</th>
<th>Ambulatory</th>
<th>Ambulatory</th>
<th>ER - Chavez</th>
<th>Ambulatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-9 am</td>
<td>Mommy Pager, EPA 2</td>
<td>Mommy Pager, EPA 2</td>
<td>Mommy Pager, EPA 2</td>
<td>Mommy pager EPA 2</td>
<td>Mommy Pager, EPA 2</td>
</tr>
<tr>
<td>9-10 am</td>
<td>Neonate (topics), adolescent (topics), Friedman</td>
<td>Pediatric EKGs (90 min)</td>
<td>SKILLS: Cultural Sensitivity and implicit bias, Kim</td>
<td>ED</td>
<td>ED</td>
</tr>
<tr>
<td>10-11 am</td>
<td>breastfeeding</td>
<td>sports clearance/participation (Kendra)</td>
<td>challenges with communicating with families (Nicole Torres)</td>
<td>ED</td>
<td>ED</td>
</tr>
<tr>
<td>11-12 am</td>
<td>Infant (topics)</td>
<td>LGBTQ aspects in pediatrics (1 hour), Chatani</td>
<td></td>
<td>ED</td>
<td>wellness and appropriate coping skills (not depending on drugs/ alcohol), GME resources</td>
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<tr>
<td></td>
<td>LUNCH</td>
<td>LUNCH</td>
<td>LUNCH</td>
<td>LUNCH</td>
<td>LUNCH</td>
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<tr>
<td>1-2 pm</td>
<td>toddler (topics)</td>
<td>Radiology: Basics, Dr. Infante</td>
<td>SKILLS: Spinning</td>
<td>Clinic Time/Shadowing Experience, Jeopardy (take home points), Alba/Torres</td>
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</tr>
<tr>
<td>2-3 pm</td>
<td>school age (topics)</td>
<td>What to do? Is this abuse? (Call 1.800.96 abuse exercise), Lambert</td>
<td></td>
<td>Course Evaluation and post test</td>
<td></td>
</tr>
<tr>
<td>3-4 pm</td>
<td>Advocacy (Schechter)</td>
<td></td>
<td></td>
<td>Closing Remarks</td>
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Revised November 2019
POISON CENTER TOXICOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 896</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Richard S. Weisman, Pharm. D., ABAT</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5250</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:rweisman@med.miami.edu">rweisman@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Sandy Guerra; <a href="mailto:sguerra@med.miami.edu">sguerra@med.miami.edu</a> [Highland Professional Building 1st floor]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2/4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>None</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
<td>3</td>
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<tr>
<td>AVAILABLE:</td>
<td>All Year, except Block 7AB and Blocks 10A-12B</td>
</tr>
<tr>
<td>U.S VISITING STUDENTS:</td>
<td>Yes</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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<td>TYPE:</td>
<td>Clinical</td>
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</table>

**NOTE: ANY schedule changes involving the Poison Center / Toxicology Elective must be authorized by Sandy Guerra or Dr. Weisman (see above for contact information) before your schedule can be officially changed.**

**Overview/Course Design:**
The senior student will be given the opportunity to assist the Poison Information Specialists and Toxicologists at the Florida Poison Information Center with the diagnosis, triage, treatment and follow-up of patients exposed to toxins. The high volume of cases (over 170 patients per day) will allow the student to learn about a wide variety of toxins in both pediatric and adult patients. The clinical experience at the Poison Center will be supplemented with didactic lectures and bedside consultations for both adult and pediatric patients hospitalized at Jackson Memorial Hospital.

**Goals/Objectives:**
At the completion of this elective the student will understand the management of the poisoned patient and will be able to diagnose and treat patients that have been poisoned with acetaminophen, salicylates, iron, cyclic antidepressants and pesticides. In addition the student will be familiar with all of the commonly used poisoning antidotes.

**Location:**
Highland Professional Building, 1801 NW 9TH Avenue, 1st Floor – suite 100
Miami Florida 33136 JMH (100%)

**Prerequisite:** None

**Expectations:** Attendance is mandatory for all assigned conferences, rounds and/or presentations.

**Student evaluations and grading:**
At the completion of the rotation, the student will be evaluated by one of the Center’s Toxicologists.

The students are evaluated and judged on their professionalism, clinical skills, and participation; reliability, initiative, judgment, and ability to perform accurate history/physical; promptness and their ability to relate to patients, peers and staff.

Reviewed October 2019
PEDIATRICS SUB-I

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 897</th>
</tr>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Akram Tamer, M.D.; <a href="mailto:ATamer@med.miami.edu">ATamer@med.miami.edu</a>  [ET 6006]</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-6042</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Merida Pelier; 305-585-6364</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:mmp161@med.miami.edu">mmp161@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
<td>3</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year, EXCEPT Block 7A/B</td>
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<tr>
<td>U.S VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
</tr>
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<td>TYPE:</td>
<td>Clinical</td>
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</table>

NOTE: ANY schedule changes involving ALL Pediatrics rotations must be authorized by Merida Pelier before your schedule can be officially changed.

Overview/Course Design:
The large pediatric inpatient service offers a unique opportunity to the student to improve the clinical and didactic skills in the diagnosis and management of all the common and most of the uncommon disorders in children. The senior student will be placed in the regular first year resident rotation functioning as part of the ward team under direct supervision of pediatric residents and the attending physicians. There might be two (2) attendings on the team, one full time faculty member in general pediatrics and the other a pediatric specialist or a practicing community pediatrician.

Goals/Objectives:
Students will participate in the care of children on the inpatient pediatrics service.

Location:  Jackson Memorial Hospital - Holtz Children’s Hospital (100%)  

Prerequisite:  Completion of core clerkships

Expectations:
The student will assume the primary responsibility of patient care, and will participate in the Attending rounds five days per week, attend the weekly staff conference, grand rounds, planning conference, the housestaff lunch conference and the monthly Journal Club meeting.

Student evaluations and grading:
At the end of the rotation, there will be a full evaluation by the senior resident and the attending physicians and a pass/fail grade will be given and sent to the Registrar’s office. Students will be evaluated based on part, or all of the following:

- Patient evaluation skills
- Data gathering and problem solving
- Fund of knowledge
- Case presentations and write-ups
- Personal qualities
- Clinic/Ward activities and responsibilities
- Communication and interpersonal skills
Students should contact the pediatric chief resident prior to beginning the rotation.

Reviewed November 2019
### RMC DEVELOPMENTAL & BEHAVIORAL PEDIATRICS

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1001</th>
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<tbody>
<tr>
<td>COURSE DIRECTOR:</td>
<td>Judith Aronson-Ramos, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>954-531-0847 and mobile 561-901-3965</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:info@draronsonramos.com">info@draronsonramos.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Desiree Guiliano OR Joseph Sollecito, <a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>, 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ROTATION:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Pediatrics</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>Contact Dr. Aronson-Ramos directly via email to ask about date availability and to receive final registration confirmation. Unavailable in blocks 8A and 9B</td>
</tr>
<tr>
<td>VISITING STUDENTS:</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Only on Fridays</td>
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<td>TYPE:</td>
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**Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.**

**Overview**

This outpatient private practice rotation is at the office of Dr. Aronson-Ramos in Coconut Creek, located in northern Broward County. This busy private practice sees children, teens, and young adults with diverse neuro-developmental issues. The practice has a family centered approach and considerable time is spent interviewing family members and observing and interacting with patients.

Students will learn about diagnostic assessments and treatment planning for the most common pediatric neuro-developmental problems. Common conditions the student will encounter include: autism spectrum disorders, ADHD, developmental delays, anxiety disorders, mild depression, syndromes, disruptive behavioral disorders, obsessive compulsive disorder, among other clinical issues.

**Course Design**

Students will work directly with Dr. Aronson-Ramos in a small intimate patient setting. The daily activities will primarily consist of observing assessments for new patients and follow up visits. Opportunities will exist to learn how to perform a variety of brief specific assessments of patients on a case by case basis such as: rating behaviors, IQ screening, and developmental evaluations. Students will learn the appropriate use and scoring of diagnostic assessment instruments. Hands on patient interaction will consist primarily of interview, play based interactions, and limited physical examinations. This elective will be valuable to students interested in pediatrics, psychiatry, and family practice.

**Location:**

Developmental and Behavioral Pediatrics, 5350 West Hillsboro Blvd #207, Coconut Creek, Florida, 33073

**Participating Faculty**

Judith Aronson-Ramos, M.D.

**Prerequisite**

Pediatrics Clerkship
**Expectations**
The student will be present for all patients seen Mon-Thurs for two weeks. It is suggested students bring their lunch for daily mid-day review of morning cases which are traditionally all new patients.

**Hours:** Monday - Thursday: 9:00-5:00 PM

**Student Evaluation and Grading**
The student will be evaluated by the Attending, and will be based upon attendance and participation in all aspects of the elective, including medical knowledge, patient care, interpersonal and communication skills, professionalism, and genuine interest in patients and their family’s concerns.

Revised November 2018
RMC PEDIATRIC OTOLARYNGOLOGY
(Listed under both Otolaryngology and Pediatrics)

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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</tr>
</thead>
</table>
| CLERKSHIP DIRECTORS: | Zorik Spektor, MD, FAAP  
                          David J. Kay, MD, MPH, FAAP  
                          David L. Mandell, MD, FAAP, FACS |
| TELEPHONE: | 561-736-8141 |
| EMAIL: | jsollecito@med.miami.edu |
| CONTACT: | Joseph Sollecito, jsollecito@med.miami.edu, 561-886-1202 |
| LENGTH OF ELECTIVE: | 2 / 4 weeks |
| PREREQUISITE: | Core Surgery and Core Pediatrics |
| NUMBER OF STUDENTS: | 1 |
| AVAILABLE: | All Year – Please contact Joseph Sollecito a minimum of two weeks prior to the requested start date to obtain approval. Schedule is not final until approval has been given. |
| U.S. VISITING STUDENTS: | No |
| INTERVIEWING TIME: | 1 day (2wks) OR 2 days (4wks), with prior approval |
| TYPE: | Clinical |

Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

Overview:

1. This clinical elective will expose students to the subspecialty of Pediatric Otolaryngology—Head and Neck Surgery.
   i) Students will have the opportunity to learn by seeing patients in our private office as well as assisting in the operating room.

2. This elective is designed with two different types student interests in mind, and will be individually tailored to the individual students interests
   i) PRIMARY CARE TRACK
      (1) For students interested in entering medical fields with a primary focus on treating children  
          (a) E.g. Pediatrics, Family Practice, etc.
      (2) Students will learn evidence-based medical management of acute and chronic problems of the ears, nose, and throat in children
      (3) Students will hone their diagnostic skills in pediatric otoscopy, rhinoscopy, and throat examinations with direct feedback
      (4) Student will be exposed to common Pediatric ENT surgical procedures, so they can understand firsthand exactly what they involve
   ii) SURGICAL SPECIALTY TRACK
       (1) For students interest in becoming Otolaryngologists, or other related surgical fields  
           (a) E.g. pediatric surgery, neurosurgery, ophthalmology, plastic and craniofacial surgery, neuroradiology
       (2) Students will complete all the objectives of the Primary Care Track
       (3) Students will be exposed to surgical decision making and the criteria for medical vs. surgical management of Pediatric ENT disorders
(4) Students will experience performing pre-operative work-up and post-operative management of surgical cases
(5) Students will assist in more complicated Pediatric ENT surgical procedures
(6) Students will have the option of performing inpatient Pediatric ENT consultations

Course Design:
1. Students will be exposed to the practice of pediatric otolaryngology, including
   i) The medical management of patients in the clinic/office
   ii) The surgical management of patients in the operating room
2. Schedule for the ten-day course
   i) PRIMARY CARE TRACK
      (1) Students will spend 2-3 mornings a week in the operating room, watching routine surgeries, and learning about their indications, alternatives, risks, benefits and complications
      (2) Students will spend the remaining mornings and every afternoon in the office, examining and treating patients, with a focus on the most common pediatric otolaryngology conditions
      (3) Students will spend one half day with the pediatric audiologist, learning about the various modalities of pediatric hearing evaluation
   ii) SURGICAL SPECIALTY TRACK
      (1) Students will spend every morning in the operating room, assigned to the attending performing the most interesting cases of the day
      (2) Students will be hands-on in the operating whenever they can; however, in the interest of patient safety, the majority of the surgical training will be observational
      (3) Students will spend every afternoon in the office, examining and treating patients, with a focus on the most complicated pediatric otolaryngology cases
      (4) Students will spend one half day with the pediatric audiologist, learning about the various modalities of pediatric hearing evaluation
      (5) Students will have the option of rounding with the attending seeing hospital consults in the evening and weekends (definitely not required; just available if there is a strong interest)

Goals/Objectives:
1. The goals of this course are to:
   i) PRIMARY CARE TRACK
      (1) Familiarize students with treatments for pediatric ear, nose, and throat disorders
      (2) Improve students’ accuracy and validity of their pediatric ear physical examinations
      (3) Familiarize student with pediatric audiologic testing
   ii) SURGICAL SPECIALTY TRACK
      (1) All the above, plus
      (2) Familiarize students with functional pediatric otolaryngology
      (3) Introduce students to pediatric otolaryngology surgical procedures
2. After this elective, the student should be able to:
   i) PRIMARY CARE TRACK
      (1) Understand the medical treatments for recurrent acute and chronic otitis media and for acute and chronically draining ears
      (2) Distinguish between otitis media and otitis externa on physical examination
      (3) Distinguish between conductive and sensorineural hearing loss, and understand the implications on diagnostic and therapeutic interventions
      (4) Understand the indications for tympanostomy tube placement
      (5) Distinguish allergic from infectious sinonasal disease based on history and physical exam
      (6) Understand the medical treatment algorithm for rhinosinusitis in children
      (7) Distinguish obstructive sleep apnea from primary snoring based on history, and appreciate the role and results of pediatric polysomnography
      (8) Understand the indications for tonsillectomy and adenoidectomy
      (9) Recognize the signs and symptoms of stridor
Recognize abnormal findings in the pediatric head and neck examination as distinct from normal variants

ii) SURGICAL SPECIALTY TRACK
(1) All the above, plus become introduced to evaluation of and the surgical treatment algorithm and/or management for the above conditions.
(2) Appreciate the roles and techniques of pediatric sinus endoscopy, nasopharyngoscopy, and laryngoscopy
(3) Understand the anatomy of the pediatric larynx and its implications for phono-aero-digestive disorders
(4) Have the opportunity to participate in a clinical research project
   (a) May extend beyond the timeframe of the elective itself

Location:
1. All patients will be seen at the Center for Pediatric ENT—Head and Neck Surgery
   i) Located in Bethesda Health City in Boynton Beach, Palm Beach County
2. The majority of the surgeries will occur at the following facility
   i) West Boca Medical Center

Participating Faculty:
- Zorik Spektor, MD, FAAP
- David J. Kay, MD, MPH, FAAP
- David L. Mandell, MD, FAAP, FACS
- All are board-certified fellowship-trained pediatric otolaryngologists

Prerequisite: Core Surgery and Core Pediatrics

Student Evaluation and Grading:
1. The participating faculty will subjectively evaluate the students.
2. Grading will be pass/fail based on
   i) Attendance
   ii) Motivation
   iii) Ability to apply learned information to new patient encounters

Reviewed November 2019
PHYSICAL MEDICINE AND REHABILITATION
BRAIN INJURY NEUROREHAB

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 848</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Gemayaret Alvarez, M.D.</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:GAlvarez3@med.miami.edu">GAlvarez3@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Coretha Davis (JMH Trauma 4th Floor room T-405)</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:ccdavis@med.miami.edu">ccdavis@med.miami.edu</a></td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1431</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 / 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Neurology</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year EXCEPT BLOCKS 1A/B &amp; 6B</td>
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<td>U.S VISITING STUDENTS:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</table>

Note: ANY schedule changes must be authorized by Dr. Alvarez before your schedule can be officially changed.

Overview/Course Design:
This elective is intended for medical students who have completed the neurology core clerkship rotation.

During the elective, the medical student will spend time on the Ryder Trauma 4th floor Neurorehab service, shadowing the Rehab attending on daily rounds. Students will also have the opportunity to become familiar with Botulinum toxin injections and participate of Brain Injury Medicine Clinic on the 2nd and 4th Thursday of the month. There is an opportunity to get involved in clinical research activities that are ongoing in the division.

Goals/Objectives:
Students will be exposed to and participate in the care of patients undergoing neurorehabilitation. Students will participate in the inpatient rehabilitation care of persons with any neurologic diagnoses. They will initially attend and later participate in interdisciplinary meetings. Interaction with other rehabilitation disciplines will be promoted. The students are expected to utilize their skills when seeing patients for initial and/or follow-up visits. In addition to the core course objectives, they are expected to learn the following:
3. Recognition of acute medical complications associated with the patient’s injury.
4. 15-20 minute PowerPoint presentation on neurorehabilitation/ brain Injury medicine topic.

Location: JMH Trauma Center (80%), UMHC/Jackson Memorial Hospital Private Clinic and Staff Clinic (20%)

Prerequisite: Neurology Clerkship, Neurology required rotation

Expectations:
Key Responsibilities while on elective:
1. Participation in morning rounds and didactic and patient conferences.
2. Attendance in out-patient clinics.
3. Participation in the medical care of 2-4 patients on the in-patient rehabilitation unit which will include obtaining a physical history and physical examination, writing progress notes, and attending interdisciplinary rounds.
4. There is no call

Reading List: Reading materials will be available during the rotation.

Student evaluations and grading:
Supervising attending and residents will complete evaluation forms documenting student performance on the elective in the following categories: (1) patient evaluation skills, (2) data gathering and problem solving, (3) fund of knowledge, (4) case presentations, (5) patient write-ups and progress notes, (6) personal qualities, (7) ward activities and responsibilities, and (8) communication and interpersonal relationships.

Reviewed July 2019
PHYSICAL MEDICINE AND REHABILITATION

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 900</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Laura Huang, MD</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Coretha Davis (JMH Trauma 4th floor room T-405)</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:cdavis@med.miami.edu">cdavis@med.miami.edu</a></td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1431</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 Weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine &amp; Surgery</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
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<td>AVAILABLE:</td>
<td>All year EXCEPT BLOCKS 1A, 1B, and 6B</td>
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<tr>
<td>U.S VISITING STUDENTS:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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<tr>
<td>TYPE:</td>
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</tbody>
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NOTE: Any Schedule changes must be authorized by clerkship coordinator and the clerkship director before your schedule can be officially changed.

Overview: This elective provides a variety of settings to experience and learn about the field of physical medicine and rehabilitation.

Course Design: Elective Settings:

Clinical Adult In-Patient Service

Supervising physicians: Dr. Gemayaret Alvarez, Dr. Seema Khurana, Dr. Lauren Shapiro, and Dr. Kevin Dalal and Dr. Robert Irwin

Site: Jackson Memorial Hospital: Rehab-2 Annex Building, Trauma 4
Students will participate in the inpatient rehabilitation care of persons with neurologic, cardiac, oncologic and orthopedic diagnoses. They will attend and participate in interdisciplinary meetings. Interaction with other rehabilitation disciplines will be promoted. The students will utilize their skills to perform patient histories, physical examinations and follow-up assessments. In addition to the core course objectives, they will learn the following:
- Performance of a physiatric history and physical examination.
- Performance of a musculoskeletal and neurologic exam.
- Prediction of functional potential based on level and degree injury.
- Medical management of neurogenic bowel and bladder dysfunction.
- Recognition of acute medical complications associated with the patient’s injury.
- Definition of concepts of impairment, disability, and handicap (World Health Organization) and application of these concepts clinically.

Clinical Adult Consultation Service

Supervising Physicians: Dr. Adriana Valbuena and Dr. Diana Molinares

Site: Jackson Memorial Hospital
An attending physician will supervise students as they provide rehabilitation consultation to inpatients at Jackson Memorial Hospital. The students are expected to utilize their skills in performing patient histories and physical examination, and follow-up of patients. In addition to the core course objectives, they are expected to learn the following:
• Formulation of rehabilitation diagnoses.
• Understanding of the different levels of post-acute care and how to make recommendations based on patient needs and resources.
• Identification of patients who are appropriate candidates for comprehensive in-patient rehabilitation.

**Rehabilitation Research**  
**Supervising physician:** Dr. Douglas Johnson-Greene, Dr. Mark Nash, and Dr. Elizabeth Felix.

**Sites:** Jackson Memorial Hospital  
Students will be supervised in the development of research questions and hypotheses, formulation of effective methodology, and identification of different sources for collaboration and funding for rehabilitation research. Students who choose to participate in this elective will be strongly supported to present a poster or publish an abstract of the project undertaken during this elective time. Students may also choose to participate in ongoing research at any of the above sites.

**Clinical Adult Outpatient Service**  
**Supervising Physicians:** Dr. Andrew Sherman, Dr. Seema Khurana, Dr. Kevin Dalal, Dr. Gemayaret Alvarez, Dr. Robert Irwin, Dr. Adriana Valbuena, Dr. Laura Huang, Dr. Lauren Shapiro, Dr. Chane Price, Dr. Elba Gerena, Dr. Timothy Tiu, Dr. Diana Molinares

**Sites:** University of Miami Hospital and Clinics Spine Institute, Medical Wellness Center Pain Clinic, Jackson Memorial Hospital Private Clinic and Staff Clinic, Bascom Palmer Hospital, Lennar Medical Foundation  
An attending physician will supervise students as they provide rehabilitation consultation for patients with a variety of musculoskeletal and neurological disorders, and chronic pain. They can also participate in the out-patient staff SCI Clinic, and conference rounds from related specialties such as Neurosurgery and Orthopedics. Opportunity will be provided to observe electrodiagnostic procedures, major/minor joint injections and botulinum toxin injections. In addition to the core course objectives, they are expected to learn the following:

• Performance of a complete musculoskeletal and neurologic exam.
• Performance of a focused evaluation of the spine.
• Psychiatric evaluation and management of low back and neck pain
• Prescription of therapy orders.

A combination of different elective settings will be provided during each rotation to enhance a broad exposure to Rehabilitation Medicine. The clerkship coordinator and clerkship director will design this prior to the start of the elective rotation.

**Clinic Schedules:** The student cannot attend any clinics without prior notice to the clerkship coordinator and clerkship director

**Conference and Clinic Schedule:**  
The medical student can participate in any of these conferences as discussed with the clerkship coordinator prior to the start of the rotation. The student cannot attend the clinics without prior notice.

**Monday**  
8:30 am Welcome & Schedule - Coretha Davis  
9:00-10:30am Interdisciplinary in-patient rounds JMH Rehab

**Tuesday**  
7:00-8:00am Clinical Walk Rounds  
Ortho Spine Rounds
Goals/Objectives:
- Become familiar with Physical Medicine and Rehabilitation (PM&R) as a specialty
- Learn the scope and practice of PM&R
- Understand appropriate situations for referral to PM&R
- Perform a focused medical and functional history and examination, formulate rehabilitation diagnoses and problem list, and construct a comprehensive rehabilitation plan
- Understand the roles of the various disciplines in an interdisciplinary rehabilitation team

Location: Jackson Memorial Hospital – 50%-75% and University of Miami Hospital and Clinics – 25-50%

Prerequisite: Completion of Internal Medicine and Surgery core clerkships

Expectations: Key Responsibilities while on elective:
- Participation in morning rounds and didactic and patient conferences
- Attendance in out-patient clinics
- Participation in the medical care of 2-4 patients in the in-patient rehabilitation unit which will include obtaining a physical history and physical examination, writing progress notes, and attending interdisciplinary rounds.
- Participation in the in-patient consultation service which will include obtaining a physical history and physical examination, and writing assessments, and recommendations.
- 5-7 minute presentation on rehabilitation topic.

Reading List: Articles will be emailed to you at the beginning of the rotation

Reference Textbook:
- Participation in morning rounds and didactic and patient conferences
- Attendance in out-patient clinics
- Participation in the medical care of 2-4 patients in the in-patient rehabilitation unit which will include obtaining a physical history and physical examination, writing progress notes, and attending interdisciplinary rounds.
- Participation in the in-patient consultation service which will include obtaining a physical history and physical examination, and writing assessments, and recommendations.

Student evaluations and grading:
Evaluation will be based on overall interest, enthusiasm, and clinical performance utilizing the standard medical school evaluation forms. The faculty member that has interacted with the student the most will perform this evaluation.

Reviewed November 2019
WPB VAMC PHYSICAL MEDICINE & REHABILITATION

COURSE CODE: MDR 995
CLERKSHIP DIRECTOR: Jorge E. Garcia-Negron, MD
TELEPHONE: 561-422-5672
EMAIL: Jorge.garcia-negron2@va.gov
CONTACT: Joseph Sollecito, jsollecito@med.miami.edu, 561-886-1202
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITE: Core Internal Medicine Clerkship
NUMBER OF STUDENTS: 2
AVAILABLE: All year, except 6B, 7A/B, 10A
U.S. VISITING STUDENTS: No
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

Overview:
The purpose of this rotation is to provide the medical student with an introduction to the field of PM&R with emphasis on basic assessment and management options for common musculoskeletal disorders and neurological conditions affecting physical function. The rotation takes place mostly in the outpatient clinic setting with opportunities to also learn in other settings such as a nursing home or acute general hospital. There is also exposure to electrodiagnostic medicine and pain management.

Course Design:
The student will spend most of time in the outpatient PM&R clinics at the West Palm Beach VAMC. These are general rehabilitation clinics as well as sub-specialized clinics including pain management clinics, electrodagnosis clinics, and amputee clinics. There will be opportunities for interested student to also rotate through cardiac rehabilitation clinics and to participate in rehabilitation rounds for inpatients. The pain management program can also provide students exposure to complementary treatment modalities including acupuncture and chiropractic. The student will have ample opportunity to participate in the performance of multiple office-based procedures including joint injections. Students will attend and participate in all PM&R didactic activities including conferences and Journal Club, usually held twice per month.

Goals:
• Learn and apply the physical examination of the neuro-musculoskeletal system.
• Learn how and when to order diagnostic testing for the patient patients with neuro-musculoskeletal complaints, including imaging studies and electrodiagnostic tests.
• Learn how to adequately assess pain and impairment.
• Learn about treatment options for the management of painful neuro-musculoskeletal conditions including appropriate physical therapy, medication management, and interventional management.
• Learn about the physiology of exercise in the cardiac and musculoskeletal systems.
• Review the importance of appropriate exercise as a preventive strategy in cardiac and musculoskeletal disorders, including arthritis and back pain.
• Observe and assist the preceptor with office-based interventional pain management procedures.
Objectives:
The medical student will be expected to become familiar with the basic evaluation and management of:
- Spinal Pain
- Joint and Soft Tissue Pain
- Peripheral Entrapment Neuropathies
- Rehabilitation needs of patients with CNS disorders
- Rehabilitation needs of patients following Orthopedic procedures
- Rehabilitation needs of patients following amputations
- Patients with chronic intractable non-malignant pain syndromes
- Rehabilitation needs and precautions for patients with cardiac disease

Location:
West Palm Beach VA Medical Center – PM&R Service (suite 3B-209).

Participating Faculty:
Jorge Garcia-Negron, MD and Faculty from the Physical Medicine & Rehabilitation Service at the West Palm Beach, VA, including the Pain Management program.

Prerequisite:
Completion of Internal Medicine Core Clerkship.

Expectations:
Attendance and participation to all clinical assignments and didactic activities of the Service. The clerkship director needs to be notified of any absences. Professionalism (in all aspects) will be expected at all times.

Student Evaluation and Grading:
The medical student will receive a written evaluation at the end of the rotation. This will be discussed with the student by a member of the faculty and will review their performance within each of the above expectations. The medical student will complete a rotation evaluation at the end of the rotation. The student will complete a faculty evaluation at the conclusion of the rotation. (submitted to the Medical School)

Revised June 2019
PSYCHIATRY
FORENSIC PSYCHIATRY

COURSE CODE:  MDR 1024
CLERKSHIP DIRECTOR:  Spencer Eth, MD, 305-575-3301
TELEPHONE:  305-243-3075
EMAIL:  seth@med.miami.edu
CONTACT:  Cary Fratacci RMSB #210 cfratacc@med.miami.edu
LENGTH OF ELECTIVE:  2 / 4 weeks
PREREQUISITE:  Psychiatry Clerkship
NUMBER OF STUDENTS:  1
AVAILABLE:  All year EXCEPT BLOCKS 00, 1A/B, 7A, 12B
U.S. VISITING STUDENTS:  No
INTERVIEWING TIME:  1 day (2wks) OR 2 days (4wks), with prior approval
TYPE:  Clinical

OVERVIEW
This is a 2 or 4-week elective intended to expose the senior medical student to a spectrum of experiences in forensic psychiatry. The student will spend a portion of each week in various hospital and community settings that involve the clinical practice of aspects of forensic psychiatry.

COURSE DESIGN
The student will spend time most of their time during this elective at Jackson Memorial Hospital on the psychiatric competency restoration unit, with additional experiences with the Miami VA suicide prevention program, and the University of Miami Law School clinics. The student will also have an opportunity to visit the nearby Miami-Dade County criminal court. All students will meet with Dr. Eth, the rotation coordinator, weekly, and will receive instruction from Drs. Vickki-Ann Samuel, Regina Carney, and Giovanna Delgado, who are also members of the forensic psychiatry faculty. The students will also interact on a daily basis with the forensic psychiatry fellows.

GOALS
A. Review and apply basic psychiatric principles, relevant legal concepts, and cognitive skills as they relate to criminal and civil issues in forensic psychiatry.
B. Familiarize the medical student with conducting psychiatric examinations that focus on legal issues, understand the general indications for the forensic psychiatry consultation, and observe psychiatric interactions with forensic patients, as well as participate in competence and suicidal risk assessments.
C. Reinforce a critical approach to the relevant medical literature.

OBJECTIVES
A. The medical student will be expected to become acquainted with the psychiatric and legal literature relevant to the epidemiology, etiology, prevention diagnosis, evaluation and management of major mental disorders, and multimodal treatment of psychiatric disorders among correctional patients, including those who are charged with committing violent offenses.
B. The medical student will be expected to assist in evaluating and treating individuals involved in a correctional jail diversion program, using interviewing techniques that are respectful and culturally sensitive. The student will be expected to analyze the clinical data in order to delineate a differential diagnosis and develop a biopsychosocial treatment plan.
C. The medical student will be expected to conduct chart reviews, including violence risk assessments of psychiatric patients.
D. The medical student will be expected to identify salient issues in the evaluation of patients at risk for suicidal behavior.

LOCATION
Jackson Memorial Mental Health Hospital (75%) and Miami VA Healthcare System (25%)

PARTICIPATING FACULTY
Faculty in Forensic Psychiatry

PREREQUISITE
Completion of Psychiatry Core Clerkship

EXPECTATIONS
- The student will be expected to participate in all activities described above and be on time.
- The rotation director (Dr. Eth) and the coordinator (Cary Fratacci) will be informed of all absences.
- Professionalism as mandated by the School of Medicine is expected.

STUDENT EVALUATION AND GRADING
- The medical student will receive an evaluation at the end of the month, which will be reviewed with the student by the faculty evaluator.
- The student will be asked to complete an evaluation of the rotation as a whole upon completion to allow for continual improvement of the student experience.
- Faculty performance will be evaluated by the medical student (submitted anonymously).

Revised January 2019
MIA VAMC MILITARY RELATED MENTAL HEALTH & GENERAL PSYCHIATRY

<table>
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<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Adriana Cortes, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-575-7000 ext 6307</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Adriana.Cortes@va.gov">Adriana.Cortes@va.gov</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Cary Fratacci  RMSB #210  <a href="mailto:cfratacc@med.miami.edu">cfratacc@med.miami.edu</a> 305-243-3075</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Psychiatry Clerkship</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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Overview:
The medical student will be involved in the care of patients with a wide spectrum of psychiatric conditions but specific emphasis will be placed on those disorders that are related to military life and exposure to combat. The student will rotate through different clinics at the Miami VA. This rotation will give the medical student the opportunity to work with patients in different settings, such as Outpatient psychiatry, Consultation Liaison Psychiatry, Primary Care and Community Living Center.

Course Design:
The student will have the opportunity to rotate in Outpatient setting, like the Behavioral Health Clinic. The medical student will participate in the care of patients with multiple Mental Health conditions, including Post Traumatic Stress Disorder (PTSD).

The medical student will also have the opportunity to work in the Mental Health Primary Care Geriatric Psychiatry Clinic and Community Living Center. This clinic operates on a collaborative model between Primary Care and Psychiatry. During this rotation the medical student will become familiar with the diagnosis and management of older adults.

The student will also be working with the Consultation Liaison Psychiatry service, helping with interface between Inpatient general medicine and Psychiatry.

The student will also participate in the didactic lectures designed for medical students at the University of Miami and in the Psychiatry Grand Rounds.

Goals / Objectives:
- Demonstrate the ability to develop a complete Psychiatric diagnostic interview and perform complete mental status examination.
- Recognize, diagnose and formulate accurate differential diagnoses for major psychiatric disorders like Post Traumatic Stress Disorder, Traumatic Brain Injury, Major Depressive Disorder, Bipolar Disorder, Schizophrenia, Dementia and in addition, other psychiatric emergencies like suicidal behaviors.
- Develop appropriate assessments, treatment and management plans for patients with Psychiatric disorders.

Location:
Miami Veterans Administration Medical Center, Mental Health and Behavioral Sciences Service (100%).
**Participating Faculty:**
- Adriana Cortes, MD
- Maria Lujan, MD
- Krystal Nicht, MD

**Prerequisite:**
Psychiatry Clerkship

**Expectations:**
- During the rotation the student will be interviewing patients, obtaining collateral information. The student will be discussing every single patient with the respective attending. The discussion should include: chief complaint, history of present illness, prior psychiatry history, family psychiatry history, medical history, current medications, mental status exam, psychiatric diagnosis (using the five axes diagnosis) and management. Progress notes should be titled: “Student note”. The note has to be cosigned by the Psychiatry attending.
- The medical student will be expected to participate in all activities (clinical rounds, didactics, Grand rounds) and be on time. The rotation coordinator needs to be informed of all absences. Professionalism as mandated by the School of medicine is expected.
- The medical student will be expected to be familiar with the diagnosis and management of the following disorders: Post Traumatic Stress Disorder, Traumatic Brain Injury, Major Depressive Disorder, Bipolar Disorder, Schizophrenia, and Dementia.

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
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<th>Friday</th>
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</thead>
<tbody>
<tr>
<td>8am-12 noon</td>
<td>Behavioral Health Clinic 4th floor</td>
<td>Consultation Liaison (CL) Dr. Nicht Office: C509c Ext 4828</td>
<td>CL Dr. Nicht Office: C509c Ext 4828</td>
<td>Geriatric Primary Care Clinic Dr. Cortes Office #: 1D198 Ext 7581</td>
<td>Community Living Center (CLC) 2nd floor Nursing Home Dr. Cortes</td>
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<tr>
<td>12 noon- 1pm</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Grand Rounds</td>
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<tr>
<td>1pm- 4: 30pm</td>
<td>Behavioral Health Clinic 4th floor Dr. Cortes</td>
<td>CL Dr. Nicht Office: C509c Ext 4828</td>
<td>CL Dr. Nicht Office: C509c Ext 4828</td>
<td>Geriatric Primary Care Clinic Dr. Cortes Office #: 1D198 Ext 7581</td>
<td>CLC 2nd floor Nursing Home Dr. Cortes</td>
</tr>
</tbody>
</table>

**Student Evaluation and Grading:**
- The medical student will receive a written evaluation at the end of the month. Grade is Pass/Fail
- The student will be evaluated in the following areas:
  - History taking, interviewing and mental status examination skills.
  - Oral case presentations, written notes.
  - Interpretation and management skills.
  - Fund of knowledge and self-directed learning.
  - Professional attitude and communication skills. (REVISED November 2019)
**Child & Adolescent Psychiatry**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 901</th>
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<tbody>
<tr>
<td>COURSE DIRECTOR:</td>
<td>Ana E. Campo, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3075</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:acampo@med.miami.edu">acampo@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Cary Fratacci RMSB #2100 <a href="mailto:cfratacc@med.miami.edu">cfratacc@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
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<td>PREREQUISITE:</td>
<td>Psychiatry</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME:</td>
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**Overview/Course Design:**
Various clinical services are utilized for undergraduate and post-graduate training in Child & Adolescent Psychiatry: the Children’s Inpatient Unit and the Child & Adolescent Outpatient Clinic.

Students may be assigned to one or a combination of these services where they will have a supervised experience.

**Goals/Objectives:**
Students will be exposed to and will participate in the care of children and adolescent patients with psychiatric disorders.

**Location:**
JMH (100%)

**Participating Faculty**
Faculty from the Department of Psychiatry

**Prerequisite:**
Completion of psychiatry core clerkship

**Expectations:**
All services require student participation Monday through Friday 8 am to 5 pm. Times and shifts may vary depending on the clinical assignment.

**Student evaluations and grading:**
Students are evaluated by the course instructor or his/her designee. They are judged on their professionalism, clinical skills commensurate with their level of training, and on their level of participation. Attendance is a must for all assigned conferences, rounds and/or presentations. Final grades are reported as a “Pass” or “Fail.”

Revised November 2019
CONSULTATION-LIAISON PSYCHIATRY

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<tr>
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<tr>
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Overview/Course Design:
This service is responsible for consultations to non-psychiatric inpatients and for various liaison activities with other services and units of the general hospital. Students under supervision will respond to consultation requests in evaluating the patient and making recommendations to the referring physician. They will join faculty members in their liaison work and attend regularly scheduled seminars and consultation reviews.

Goals/Objectives:
The experience presents an opportunity to better understand the doctor-patient relationship in a non-psychiatric setting, to understand doctor – doctor relationships, gain a more holistic view of disease states, specifically those in the psychosomatic spectrum.

Location:
JMH (100%)

Participating Faculty
Faculty from the Department of Psychiatry

Prerequisite:
Completion of psychiatry core clerkship

Expectations:
All services require student participation Monday through Friday 8 am to 5 pm. Times and shifts may vary depending on the clinical assignment.

Student evaluations and grading:
Students are evaluated by the course instructor or his/her designee. They are judged on their professionalism, clinical skills commensurate with their level of training, and on their level of participation. Attendance is a must for all assigned conferences, rounds and/or presentations. Final grades are reported as a “Pass” or “Fail.”

Reviewed November 2019
# GERIATRIC PSYCHIATRY

<table>
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<tr>
<th>COURSE CODE:</th>
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<td>Ana E. Campo, M.D.</td>
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<td>TYPE:</td>
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## Overview/Course Design:

The Department of Psychiatry offers an elective in Geriatric Psychiatry. The elective can be tailored to the student’s special needs. Clinical experiences focus on diseases that are more prevalent in the geriatric population such as delirium and dementia.

## Goals/Objectives:

Students will be exposed to the different manifestations that psychiatric illness presents with in geriatric patients.

## Location:

JMH (100%)  

## Prerequisite:

Completion of psychiatry core clerkship

## Student evaluations and grading:

Students are evaluated by the course instructor or his/her designee. They are judged on their professionalism, clinical skills commensurate with their level of training, and on their level of participation. Attendance is a must for all assigned conferences, rounds and/or presentations. Final grades are reported as a “Pass” or “Fail.”

Reviewed November 2019
INPATIENT PSYCHIATRY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 904</th>
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<tbody>
<tr>
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<td>Ana E. Campo, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3075</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:acampo@med.miami.edu">acampo@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Cary Fratacci, RMSB #2100, <a href="mailto:cftratacc@med.miami.edu">cftratacc@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2/4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

Overview/Course Design:
This elective allows students to diagnose and manage a variety of psychiatric disorders. This includes patients with mood disorders, psychotic disorders and other conditions that require psychiatric hospitalization. Under the supervision of attending physicians students will manage patients with a variety of therapeutic techniques available for their treatment. We have several units available for this elective:
- 2 Inpatient units for acutely ill adult psychiatric patients - JMH
- 1 dual diagnosis unit (treatment of acute substance abuse, detox and psychiatric disorders) – JMH
- 1 inpatient unit for Mood Disorders - UMH

Goals/Objectives:
Students will be exposed to and will participate in the inpatient care of patients with psychiatric disorders.

Location:
JMH – 100%

Participating Faculty
Faculty from the Department of Psychiatry

Prerequisite:
Completion of psychiatry core clerkship

Expectations:
All services require student participation Monday through Friday 8 am to 5 pm. Times and shifts may vary depending on the clinical assignment.

Student evaluations and grading:
Students are evaluated by the course instructor or his/her designee. They are judged on their professionalism, clinical skills commensurate with their level of training, and on their level of participation. Attendance is a must for all assigned conferences, rounds and/or presentations. Final grades are reported as a “Pass” or “Fail.”

Revised November 2019
# PSYCHIATRY EMERGENCY SERVICE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 905 - ON HOLD – NOVEMBER 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE DIRECTOR:</td>
<td>Ana E. Campo, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3075</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:acampo@med.miami.edu">acampo@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Cary Fratacci RMSB #2100 <a href="mailto:cfratacc@med.miami.edu">cfratacc@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks only</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
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</tr>
<tr>
<td>AVAILABLE:</td>
<td>ON HOLD</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

**Overview/Course Design:**
This course provides students with the opportunity to be involved in the diagnosis and therapy of selected patients presenting to the Psychiatric Emergency Room.

**Goals/Objectives:**
The student will be assigned to the Psychiatric Emergency Room. The student will then be able to observe a wide range of acute psychiatric emergencies and learn to handle these in an appropriate manner. The student will begin to develop concepts of psychiatric diagnosis, nomenclature and treatment applicable to the acute situation. Also, under supervision, the student will see acute psychiatric consultations as requested. Students should consider this elective interested in a career in Emergency Room Medicine or Family Medicine besides those students interested in Psychiatry.

**Location:**
JMH Crisis (100%)

**Participating Faculty:**
Faculty from the Department of Psychiatry

**Prerequisite:**
Completion of psychiatry core clerkship

**Expectations:**
All services require student participation Monday through Friday 8 am to 5 pm. Times and shifts may vary depending on the clinical assignment.

**Student evaluations and grading:**
Students are evaluated by the course instructor or his/her designee. They are judged on their professionalism, clinical skills commensurate with their level of training, and on their level of participation. Attendance is a must for all assigned conferences, rounds and/or presentations. Final grades are reported as a “Pass” or “Fail.”

Reviewed November 2019
AMBULATORY PSYCHIATRY

COURSE CODE: MDR 906
COURSE DIRECTOR: Ana E. Campo, M.D.
TELEPHONE: 305-243-3075
EMAIL: acampo@med.miami.edu
CONTACT: Cary Fratacci RMSB #2100 cfratacc@med.miami.edu
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Psychiatry
NUMBER OF STUDENTS: 1
AVAILABLE: All year EXCEPT Blocks 00, 1A, 6A, and 12B
U.S. VISITING STUDENTS: NO
INTERVIEWING TIME: 1 day (2wks), with prior approval
TYPE: Clinical

Overview/Course Design:
This course provides students with the opportunity to be involved in the diagnosis and therapy of selected patients presenting to the outpatient clinics at the Mental Health Center. Individual supervision will be aimed at exposing the student to the range of psychiatric disorders that can be managed in an outpatient basis such as anxiety disorders, depression, etc. The students will be exposed to different therapeutic modalities used to treat these problems including psychopharmacologic treatments, cognitive behavioral therapy, and group therapy.

Goals/Objectives:
Students will be exposed to and will participate in the outpatient care of patients with psychiatric disorders.

Location:
JMH (100%)

Participating Faculty:
Faculty from the Department of Psychiatry

Prerequisite:
Completion of psychiatry core clerkship

Expectations:
All services require student participation Monday through Friday 8 am to 5 pm. Times and shifts may vary depending on the clinical assignment.

Student evaluations and grading:
Students are evaluated by the course instructor or his/her designee. They are judged on their professionalism, clinical skills commensurate with their level of training, and on their level of participation. Attendance is a must for all assigned conferences, rounds and/or presentations. Final grades are reported as a “Pass” or “Fail.”

Reviewed November 2019
ADDICTION PSYCHIATRY @ WELLINGTON RETREAT

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 965</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE DIRECTOR:</td>
<td>Robert A Moran, M.D., F.A.P.A.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-296-5288</td>
</tr>
<tr>
<td>EMAIL:</td>
<td>Hector Sigler (Administrative Supervisor) <a href="mailto:hsigler@fcfrmd.com">hsigler@fcfrmd.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito, <a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>, 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of Core Clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
<td>All year</td>
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<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days with prior approval</td>
</tr>
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<td>TYPE:</td>
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</tbody>
</table>

Please contact a minimum of 2 weeks before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance.

Overview: Medical students get hands on experience regarding the evaluation and treatment of addiction and other psychiatric illnesses. Levels of care seen are Detox, Residential, PHP, IOP and OP, on adult and adolescent populations and also pregnant women. From day one, they are taught to recognize symptoms and gain interview techniques. They perform initial evaluations directly supervised by Dr. Moran who is quadruple board certified in general psychiatry, addiction psychiatry, addiction medicine, and preventive medicine. Students attend community meetings every week day as well as adolescent community meetings and several groups (which usually takes all morning 8:30-12:00). They are shown the proper way to write notes on patients with psychiatric diseases and all notes are written by the students and reviewed by the doctor. Students are assigned a caseload of patients. The students are expected to assess them daily to witness and understand the gradual changes in the psychopathology. Every day, everyone involved in the care of patients (Doctors, Therapists, Clinical Director, Coordinators Director, Residents P.A. students and the medical students) meet during lunch (12:30-13:30) to discuss the individual treatment of each patient; students are encouraged to participate since their contact with the patients provides helpful additional observations. Our treatment is based on cutting edge research and the students will learn about psychopharmacology as well as evidence-based psychosocial interventions. Other experiences attained are Cognitive Testing and Exercises and Transcranial Magnetic Stimulation.

Design: The student would participate in the entire program, learning about comprehensive neuropsychiatric and medical assessment, differential diagnosis. They will utilize the DSM-V, various textbooks, and the American Society of Addiction Medicine’s Patient Placement Criteria, developing a dynamic treatment plan involving a multidisciplinary treatment team, and implementing the treatment through individual, group, family, and milieu therapy.

Goals and Objectives: By the end of the month, the student will
- be exposed to a vast array of psychopathology;
- learn about and engage in the development of differential diagnosis and treatment planning;
- implement components of the treatment plan along with a multidisciplinary treatment team via individual and group modalities;
experience multiple levels of care;
observe the evolving response to all of these treatment interventions;
learn about indicated psychopharmacologic intervention;
understand the comorbidity between addiction and other mental diseases;
gain an appreciation for addiction as a brain disease that is just as treatable as our other most common medical disorders.

Setting: Wellington Retreat is a dual diagnosis treatment facility for both adults and adolescents. It offers all non-inpatient levels of care, including detoxification, residential, partial hospitalization, intensive outpatient, and outpatient care. It is licensed by Department of Children and Families and ACHA and Joint Commission accredited. The patient population consists of both genders, 13 years and older (majority being 18 to 30 y/o), including pregnant women; most with addiction (some with primary psychiatric disorders--Major Depression, Bipolar Disorder, Schizophrenia without addiction) and comorbid psychiatric and medical disorders. The addictions include diverse substances--alcohol, marijuana, cocaine, opiates, benzodiazepines. Substance-induced psychiatric syndromes are common. Some patients present in acute withdrawal and require detoxification which is conducted at our facility (except for complicated alcohol withdrawal which would be referred to an inpatient hospital setting). Wellington Retreat is a facility that provides learning experiences to several fields such as medical students, P.A. students and mental health interns. Almost 50 different schools have signed affiliations with Wellington Retreat and we are proud to offer all our students, interns and residents a unique experience with colleagues from all over the country, helping them make connections that are bound to be of great aid in their career.

Location: (100%)
Wellington Retreat
7051 Seacrest Blvd.
Lantana, FL, 33462

Participating Faculty: Dr. Robert A. Moran

Prerequisite: Completion of Core Clerkships

Expectations: The student will evaluate and follow at least two patients from their admission throughout the month, learning about history-taking, examination, diagnosis, and treatment planning, as it applies to his/her particular patients. We will provide regularly scheduled didactic sessions which will include such topics as mental status exam, neurobiology of addiction, detoxification, psychopharmacology, treatment of comorbid disorders, differential diagnosis, cognitive-behavioral therapy, motivation enhancement therapy, and 12-step facilitation.

Typical schedule of the program

8:30AM-11:00AM Community meeting group
11:00AM-11:45AM Individual
12:00PM-12:30PM Meeting with Medical Director
12:30PM-1:30PM Treatment Team
1:30PM-2:00PM Caseload
2:15PM-3:15PM Group
3:30PM-4:30PM Group

The students would begin at 8:30AM by attending community meeting which is a group ran by the medical director which involves all of our Adult Detox, Residential and partial hospitalization program and some of our intensive outpatient and outpatient community. Afterwards they will join the doctor in a group with the adolescent community until noon when they will meet with the doctor who will discuss with them about what
they have experienced with their patients and will answer questions the students may have. At 12:30 the students will attend Treatment Team where the staff meets to discuss and review the progress and plans for the patients. In the afternoon, during one of the group times (can vary from day to day depending on which group is occurring), the faculty will provide didactic sessions. Students handle the initial evaluation of new admissions under the doctor’s supervision.

Throughout the month, the student will also have exposure to other staff members to learn about the evidence-based treatment modalities. For example, masters level therapists can introduce principals of cognitive behavior therapy, motivation enhancement therapy, among others.

**Electronic Resources:**
Students will work with Electronic Medical Records from stations designated for them in their own office, personal devices are encouraged in order to facilitate mobility and allow them to work on non-time-sensitive notes remotely and will also have 24-hour access to the University of Miami online resources which links them to a vast collection of resources needed for their education, for doing research and taking care of patients.

**Evaluations and Feedback:**
The supervising attending will provide verbal face-to-face feedback to the M4 student at the close of the second week and then again at the end of the rotation. The Attending will complete a written evaluation at the end of the rotation.

Students will be evaluated at the end of the rotation by the course director. It will be based on the achievement of the expectations of the student listed above, and active engagement in supervised patient care activities.

Revised November 2019
PUBLIC HEALTH
PUBLIC HEALTH CLERKSHIP

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1003</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Amy R. Zito, MD and Sarah Bland, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-886-1202</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:arzito@med.miami.edu">arzito@med.miami.edu</a> / <a href="mailto:sbland@med.miami.edu">sbland@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Amy R. Zito, MD and Sarah Bland, MD</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Public Health Practicum</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>3</td>
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<td>AVAILABLE:</td>
<td>All year EXCEPT Block 00 and 12A/B</td>
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<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
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<td>INTERVIEWING TIME:</td>
<td>1 day (2wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Required / Clinical</td>
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</table>

OVERVIEW
This is a 2-week required rotation for students in the MD/MPH track. This sub-internship will expose them to the professional responsibilities and work flow of a physician trained and practicing public health. Each week the student will be rotating through various clinics within the health department. They will also have weekly interaction with the Department of Health preventive medicine residents.

COURSE DESIGN
The student will spend time at the Palm Beach County Health Department administrative offices interacting in didactic sessions and journal club presentation with the Preventive Medicine Residents. The didactic curriculum will be linked to the residency program curriculum. Students will be scheduled to rotate through the health department’s HIV and sexual health clinics (OB/GYN, STD and family planning). Students will also rotate in the JFK Internal Medicine Residency continuity clinic. They will participate in the residency clinic ambulatory didactic, journal club and interdisciplinary psychology conferences. Students will receive a final grade (P/F), based on clinical evaluations, participation in didactics, assigned tasks and a final journal club presentation.

GOALS
1. Familiarize the medical student with
   a. the role of public health providers
   b. the role and goal of preventive medicine residencies
2. Familiarize student with available and needed resources for underserved population.
3. Understand importance of knowing and incorporating population-based data, and understanding of the health care delivery system in the treatment of patients.
4. Reinforce the importance of prevention and treatment from a community health perspective.
5. Review and apply basic scientific principles, pathophysiology, clinical laboratory method and cognitive skills as they relate to the diagnosis and treatment of communicable diseases.
6. Reinforce public health research hypothesis and study designs.
7. Work closely with community partners and organizations to finalize fieldwork and capstone projects.
8. Understand the importance of providing culturally competent care.
9. Understand the importance of advocacy for vulnerable patient populations and elimination of health disparities.

OBJECTIVES
A. The medical student will be expected to participate in weekly didactic sessions that are linked with the preventive medicine residency curriculum and ambulatory care residency curriculum.

B. The medical student will be expected to present a journal club presentation at the end of the rotation to the preventive medicine residents.

C. The medical student will work closely with public health providers in various clinics of the Palm Beach County Health Department.
   a. HIV clinic
   b. STD clinic
   c. Family Planning clinic
   d. OB/Gyn clinic

D. The medical student will be expected to be familiar with the basic evaluation and management of the following:
   a. HIV/AIDS
   b. Gonorrhea
   c. Chlamydia
   d. Trichomoniasis
   e. Hepatitis B
   f. Syphilis
   g. Human Papilloma Virus
   h. Bacterial vaginosis
   i. Herpes
   j. Prenatal care in underserved communities
   k. Family planning treatment options and counseling
   l. PAP screening and guidelines

E. The medical student will work closely with residents and faculty from the UM Regional Internal Medicine residency program in their underserved primary care clinic.
   a. The student will see patients on a continuity basis throughout the two weeks.
   b. The student will participate in weekly ambulatory didactic sessions that are linked to the residency curriculum.
   c. The student will participate in ambulatory journal club and case presentations that are linked to the residency curriculum.
   d. The student will participate in the biweekly interdisciplinary psychology conference.

LOCATION
- Department of Health Administrative office (20%)
- Department of Health 45th street clinic (20%)
- Department of Health Delray Clinic (20%)
- Department of Health Lantana clinic (10%)
- JFK Ambulatory clinic/Community Health Center (30%)

PARTICIPATING FACULTY
PBCHD Delray Clinic – Dr. Charles Gonik
PBCHD Lantana/Lake worth Health Center – Dr. Helena DeCarvalho and Dr. Lesly Desrouleaux
PBCHD 45th Street clinic – Dr. Ernie Jabour
PBCHD Preventive Medicine Residency program – Dr. Robert Parkes

Dr. Alina Alonso, Director, Palm Beach County Health Department

JFK Ambulatory clinic:
Dr. Vicki Britton
Dr. Stuart Bagatell
Dr. Sarah Bland
PREREQUISITE
Completion of Public Health Practicum

EXPECTATIONS
The student will be expected to participate in all activities and be on time. The student will be asked to complete an evaluation of the rotation as a whole upon completion to allow for continual improvement of the student experience. Preceptor performance will be evaluated by the medical student (submitted anonymously).

One of the rotation directors (Drs. Zito) needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

STUDENT EVALUATION AND GRADING
A. One journal club presentation will be required during this rotation.
B. Completion of 4 online public health modules is required.
C. The medical student will receive written evaluations at the end of the month from each sub-internship site. This will be reviewed with the student by the faculty evaluator.
D. Course is P/F.

Reviewed October 2019
PUBLIC HEALTH ELECTIVE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 940</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Alberto J. Caban-Martinez, DO, PhD, MPH</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-7565</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:acaban@med.miami.edu">acaban@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Students enrolled in the MD/MPH program or MD students who have completed public health coursework. Application to and approval by Dr. Caban-Martinez 90 days in advance</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>50</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<td>U.S. VISITING STUDENTS:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>N/A</td>
</tr>
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</tbody>
</table>

Application and approval by Dr. Caban-Martinez must be completed at least 90 days prior to the start of the rotation. Please contact him for information.

Overview:
The Public Health elective will be offered to senior MD/MPH medical students if approved by the course director for time spent on a 2- or 4-week public health externship. MD students who have completed public health coursework will also be considered. The consideration of elective credit includes the content and quality of the program/project and its relevance to the dual degree curriculum. In addition, the dates of the program must mesh with the schedule of the UMMSM MD/MPH medical school curriculum and academic calendar. Each application will be considered on an individual basis with consideration of the student's overall performance and standing in the UMMSM MD/MPH program.

Goals: Dependent upon elective chosen by student, to be approved by course director.

Objectives: Dependent upon elective chosen by student, to be approved by course director.

Prerequisite: Open to senior MD-MPH students in good standing

Expectations:
Prior to consideration of elective credit, the student will be required to:

1) Email course director the following at least 90 days prior to the start date of the elective:
   a. For established national electives or if a student is creating an independent program for elective credit, student must submit the Public Health Independent Study for Elective Credit Application Form. (attached)

Student Evaluation and Grading:
Pass/Fail and dependent on externship report/evaluation from project manager/community lead etc.
APPLICATION: Public Health Independent Study for Elective Credit

MD-MPH Program Office | University of Miami, Miller School of Medicine
Form Last Updated: April 7, 2019 | Course Director: Alberto J. Caban-Martinez, DO, PhD, MPH
Direct Application Questions to: acaban@med.miami.edu

1. Student Name:

2. Year in MD-MPH Program:

3. Anticipated Elective Start Date:

4. Duration of Elective (circle one): 2-weeks or 4-weeks

5. Elective Course Type† (circle one): Established Program or Self-Directed/Designed
   †A self-directed/designed elective indicates an educational instruction and rotation in public health that was created by the medical student in consultation with a public health practitioner. An established program includes all national, state or local public health elective coursework that has formal learning objectives, instruction and established preceptors.

6. What is the geographic location of your anticipated Public Health Elective Rotation?

7. Who is your anticipated preceptor? Include Name, Educational Credentials, Mailing address, telephone and email for preceptor.

8. Provide link to established public health Elective Rotation Information (if applicable):

9. Describe in three to five sentences what is the public health elective course/clerkship about:

10. Discuss in three to five sentences how this public health elective course will be useful to your overall MD-MPH program training and your long-term professional goals as a public health physician.

11. List two to five anticipated learning objectives (what you will learn) from your participation in the 2- or 4-week public health elective course.

NOTE: Completed Applications should be emailed directly to Dr Alberto Caban-Martinez (acaban@med.miami.edu) at least 90-days prior to anticipated start of the public health course/clerkship rotation. Final elective course grade will be posted once the elective course evaluation and the student evaluation forms are submitted.
# EVALUATION RUBRIC FOR ENROLLMENT INTO PUBLIC HEALTH ELECTIVE

MD-MPH Program Office | University of Miami, Miller School of Medicine | Form Last Updated: April 9, 2019

**Reviewer (Circle One):** Dr Alberto J. Caban-Martinez and/or Dr Shirin Shafazand

<table>
<thead>
<tr>
<th>CRITERIA</th>
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<th>MODERATE</th>
<th>HIGH</th>
<th>Row Total</th>
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<tbody>
<tr>
<td>1. Student submitted paperwork 90-days prior to elective start date</td>
<td>Application for elective was received very late (&lt;2 weeks prior to start date)</td>
<td>Application was submitted &lt;90 days but more than 2 weeks prior to start date</td>
<td>Application was submitted &gt;90 days prior to start date</td>
<td></td>
</tr>
<tr>
<td>2. Established public health elective course/clerkship</td>
<td>Application describes a relatively new formal elective with unclear Public Health relevance</td>
<td>Application describes an established formal elective with limited Public Health relevance</td>
<td>Application describes an established public health elective course/clerkship</td>
<td></td>
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<tr>
<td>3. Student created experience</td>
<td>Application describes an elective created by student with limited description of tasks and activities.</td>
<td>Elective created by student with limited description of tasks and activities.</td>
<td>Elective created by student with detailed description of tasks and activities.</td>
<td></td>
</tr>
<tr>
<td>4. Student provides clear and explicit description of elective course as it relates to development as a public health physician</td>
<td>No explanation of how elective course contributes to professional development</td>
<td>Some broad description of relationship to professional development</td>
<td>Clearly described learning goals and professional development</td>
<td></td>
</tr>
<tr>
<td>5. Elective learning objectives support the educational mission and curriculum of the MD-MPH program</td>
<td>No learning objectives provided</td>
<td>Some limited, broad learning objectives described</td>
<td>Explicit, enumerated learning objectives provided</td>
<td></td>
</tr>
<tr>
<td>6. Elective coursework relevant to social determinants of health</td>
<td>Elective has no linkage to public health</td>
<td>Some linkage to public health</td>
<td>Clear relevance to public health training</td>
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</tr>
<tr>
<td>7. Seasoned/established preceptor listed on student application</td>
<td>Preceptor has limited experience in public health</td>
<td>Preceptor has some application/experience in public health</td>
<td>Preceptor is seasoned/mature public health expert</td>
<td></td>
</tr>
</tbody>
</table>

**Rubric Scoring:** Score range is from 0 to 14 possible points, where 14 points indicates a perfect public health elective with MD-MPH program relevance, strong learning objectives, and seasoned preceptor. Scores at or below 7 points should require additional review by MD-MPH program director.

**MD-MPH PROGRAM OFFICE REVIEW AND USE ONLY**

Elective Approval by: _____________________________  Approved Date: _________________

[Dr. Shirin Shafazand and/or Dr Roderick King]
RADIOLOGY
INTERVENTIONAL RADIOLOGY

<table>
<thead>
<tr>
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<th>MDR 969</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE DIRECTOR:</td>
<td>Prasoon P. Mohan <a href="mailto:pxp136@miami.edu">pxp136@miami.edu</a></td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5778</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:agonzalez13@med.miami.edu">agonzalez13@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Alina Gonzalez [JMH WW-279]</td>
</tr>
<tr>
<td>LENGTH OF ROTATION:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Surgery or OBGYN Core Clerkship, Radiology Clerkship is preferred</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All Year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>Yes</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
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</tbody>
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Overview:
The course is an introduction to Vascular/Interventional Radiology and consists of intensive exposure to Vascular and Interventional Radiology procedures under the direct supervision of interventional radiologists. Students will learn and participate in (a) the use of various radiological imaging to guide procedures in different organ systems, (b) the evaluation and pre and post procedural management of patients requiring interventional radiology procedures, and (c) participate in and learn various interventional procedures such as arterial and venous access, angiography, angioplasty, stenting, biopsies, various image guided drainages, arterial embolization, tumor ablations and other vascular and interventional procedures.

Course Design:
Students will attend weekly didactic Interventional Radiology Conferences on Thursday mornings at 7AM, as well as daily morning case conference (rounds) by the IR Section. They will also participate in Interventional Radiology lectures scheduled by the Section (Noon conference, mortality and morbidity conference, grand rounds, tumor board, outside conferences, etc.).

The students will observe and participate in vascular and interventional radiology procedures under the direct supervision of the designated attending for each case, in the measure and extent considered appropriate by the attending, depending on the student’s level of knowledge and expertise. As the student’s skills and knowledge increase during the rotation, the student may be allowed increased participation, always under the direct supervision of the attending or a Fellow designated by the attending.

Students will be assigned to read selected chapters from the Handbook of Interventional Radiology Procedures, 3rd Ed., by Kandarpa.

Students will have the opportunity to participate in a research project in conjunction with Vascular and Interventional attendings, fellows and/or residents.

Goals:
Students are expected to learn how to:
1. Evaluate a patient to determine if he/she is a candidate for an IR procedure.
2. Obtain appropriate required clinical information and informed consent.
3. Identify the correct imaging modalities in Interventional Radiology procedures and select the correct one for the case.
4. Basic image-guided vascular access procedures (under direct supervision of an Interventional Radiology attending or Fellow).
5. Manage patients immediately pre- and post-procedure, including but not limited to short and long term complications of nephrostomy, dialysis, gastrostomy, gastrojejunostomy, biliary and vascular tubes, catheters and stents.
6. Perform and prepare patients for image guided biopsies, drainages and aspirations.
7. Know when to send a patient for biopsy or aspiration and to understand the best approach to the tumor.

Objectives:
The student will achieve these goals by:
1. Attending all required didactic conferences
2. Participating in image interpretation sessions and case discussions
3. Reading the required text and pertinent articles.
4. Researching from other texts available in the Radiology Library and Sectional teaching files
5. Participating in Vascular and Interventional Radiology procedures under the guidance of an Interventional Radiology attending or Fellow

Location:
- Primary: Jackson Memorial Hospital, West Wing Building, 2nd floor, Angio rooms – 85%
- University of Miami Hospitals and Clinics (UMHC), Vascular Interventional Radiology, first floor – 5%
- UHealth Tower, Vascular Interventional Radiology, ground floor – 5%
- Lennar Foundation Medical Center – Vascular Interventional Radiology, 2nd floor – 5%

Participating faculty: UMMSM Interventional Radiology Faculty, Fellows, and Residents

Prerequisite: Surgery or OBGYN Core Clerkship, Radiology Clerkship is preferred

Expectations:
1. Work day is approximately 7:30AM until 5pm or when cases finish.
2. Attend morning conference to prepare for the days cases at 7:30AM.
3. Present cases at morning conference that students worked up the day before.
4. Obtain history and physical exams for patients prior to procedures. Present the history and physical results to the attending Radiologist, fellow or resident.
5. See patients in the Interventional Radiology clinic for preinterview, history and physical exam. Present these cases directly to the attending Radiologist.
6. Scrub into cases in the IR suite as first or second assist. Progressively perform parts of the procedure depending on the student’s skills and complexity of the procedure.
7. Document procedure appropriately in the chart.
8. When consultations and requests are made to the IR service a student will see the patient, obtain a history and physical exam, decide whether an IR procedure is appropriate, list recommendations for the requesting service, select the best procedure and approach and present this to the Radiology attending for approval. The student will present the case in morning conference.

Student evaluations and grading:
At the end of the rotation, the attending with whom the student has spent most time will assess a passing or failing grade in the form the UMMSM sends at the end of the rotation, including any comments regarding the students’ performance.
A maximum of two days of previously approved absence is enforced. The student will communicate any absence by e-mail to the Student Coordinator at agonzalez13@med.miami.edu to obtain approval. Any absences beyond the three days must be made up to avoid an incomplete in the rotation.

Revised November 2019
NUCLEAR MEDICINE

COURSE CODE: MDR 911
CLERKSHIP DIRECTOR: Mark Foley, M.D.
CONTACT PERSON: Alina Gonzalez [JMH WW-279]
TELEPHONE: 305-585-5778
EMAIL: agonzalez13@med.miami.edu
REPORT TO: Chief Resident, Nuclear Medicine, JMH Central 2, Room C-252 @ 9:00 am
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: None
NUMBER OF STUDENTS: 2
AVAILABLE: All Year
U.S VISITING STUDENTS: Yes
INTERVIEWING TIME: 1 day (2wks), with prior approval
TYPE: Nuclear Medicine

Overview:
The Nuclear Medicine elective allows the student to interact with the clinical and research activities of Nuclear Medicine as it relates to diagnostic imaging and therapy with this modality. Students are trained under the direct supervision of our faculty members with guidance from our residents. Learning Techniques include: daily work, teaching file, and conference attendance. Reading sessions start at 8:30 a.m. daily. While patients are injected for studies during the morning, the students observe the technical aspect of this procedure prior to interpreting the studies with residents and attendings. An example of such studies is the myocardial perfusion studies - patients are injected early in the morning, residents and students monitor the stress and rest imaging acquisitions. Students will also observe many other nuclear medicine procedures, such as bone scans, renal scintigraphy, thyroid scintigraphy and PET/CT scans.

Course Design:
Teaching: Grand Rounds and Journal Clubs, appropriately prescheduled, are offered at various times throughout the month. Conferences include Lymphoma on Mondays, Pediatric Nephrology on Tuesdays and Tumor Board on Thursdays and Fridays in which students will have the opportunity to participate in these multidisciplinary discussions of interesting cases. In addition, informal teaching sessions occur periodically in the JMH Nuclear Medicine reading room during the mornings and teaching always occurs during case read out sessions with the Nuclear Medicine attendings.

Therapies: Outpatient Iodine-131 hyperthyroid therapy, inpatient or outpatient Iodine-131 thyroid cancer therapy, metastatic bone pain palliation therapy (Samarium, Xofigo), Lutathera for metastatic neuroendocrine cancer. Students can participate in the consultation and therapy process.

Procedures: Lymphoscintigraphy for sentinel lymph node mapping is commonly performed in our department. Less commonly ordered procedures may include: nuclear cisternograms, shunt evaluation with radiopharmaceutical injection. Students can observe these procedures as they are being performed and learn the indications, appropriate technique and subsequently participate in the interpretation of the results.

Basic Science Teaching Course: A Basic Science Teaching Course is offered to all first year residents, which students, if they so desire, may attend (the course takes place usually in the Fall over a period of 2 weeks). The course comprises didactic lectures on Physics, Mathematics, Statistics, Computer Science, Radiation Protection, Radiobiology, Radiopharmacy, Instrumentation and basic science lectures on Indications,
Techniques and Applications of Nuclear Medicine Imaging and Therapy. Following these lectures, attendees participate in the organized instruction and regular clinical activities and will be instructed on clinical cases, the techniques of the procedures and the normal/abnormal cases. The course is predominately taught by Dr. Mike Georgiou, Ph.D and Director of the Division of Nuclear Medicine.

Conferences: Students are encouraged to attend the weekly Tuesday 12:30 Pediatric Nephrology Conference. Students are also required to attend the Departmental Noon Conference (12:30 – 1:30 p.m.) when the Nuclear Medicine Division is presenting.

Goals:
Students should feel comfortable with the indications and contraindications/potential risk of the Nuclear Medicine studies performed at our lab. Students will attain proficiency in the nuclear medicine diagnostic and therapeutic procedures and in the assessment and differential diagnoses of cases. They should be able to construct appropriate differential diagnoses and be able to perform basic quality check and interpretation of these same studies. At the end of this rotation, students should be able to gather essential and accurate information about patients (comprehensive history and physical examination with particular attention to the nuclear medicine examination).

Objectives:
The main objective of this elective is to provide students with knowledge and practical experience in Nuclear Medicine, sufficient to support their functioning while rotating through this service. In addition to knowledge obtained while on this rotation, students should be fully cognizant of the current literature regarding the indications and contraindications of nuclear medicine procedures, the disease processes involved, and the various invasive and non-invasive means of evaluating the patient requiring such studies and the various surgical and radiological interventions available.

Location:
Nuclear Medicine, JMH Central 2, Room C-252. Percentage of student's time spent at this site: 100%. This is the only location in which students will be stationed for the duration of their rotation.

Participating faculty:
During their Nuclear Medicine rotation, all students will be under the direct supervision of Dr. Mark Foley, Nuclear Medicine Course Director and/or Dr. Mike Georgiou, Ph.D., Director, Division of Nuclear Medicine. All attendings, including Dr. Shabbir Ezuddin, Dr. Efrosyni Sfakiianaki, Dr Sam Samaan, Dr Louis Sanjar and Dr. Russ Kuker are responsible for the training of students, as well as the Chief Resident. In addition, our Nuclear Medicine residents are also encouraged to participate in the training of students.

Prerequisite:
Although there are no requirements prior to starting this rotation, upon contact with the department, students are provided with a suggested reading list, including books and electronic books (e-books).

Expectations:
During their rotation, students are expected to attend all Nuclear Medicine academic and service obligations. This includes attending and participating in divisional and departmental lectures such as case presentations, and discussion in teaching clinics, daily reading sessions (which includes participation in the review of images, and quantitative data), and in the discussion of the differential diagnosis and in the process of arriving at a final diagnosis.

Student evaluations and grading:
Evaluations are completed based on daily direct observation and feedback by attendings and program director. Students are not expected to independently evaluate patients.
Students are expected to achieve and maintain a certain level of competency in PET/CT, cardiac imaging, renal scintigraphy, bone scans and other nuclear medicine procedures. These will be evaluated by the Nuclear Medicine Residency Program Course Director, Dr. Mark Foley, at the end of their rotation on the forms provided by the Office of Student Affairs.

Revised November 2019
RADIOLOGY CLERKSHIP

COURSE CODE: MDR 909
CLERKSHIP DIRECTOR: Humberto O. Martinez, M.D.
TELEPHONE: 305-585-5778
EMAIL: agonzalez13@med.miami.edu
CONTACT: Alina Gonzalez [JMH WW-279]
LENGTH OF CLERKSHIP: 2 weeks
PREREQUISITE: None
NUMBER OF STUDENTS: Maximum 15 (minimum of 5 – any Block with an enrollment of less than 5 students will be cancelled)
AVAILABLE: All the A blocks (1A block may not be available to M3 students because of 3rd year general orientation)
U.S VISITING STUDENTS: No
INTERVIEWING TIME: 1 in 2 weeks
TYPE: Clinical

Overview:
Radiology is a required 2 week clerkship available to third and fourth year medical students, and must be successfully completed prior to graduation. The course is offered once a month 12 times a year. It is a structured two week course mainly at Jackson Memorial Medical Center. The aim of the course is to teach the student what every physician should know about diagnostic imaging and how to effectively use our varied radiographic techniques and imaging modalities to diagnose disease, regardless of their field of interest. An Advanced Radiology elective is offered in 2-week blocks (B blocks only) to those students wanting to gain more in depth knowledge or who are interested in the field as a career choice. Multiple blocks may be taken. Please refer to Course MDR 910 for description.

Course Design:
The course consists of daily required morning image interpretation sessions rotating through the subspecialties of Radiology as well as afternoon small group interactive sessions for case solving, based on the assigned on-line video tutorials. There will be an assigned instructor which will be an attending, fellow, or senior resident. Attendance is mandatory and will be recorded. The students will be assessed for performance during these sessions. The students are also invited to attend other departmental and sectional conferences. A final exam will be given on the last day of the course.

Goals:
- To achieve a basic knowledge of plain image interpretation as screening tools enabling the medical student to identify emergent and life threatening situations.
- To give the student a basic understanding of the indications and protocols for the more specialized imaging modalities such as sonography, computerized tomography, magnetic resonance imaging, and molecular imaging (nuclear medicine).

Objectives:
- Participation in the assigned daily morning image interpretation sessions at the PACS workstations with radiology residents, fellows, and attendings.
- Become familiar with imaging of common disease processes as specified in the Radiology Case Log.
- Become comfortable in discussing with the assigned instructor, the radiographic findings and differential diagnoses of a disease process during the interactive problem solving sessions.
- Be familiar with the most indicated imaging tools and imaging protocols available for specific disease presentations.
- Become familiar with the role of the radiologist as a member of the health care team.

Location:
- Jackson Memorial Hospital (JMH), Radiology areas in West Wing, Central, Diagnostic Treatment Center and JMH Emergency Room Radiology – 95%
- University of Miami Hospital and Clinics/Sylvester Cancer Center (UMHC/SCCC) < 5%

Participating faculty:
UMMSM Faculty, Fellows, and Residents

Prerequisite:
None

Expectations:
Students need to become familiar with the supplemental information provided in the course syllabus and are required to attend all and participate in the daily image interpretation sessions and/or procedures. The daily afternoon interactive problem solving sessions are mandatory, and attendance will be recorded. The students are invited to attend other departmental and sectional conferences. They are also encouraged to take advantage of the additional materials available in our Radiology library, including books, teaching files, and audio-visual materials. We recommend the use the classic “Fundamentals of Radiology” by Lucy Squire and Robert Novelline as a reference text.

Understanding the role of Diagnostic Radiology as a consulting specialty and obtaining a good comfort level in ordering and interpreting basic imaging modalities should provide the student with the ability to choose the most efficient imaging tools to guide the diagnosis of their patients’ diseases.

Because we are a consulting service to other medical specialties, and students will often have patient contact, we require appropriate attire (including white lab coats) be worn at all times while in the department. No scrubs unless while rotating in Interventional Radiology and Fluoroscopy (Body Imaging).

Student evaluations and grading:
Because of the highly compacted and structured 2-week course, only ONE planned absence for interviews, conference presentations, and board exams is allowed. If you intend to miss more than one day due to scheduled activities as described above, we ask that you switch blocks wherever possible. Absences need to be made-up to avoid an incomplete grade. This is preferable during the same course block and has to be arranged with the course coordinator ASAP.

Missing any of the afternoon interactive problem solving sessions will require the student to return during another rotation for make-up, since this is a live exercise where the students will also be evaluated, and may not be repeated during the same rotation. The student will receive an INCOMPLETE grade in the course until this requirement is made-up with another group. Arrangements need to be made with the coordinator.

The final grade will be determined by the performance on the afternoon interactive problem solving sessions (25%), the morning practical rotations (35%), and the final examination (35%). The remaining 5% will take into consideration attendance, evaluations from practical sessions and professionalism, at the discretion of the course director.

Reviewed November 2019
## ADVANCED RADIOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 910</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Humberto O. Martinez, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5778</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:agonzalez13@med.miami.edu">agonzalez13@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Alina Gonzalez [JMH WW-279]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 week blocks, but may take multiple</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Radiology Clerkship</td>
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<td>NUMBER OF STUDENTS:</td>
<td>2</td>
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<tr>
<td>AVAILABLE:</td>
<td>All B Blocks only for 2 week course. See Course Design</td>
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<tr>
<td>U.S VISITING STUDENTS:</td>
<td>Yes</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day per 2 week block</td>
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</table>

### Overview:
Advanced Radiology consists of a more extensive exposure to one or two subspecialty areas in clinical Diagnostic Radiology.

### Course Design:
The 2 week elective will be available ONLY during the B Blocks, as described above. If desired, the students will be allowed to schedule more than one 2-week block, either consecutively or at different block dates. The students may select to spend a minimum of one week in any subspecialty area. However, they are encouraged not to spend more than two weeks in a particular section. UM students are required to participate in image interpretation sessions mornings and afternoons at the PACS stations. All students are required to attend the daily 12:30 p.m. departmental conference and all sectional conferences of the subspecialties they are rotating through. Visiting students from other institutions, however, are required to attend the morning interpretation sessions and any ongoing clerkship medical students' interactive case sessions in the afternoons.

### Goals/Objectives:
Once the students have chosen one or more of the Radiology subspecialties, they should spend as much time as possible in their daily imaging interpretation sessions or procedures and attend as many subspecialty conferences as possible during the elective. They are encouraged to present and discuss cases at the sectional conferences.

### Location:
Primary: Jackson Memorial Hospital: Radiology areas in West Wing Building, Central Building, Diagnostic Treatment Center (DTC) and Emergency Room Radiology (1st floor Emergency Building) for all subspecialties. Secondary (1) Lennar Foundation Medical Center for Interventional MSK and IR (limited days), (2) UMHC for Breast Imaging.

### Participating faculty:
UMMSM Faculty, Fellows, and Residents

### Prerequisite:
Radiology Clerkship

### Expectations:
Students will participate in daily image interpretation sessions (mornings and afternoons), attend conferences as instructed under “Course Design,” and take advantage of the additional materials available in our Radiology Library and website including books, teaching files, and on-line videos and exhibits. Become more familiar in the use of diagnostic radiology as it pertains to the ACR appropriateness criteria.

Because we are a consulting service to other medical specialties, and students will often have contact with attendings from other services and patients, we require appropriate attire (including white lab coats), be worn at all times while in the department. No scrubs unless while rotating in Interventional Radiology and Fluoroscopy.

**Student evaluations and grading:**
The students will be under the supervision of the Radiology faculty, fellows and resident staff. They will be individually evaluated by the faculty member(s) they have worked most closely with during the elective. The students will not be required to take any written or practical examinations, but may be asked to present interesting cases at the discretion of the supervising faculty.

Reviewed November 2019
MT. SINAI DIAGNOSTIC RADIOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 908</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>William Burke, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-674-2251</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Kiesha.Candry-Scatlife@msmc.com">Kiesha.Candry-Scatlife@msmc.com</a></td>
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<tr>
<td></td>
<td><a href="mailto:Guerline.duverson@msmc.com">Guerline.duverson@msmc.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Coordinator: Kiesha Candry-Scatlife</td>
</tr>
<tr>
<td></td>
<td>MSMC Medical Education Coordinator: 305-674-2251</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1 student</td>
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<td></td>
<td>No students Blocks 00, 1A, 1B, 2A and 7A</td>
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<td>AVAILABLE:</td>
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<td>U.S VISITING STUDENTS:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</table>

Please contact a minimum of two weeks before the start of the rotation to complete hospital specific orientation requirements. Please contact April Chisolm in the Mt. Sinai Medical Education Office at Guerline.Duverson@msmc.com (305-674-2251).

The Medical Education office is open from 830a-500p. If you arrive early, wait in the cafeteria for the office to open. You will need to park in the employee parking lot. On the first day, hit the call button for access.

Overview:
The courses consist of daily required didactic conferences and practical film interpretation sessions covering all areas of Radiology.

Course Design:
The student will participate in divisional activities including diagnostic and therapeutic nuclear medicine and non-invasive cardiovascular laboratory, under the direct Preceptorship of attending physicians.

Goals/Objectives:
- Expose the student to the different imaging modalities
- Rotations will be scheduled based on institutional requirements & interest of the student
- Learn the basic approach to the interpretation of the images
- Explore the correlation between the images and the diseases

Location:
Experiences occur at Mt Sinai Medical Center.

Prerequisite:
All core clerkships

Expectations:
Students are given a complete tour of all sections and basic indoctrination to the service. The student will spend the mornings in a combination of general or specialized radiological, nuclear, computer tomography, or
magnetic resonance. At 12:30 there will be a one-hour radiology conference; attendance is mandatory. The rest of the afternoon could be spent in the library reviewing available teaching materials, reviewing the teaching collection in the CT reading room or working on a required “project”. The project or assignment consists on a short written description of the work-up of a clinical problem such as chest pain, GI bleeding, subarachnoid hemorrhage, or other topic chosen by the student, along with the choice of imaging modalities to establish the diagnosis.

**Student evaluations and grading:**
A grade of Pass or Fail will be given in consideration to the student’s attendance, participation in rotations and development of the required project.

Please report directly to the Office of Medical Education, at 8:30 a.m. located on the second floor of the De Hirsch Meyer Tower, Main Building, Suite 2065.

Students are required to have the following documents upon arrival:

- Both School and Personal ID
- Copy of Personal Insurance card

The Security Department will need a picture I.D., your car’s tag number and a $5.00 deposit in order to issue you a badge (cash only, checks or credit cards are not accepted).

Reviewed December 2019
HCH INTERVENTIONAL RADIOLOGY

COURSE CODE: MDR 1021
CLERKSHIP DIRECTOR: Mike Rush, MD (Mikerushmd@yahoo.com)
TELEPHONE: 561-886-1202
EMAIL: jsollecito@med.miami.edu
CONTACT: Joseph Sollecito, jsollecito@med.miami.edu, 561-886-1202
LENGTH OF ELECTIVE: 2 / 4 weeks
PREREQUISITE: Surgery and Internal Medicine Clerkships (RMC) or Radiology Clerkship (Miami)
NUMBER OF STUDENTS: 2
AVAILABLE: All Year
U.S. VISITING STUDENTS: No
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

Overview:
Students will be able to take a 2-4 week elective during their fourth year in diagnostic and interventional radiology. During the block, students will spend their time in the department of radiology with the faculty and radiology technicians. They will be working with radiologists on diagnostic imaging, interventional procedures, imaging and compiling the medical history as appropriate for the procedure. They should also attend any conferences or other teaching seminars offered in radiology during their assigned time.

Course Design:
This Course is designed to provide students with opportunities in a radiology practice. They will work with the physicians in the department as well as radiology technicians. Students will be expected to see patients prior to procedures to obtain a pertinent history and physical as to appropriateness of intervention. They will also be present with radiologist during interventional procedures. Furthermore, students will gain knowledge of the impact interventional radiology has on patient care by following up on patients after their intervention and evaluating for any complications, but also for resolution of symptoms. Students should begin to develop the skills to interpret normal from abnormal films and how that impacts interventional procedures. Students may also be asked to discuss results of procedures with referring physicians. Furthermore, students will have an opportunity to rotate with the radiology technicians where they can learn what goes into each individual study. They will also have opportunities to participate in multidisciplinary discussions of patient care.

Goals:
The Goal of this elective is to have fourth year students gain a better understanding of the indications, contraindications and resources needed to perform many interventional radiology procedures. They will also gain minor procedural skills during this rotation.
**Objectives:**

1. **Medical Knowledge**
   a. Student will be able to identify normal anatomy on imaging modalities including, but not limited to chest xray, CT of brain, chest and abdomen/pelvis
   b. Student will be able to differentiate radiation exposure for different imaging modalities

2. **Patient care**
   a. Student will describe the indications and contraindications for several interventional procedures including:
      i. IVC placement
      ii. Image guided Thora and Paracentesis
      iii. Ultrasound and CT guided biopsy
      iv. Image Guided Central Line placement, including PICC lines and HD lines
   b. Student will perform a focused history and physical prior to procedure to assess appropriateness of said procedure

3. **System Based Practice:**
   a. Student will be able to describe the costs and resources needed for a variety of imaging and procedural modalities
   b. Student will be able to select the most appropriate imaging modality and/or procedure with the highest value

4. **Professionalism:**
   a. Student will arrive on time, and prepare by reading appropriate information
   b. Student will display appropriate and professional interactions with nurses, radiology technicians and faculty in the department of radiology
   c. Student will have professional interactions with patients brought for radiologic interventions

5. **Problem Based Learning and Improvement**
   a. Student will read on patient presentations and imaging findings pertinent to pathologies that present during their rotation
   b. Students will self-identify areas that they struggle with and seek clarification from faculty or literature.
   c. Student will use evidence based practice in their approach to patient care

6. **Interpersonal and communication skills**
   a. Student will be able to communicate pertinent findings to referring physicians
   b. Student will be able to communicate pertinent information to radiologist in order to optimize the medical care provided to patient

**Location:**
Holy Cross Hospital (100%)  

**Participating Faculty:**
Dr. Mike Rush

**Prerequisite:**
Surgery and Internal Medicine Clerkships (RMC) or Radiology Clerkship (Miami)

**Expectations:**
- Students on this rotation are expected to come with an interest in learning. Expectations include evaluating patients prior to and after procedures and discussing findings with radiologist. They are to supplement clinical learning with independent reading to have a more robust educational experience.
- Students are expected to conduct themselves in a professional manner. They are to notify their preceptor as well as course director of any anticipated absences.
- They are to treat all patients, staff and physicians with respect.

**Student Evaluation and Grading:**
Students will be evaluated by the attending physician with whom they interact. Students will be evaluated based off of their ability to identify the indications and contraindications to many interventional procedures. They will also be evaluated on their ability to discuss the general technique and resources needed for common interventional procedures. This will allow the attending to evaluate both medical knowledge and patient care. Attendance and punctuality will be used to assess professionalism. Students should also begin to develop skills in communicating findings and plans to referring physicians which will be observed by attending physician, contributing to the grade in communication skills.

The final evaluation will be discussed face to face with the student, and will also be submitted electronically for official records.

Reviewed November 2019
## WPB VAMC RADIOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1020</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Sean Martinez, MD (<a href="mailto:Sean.Martinez@va.gov">Sean.Martinez@va.gov</a>)</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-886-1202</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito, <a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>, 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Surgery and Internal Medicine Clerkships (RMC) or Radiology Clerkship (Miami)</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>U.S. VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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</table>

**Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.**

### Overview:
Students will be able to take a 2 week elective block during their fourth year in diagnostic radiology. During the block, students will spend their time in the department of radiology with the faculty and radiology technicians. They will be responsible for working with radiologists and compiling the medical history as appropriate for the imaging modality.

### Course Design:
This Course is designed to provide students with opportunities in a radiology practice. They will work with the physicians in the department as well as radiology technicians. Students will be expected to see diagnostic images as well as some interventional procedures. Students should begin to develop the skills to interpret normal from abnormal films. If physicians come to speak with the radiologist, as students progress, they will be asked to discuss results with the physicians requesting information. Furthermore, students will have an opportunity to rotate with the Radiology technicians where they can learn what goes into each individual study.

### Goals:
The Goal of this elective is to have fourth year students gain a better understanding of diagnostic radiology modalities, the effects of radiation, appropriateness of different types of studies and begin to differentiate normal from abnormal on common imaging modalities.

### Objectives:
- **Medical Knowledge**
  - Student will be able to identify normal anatomy on imaging modalities including, but not limited to chest X-ray, CT of brain, chest and abdomen/pelvis
  - Student will be able to differentiate radiation exposure for different imaging modalities
  - Student will be able to identify common pathologic abnormalities on chest and abdominal plain films, including but not limited to:
    - Pneumonia
    - Congestive Heart Failure
    - Pneumothorax
• Pleural Effusion
• Cardiomegaly
• Ileus/Obstruction
• Nephrolithiasis
• Perforation
• Student will be able to identify common pathologic abnormalities on Chest CT including but not limited to:
  ▪ Pneumonia
  ▪ Large Pulmonary Embolism
  ▪ Pulmonary fibrosis
  ▪ Pleural Effusion
  ▪ Lymphadenopathy
• Student will be able to identify common pathologic abnormalities on Brain CT, including but not limited to:
  ▪ Intracranial hemorrhage:
    ▪ Subdural Hematoma
    ▪ Epidural Hematoma
  ▪ Ischemic stroke
• Student will be able to identify common pathologic abnormalities on Ultrasound of the abdomen: Hydronephrosis
  ▪ Ascites
• Patient care
  • Student will describe the indications and contraindications for several imaging techniques including:
    ▪ CT scans with and without contrast
    ▪ MRI scans with and without contrast
    ▪ Ultrasound
    ▪ Nuclear Medicine imaging
    ▪ Ultrasound
  • Student will be able to select the most appropriate imaging technique for a variety of common diagnostic evaluations:
    ▪ Pulmonary Embolism
    ▪ Stroke (Acute)
    ▪ Pneumonia
    ▪ Nephrolithiasis
    ▪ Cholelithiasis
    ▪ SBO/LBO
    ▪ Mesenteric ischemia/ischemic colitis
    ▪ Enteritis/Colitis
• System Based Practice:
  • Student will be able to describe the costs and resources needed for a variety of imaging modalities
  • Student will be able to select the most appropriate imaging modality with the highest value
• Professionalism:
  • Student will arrive on time, and prepare by reading appropriate information
  • Student will display appropriate and professional interactions with nurses, radiology technicians and faculty in the department of radiology
  • Student will have professional interactions with patients brought for radiologic interventions
• Problem Based Learning and Improvement
  • Student will read on patient presentations and imaging findings pertinent to pathologies that present during their rotation
• Students will self-identify areas that they struggle with and seek clarification from faculty or literature.
• Student will use evidence based practice in their approach to patient care
• Interpersonal and communication skills
  • Student will be able to communicate pertinent findings to referring physicians
  • Student will be able to communicate pertinent information to radiologist in order to optimize the medical care provided to patient.

**Location:**
VA WPB (100%)

**Participating Faculty:**
- Sean Martinez, M.D. – Clerkship Director
- Marc Friedman, M.D.
- Henry Stern, M.D.
- Albert Ammann, M.D.
- Lana Al-Karmi, M.D.
- Sabrina Browning, M.D.

**Prerequisite:**
Surgery and Internal Medicine Clerkships (RMC) or Radiology Clerkship (Miami)

**Expectations:**
• Students on this rotation are expected to come with an interest in learning as well as an area of radiology that they would like focus on during their elective. This area of focus should be emailed to Sean Martinez several weeks prior to the elective at Sean.Martinez@va.gov.
• Students are expected to conduct themselves in a professional manner. They are to notify the course director of any anticipated absences.
• They are to treat all patients, staff and physicians with respect.

**Student Evaluation and Grading:**
• Students will be evaluated by the attending physicians with whom they interact. Students will be evaluated based on their ability to begin to recognize normal anatomy and common pathological findings with an emphasis on appropriate utilization of imaging. This will allow the attending to evaluate both medical knowledge and patient care. Attendance and punctuality will be used to assess professionalism. Students should also begin to develop skills in communicating findings and plans to referring physicians which will be observed by attending physician, contributing to the grade in communication skills.
• The final evaluation will be discussed face to face with the student, and will also be submitted electronically for official records.

Reviewed November 2019
RADIATION ONCOLOGY
RADIATION ONCOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 915</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Cristiane Takita, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-4337</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:YCuervo@med.miami.edu">YCuervo@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Yamira Cuervo [SCCC - suite 1500]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVES:</td>
<td>4 weeks</td>
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<tr>
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Overview:
The objective of the Radiation Oncology elective is to familiarize the student with the treatment of neoplastic disease in general, and specifically with the role of ionizing radiation in treating cancer and related disorders.

Course Design:
The course is tailored to the needs of individual students, with an emphasis on providing a general introduction to Radiation Oncology for students either interested in other medical fields, other oncologic specialties, or considering Radiation Oncology as a field specialization.

Goals/Objectives:
Students will be exposed to and will participate in the treatment of patients with neoplastic disease using radiation modalities.

Location: Experiences occur at JMH (25%) and UMHC/SCCC (75%).

Prerequisite: None

Expectations:
The student is expected to integrate all areas of activity within the department and to perform a comprehensive oncologic history and physical examination. They will need to formulate a basic approach to management for a variety of oncologic problems. The student will be encouraged to participate in patient-planning exercises and will be exposed to the practice and principle of CT-simulation for treatment planning and tumor localization. Opportunities for the student will be available to engage in clinical research, which may lead to a published manuscript or a presentation at a regional/national meeting.

Student evaluations and grading:
Students will be evaluated on their ability to conduct a relevant history and physical examination related to oncology and on their willingness to involve themselves in the steps needed to get the patient into treatment. For example, simulation, treatment planning, self-motivation and reading outside of the program is encouraged to increase their knowledge of radiation oncology.

Reviewed December 2019
RMC RADIATION ONCOLOGY

COURSE CODE: MDR 992
CLERKSHIP DIRECTOR: Anurag Agarwal, M.D.
TELEPHONE: 561-795-9845
EMAIL: anurag.agarwal@21co.com or A.Agarwal1@med.miami.edu
CONTACT: Joseph Sollecito, jsollecito@med.miami.edu, 561-886-1202
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITE: Core Internal Medicine and Surgery Clerkships
NUMBER OF STUDENTS: 2
AVAILABLE: All year
U.S. VISITING STUDENTS: No
INTERVIEWING TIME: 1 day (2wks) OR 2 days (4wks), with prior approval
TYPE: Clinical

Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check. However, this rotation is almost exclusively outpatient in a private-practice office setting.

OVERVIEW
This is a 2 or 4-week elective intended to expose the senior medical student to spectrum of experiences in radiation-oncology. It’s anticipated that the student will rotate through 2-3 outpatient clinic settings and be exposed to various radiation-oncology treatment modalities/technologies.

COURSE DESIGN
The student will have the opportunity to evaluate new patient consultations, under the supervision of a board-certified radiation-oncologist. The student will perform a history & physical examination. The student will be expected to read further about the specific patient’s oncology diagnosis, and discuss these concepts with the supervising MD. This will be an outpatient elective experience. Core malignancies reviewed will include, but not be limited to: breast cancer, lung cancer, prostate cancer, and CNS tumors.

Radiation technologies will include external beam radiation [using a Linear Accelerator (LINAC) with Intensity Modulated Radiation Therapy (IMRT), Image Guided Radiation Therapy (IGRT), Volumetric Modulated Arc Therapy (VMAT)], Stereotactic RadioSurgery including exposure to CyberKnife SRS, and Brachytherapy. The student will have the opportunity to interact with and learn from various team members including the Radiation Physicist, Dosimetrist, Nurses, and Radiation-therapists. The student will gain a broad perspective of how a patient progresses through a radiation-treatment course from beginning to completion. Some patients will be treated concurrently with chemotherapy and there may be overlapping medical oncology concepts that the student is exposed which span a radiation-oncology and medical-oncology spectrum. The student will be expected to attend any Tumor Board/CME conferences which occur during the timeline of the clinical rotation. The student will have direct contact, supervision, and access to the supervising board-certified radiation-oncology physician at all times.

GOALS
1. Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiology examinations, and cognitive skills as they relate to the diagnosis and treatment of various solid-organ malignancies.
2. Familiarize the medical student with different types of radiation treatments.
   a. Understand the general indications for each technology, and the basic logistics of the patient experiences as they relate to a specific treatment course
   b. Learn about potential toxicities associated with different types of radiation treatments
   c. Learn basic concepts of Radiation-Biology and Radiation-Physics as they pertain to a clinical practice setting
3. Reinforce a critical approach to the medical literature.

OBJECTIVES
1. The medical student will be expected to be familiar with the basic evaluation and management of the following disorders:
   a. Lung cancer
   b. Breast cancer
   c. CNS tumors
   d. Prostate cancer
   e. Other cancers as they pertain to particular patients
2. The medical student will be expected to have read and discuss with the radiation-oncologist the basic aspects of the following clinical problems:
   a. Potential short-term and long-term toxicities from radiation therapy
   b. How radiation and chemotherapy have a synergistic effect
   c. When is Surgery vs. Radiation vs. Chemotherapy indicated for common oncologic disease.
3. Have a working understanding of how different types of technologies are utilized in the treatment of different cancers.
4. During the last week of the rotation, the student will be expected to present a 20 minute PowerPoint presentation on an oncologic topic of her/his choice as it relates to radiation-oncology concepts, and be prepared for a follow-up question/answer session with the radiation-oncologist.

LOCATION
Outpatient private practice offices mostly limited to: Wellington (99%), Others (1%)

PARTICIPATING FACULTY
Anurag Agarwal, M.D.

PREREQUISITE
Completion of Internal Medicine and Surgery Core Clerkships

EXPECTATIONS
The student will be expected to participate in all activities (consultations, procedures, rounds, clinics, conferences) and be on time. The rotation coordinator (Dr. Anurag Agarwal) needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

STUDENT EVALUATION AND GRADING
1. The medical student will receive a written evaluation at the end of the month. This will be reviewed with the student by the faculty evaluator.
2. The student will be asked to complete an evaluation of the rotation as a whole upon completion to allow for continual improvement of the student experience.
3. Faculty performance will be evaluated by the medical student (submitted anonymously).

Reviewed December 2019
NOTE: ANY schedule changes involving ALL Surgery rotations, must be authorized by Evelyn Gotera before your schedule can be officially changed.
BURN UNIT SUB-I

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Louis Pizano, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1968</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera [JMH, East Tower #2169]</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:egotera@med.miami.edu">egotera@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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**NOTE:** ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

**Overview/Course Design:**
The Burn Service admits over 150 major injuries and 300 total patients per year. Concentration is on acute care but reconstruction is also done. Principles of critical care, infection control, nutritional support, wound care and rehabilitation are stressed. Opportunities for clinical research exist.

**Goals/Objectives:**
Students will learn how to recognize, diagnose and manage patients with burn injuries.

**Location:**
Experiences occur predominantly at JMH and Ryder Trauma Center (100%).

**Expectations:**
Students hours on the sub-internship are from 6 AM to 7PM Monday through Friday. Students are required to take night call at most every third day and weekend call at least once a month. Students will not have clinical responsibilities post call after AM rounds but may be required to stay for educational activities. Students participating in on-call responsibilities are not to exceed 80 hours per week or more than 24 consecutive hours of new patient contact, with 6 hours allowed for patient follow-up and hand-off (total of 30 hours consecutive). The students will have one day off in seven.

**Prerequisite:**
Must have completed all core clerkships.

**Student evaluations and grading:**
All students will be evaluated by the attending in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

**REPORT TO:** UM/JM Burn Center, Trauma 3B, 7:00 AM.

Reviewed November 2019
CAR DiorthoRACIC SURGERY SUB-1

COURSE CODE: MDR 919
CLERKSHIP DIRECTOR: Joseph Lamelas, M.D.
TELEPHONE: 305-585-1968
CONTACT: Evelyn Gotera [JMH, East Tower #2169]
EMAIL: egotera@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Completion of all core clerkships
NUMBER OF STUDENTS: 2
AVAILABLE: All year, EXCEPT block 7AB
U.S. VISITING STUDENTS: Yes
INTERVIEWING TIME: 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

Overview: This rotation will give the 4th year student a unique opportunity to see complex surgical procedures while learning how to care for critically ill patients.

Course Design:
The attending and resident staff will supervise the care of patients undergoing operations for coronary artery disease, congenital and acquired valvular heart disease, complex congenital heart defects, a variety of lung and esophageal diseases, trauma to the chest, and heart and lung transplants. Patients will range from premature infants to elderly adults at JMH and VA Hospitals.

Goals/Objectives: Students will learn how to recognize, diagnose and treat common cardiovascular diseases with a focus on surgical approaches.

Location: Experiences occur at UMH (100%).

Prerequisite: Must have completed all the core clerkships

Expectations:
Students hours on the sub-internship are from 6 AM to 7PM Monday through Friday. Students are required to take night call at most every third day and weekend call at least once a month. Students will not have clinical responsibilities post call after AM rounds but may be required to stay for educational activities. Students participating in on-call responsibilities are not to exceed 80 hours per week or more than 24 consecutive hours of new patient contact, with 6 hours allowed for patient follow-up and hand-off (total of 30 hours consecutive). The students will have one day off in seven.

Student evaluations and grading:
All students will be evaluated by the attending in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

REPORT TO: JMH East Tower 3072 – 8:00 a.m. to make contact with the chief resident at JMH.

Revised November 2019
**GENERAL SURGERY E I SUB-I**

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<th>COURSE CODE:</th>
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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Steven Rodgers, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1968</td>
</tr>
<tr>
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**NOTE:** ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

**Overview:**
This 4-week rotation will expose the 4th year student to a wide array of cancer problems and teach an integrated interdisciplinary approach to their management. Esophageal, hepatic, breast, and gastric carcinomas will be seen and treated in addition to melanomas and soft tissue sarcomas.

**Course Design:**
The experience will be very comprehensive with the student actively participating in the care of patients before and after surgery, as well as in the Tuesday clinic at JMH.

**Goals/Objectives:** Students will learn how to recognize, diagnose and treat common carcinomas through an integrated interdisciplinary approach.

**Location:**
Experiences occur predominantly at JMH (60%), UMH (20%) and SCCC (20%).

**Prerequisite:** Must have completed all the core clerkships

**Expectations:**
Students hours on the sub-internship are from 6 AM to 7PM Monday through Friday. Students are required to take night call at most every third day and weekend call at least once a month. Students will not have clinical responsibilities post call after AM rounds but may be required to stay for educational activities. Students participating in on-call responsibilities are not to exceed 80 hours per week or more than 24 consecutive hours of new patient contact, with 6 hours allowed for patient follow-up and hand-off (total of 30 hours consecutive). The students will have one day off in seven.

**Student evaluations and grading:**
All students will be evaluated by the attending in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

**REPORT TO:** JMH West Wing 10 – 7:00 a.m.

Revised November 2019
GENERAL SURGERY E II SUB-I

COURSE CODE: MDR 921
CLERKSHIP DIRECTOR: Josefina Farra, M.D.
TELEPHONE: 305-585-1968
CONTACT: Evelyn Gotera [JMH, East Tower #2169]
EMAIL: egotera@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Completion of all core clerkships
NUMBER OF STUDENTS: 2
AVAILABLE: All year, EXCEPT block 7AB
U.S. VISITING STUDENTS: Yes
INTERVIEWING TIME: 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

Overview:
This elective surgery service predominantly sees hepatobiliary, pancreatic problems, surgical endocrine and adrenal disease. It deals with patients with portal hypertension and biliary tract disease, and both benign and malignant conditions will be seen and treated. In addition, endocrine surgery patients will be seen, and the full spectrum of thyroid and parathyroid disease will be learned. Advanced laparoscopic skills can also be seen treating a whole spectrum of surgical problems.

Course Design:
Students have the opportunity to join evening rounds, present patients, discuss current problems and generate treatment options. Students will present didactic discussion of patient subjects to staff and colleagues weekly.

Goals/Objectives: Students will learn how to recognize, diagnose and treat the most common hepatobiliary, pancreatic, endocrine and adrenal diseases.

Location: Experiences occur predominantly at JMH (40%), Lennar (30%) and SCCC (30%).

Prerequisite: Must have completed all core clerkships.

Expectations: Students hours on the sub-internship are from 6 AM to 7PM Monday through Friday. Students are required to take night call at most every third day and weekend call at least once a month. Students will not have clinical responsibilities post call after AM rounds but may be required to stay for educational activities. Students participating in on-call responsibilities are not to exceed 80 hours per week or more than 24 consecutive hours of new patient contact, with 6 hours allowed for patient follow-up and hand-off (total of 30 hours consecutive). The students will have one day off in seven.

Student evaluations and grading: All students will be evaluated by Dr. Danny Sleeman, Dr. Josefina Farra, and Dr. John Lew on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

REPORT TO: EII team, JMH West Wing 10-7:00 a.m.

Revised November 2019
GENERAL SURGERY E III SUB-I

COURSE CODE: MDR 922
CLERKSHIP DIRECTOR: Laurence Sands, M.D.
TELEPHONE: 305-585-1968
CONTACT: Evelyn Gotera [JMH, East Tower #2169]
EMAIL: egotera@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Completion of all core clerkships
NUMBER OF STUDENTS: 2
AVAILABLE: All year, except block 7AB
U.S. VISITING STUDENTS: Yes
INTERVIEWING TIME: 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

Overview:
This elective service deals primarily with diseases of the colon, rectum, and anus. Benign disease, such as hemorrhoids, anal fistulae, anal fissures, and inflammatory bowel disease will be seen and thoroughly discussed and learned. In addition, the entire spectrum of colon and rectal cancer will be seen and treated.

Course Design:
The student will have the opportunity to learn the role of chemotherapy and radiation as it relates to colorectal cancer. Office hours with the attendings will also be available for the student. The JMH clinic also provides the student with additional time seeing patients in the outpatient setting.

Goals/Objectives: Students will learn how to recognize, diagnose and treat the most common diseases of the colon, rectum and anus.

Location: Experiences occur at JMH (50%), UMH (50%).

Prerequisite: Must have completed all the core clerkships.

Expectations:
Students hours on the sub-internship are from 6 AM to 7PM Monday through Friday. Students are required to take night call at most every third day and weekend call at least once a month. Students will not have clinical responsibilities post call after AM rounds but may be required to stay for educational activities. Students participating in on-call responsibilities are not to exceed 80 hours per week or more than 24 consecutive hours of new patient contact, with 6 hours allowed for patient follow-up and hand-off (total of 30 hours consecutive). The students will have one day off in seven.

Student evaluations and grading: All students will be evaluated by the attending in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

REPORT TO: Rounds at 7:00 a.m.-page chief resident (0051) or 3RD year resident (0054) for location.
Revised November 2019
GENERAL SURGERY E IV SUB-I

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<th>COURSE CODE:</th>
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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Jose Martinez, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1968</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera [JMH, East Tower #2169]</td>
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NOTE: ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

Overview:
This 4-week rotation will expose the 4th year student to several unique, yet related, surgical disciplines: laparoscopic surgery, surgical endoscopy, and the surgical management of morbid obesity.

Course Design:
A major component of the EIV service is the 5000 square foot training center which serves as the site for numerous educational programs geared toward the training of surgeons and residents. The Center has several state-of-the-art surgical and endoscopic simulators on which students can actually perform basic surgical skills and all types of endoscopic procedures.

Laparoscopic surgical cases range from routine gallbladder and inguinal hernia surgery to more advanced procedures such as laparoscopic donor nephrectomy for renal transplants, laparoscopic gastric bypass for morbid obesity, and solid organ removal (spleen, adrenal). Students will have the opportunity to participate in these cases and to follow the patients during the postoperative period.

All types of routine and advanced flexible endoscopic procedures are performed, and students will gain exposure to routine upper and lower endoscopy as well as therapeutic procedures such as ERCP and the control of GI bleeding.

Goals/Objectives:
Students will participate and gain exposure to laparoscopic and endoscopic surgical procedures.

Location:
Experiences occur at UMH (75%), JMH (20%) and UMHC/SCCC (5%).

Prerequisite:
Must have completed all the core clerkships.

Expectations:
Students hours on the sub-internship are from 6 AM to 7PM Monday through Friday. Students are required to take night call at most every third day and weekend call at least once a month. Students will not have clinical
responsibilities post call after AM rounds but may be required to stay for educational activities. Students participating in on-call responsibilities are not to exceed 80 hours per week or more than 24 consecutive hours of new patient contact, with 6 hours allowed for patient follow-up and hand-off (total of 30 hours consecutive). The students will have one day off in seven.

**Student evaluations and grading:**
All students will be evaluated by the attending in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

**REPORT TO:** EIV office located in the CRB, 4th floor at 8:30 AM.

Revised November 2019
MIA VAMC GENERAL SURGERY SUB-I

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 944</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Seth Spector, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1968</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:egotera@med.miami.edu">egotera@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera [JMH, East Tower #2169]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year-except block 7AB</td>
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<tr>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
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<td>TYPE:</td>
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</tbody>
</table>

NOTE: ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

Overview:
The surgical program at the VA Medical Center is a truly General Surgical Service which focuses on Open and Laparoscopic General Surgery, Surgical Oncology, Colorectal Surgery and Vascular surgery. The cases include cholecystectomies, colon resections, hepatobiliary and pancreatic surgery, complex hernia repairs, distal bypasses, aortic aneurysms and vascular stenting. In addition, appendectomies, hernias, hemorrhoid operations and an increasing number of outpatient surgeries compose our experience.

Course Design:
The emphasis during the rotation is placed on the resident and medical student education with case presentation conference held on Wednesday afternoons, teaching ward rounds daily, in addition to the Department of Surgery Grand Rounds and Morbidity and Mortality conference. Working rounds, clinics and student’s level of responsibilities will be that of a sub-intern. The participant will take call along with the PGY 1 Resident.

Goals/Objectives:
Students will learn how to recognize, diagnose and treat the most common surgical problems.

Location:
Experiences occur at the VAMC (100%).

Prerequisite:
Must have completed ALL core clerkships. Students must be fingerprinted and contact Minerva Castellano at Minerva.Castellano@va.gov 1 week prior to start date for computer access. Office: (305) 575-7158

Expectations:
Student hours on the sub-internship are from 6 AM to 7 PM, Monday through Friday. Students are required to take night call at most every third day and weekend call at least once a month. Students will not have clinical responsibilities post call after AM rounds but may be required to stay for educational activities. Students participating in on-call responsibilities are not to exceed 80 hours per week or more than 24 consecutive hours of new patient contact, with 6 hours allowed for patient follow-up and hand-off (total of 30 hours consecutive). The students will have one day off in seven.
**Student evaluations and grading:**
All students will be evaluated by the attending in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

**REPORT TO:** The VA ward 11AB at 6:30 AM.

Revised November 2019
# ORAL AND MAXILLOFACIAL SURGERY

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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Lawrence Armentano, DDS, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5326</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:LArmentano@med.miami.edu">LArmentano@med.miami.edu</a> or <a href="mailto:DRivera@jhsmiami.org">DRivera@jhsmiami.org</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Digna Rivera [JMH ACC East Bldg 2nd Floor Room 234]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2/4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME:</td>
<td>None</td>
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**Overview:**
The Department of Surgery’s Division of Oral and Maxillofacial Surgery offers the student an intense experience in Head and Neck Reconstructive Surgery, Oral and Maxillofacial Pathology, Facial Trauma and Head and Neck Anatomy. The attending and resident staff is committed to providing the student with a valuable educational experience. This is the only exposure the medical student receives regarding the problems related to the oral cavity and to oral and maxillofacial surgery, which may confront him/her at a later date in his/her career. This is an advantageous rotation for those interested in ENT, Plastic Surgery, and Ophthalmology.

**Course Design:**
Time is primarily spent in the operating rooms at Jackson Memorial Hospital and the University of Miami Hospital. We also perform surgery in the Jackson outpatient clinic on Tuesday’s and Thursday’s. The student will participate in outpatient clinical activities in the Jackson clinic, as well as attend educational conferences; Grand Rounds, Oral Pathology, Anesthesia, Anatomy, Implants, Trauma, Case Review/Record Review, Morbidity and Mortality, and Journal Club.

**Goals:**
Students will be given the opportunity to develop the clinical skills and knowledge base necessary to recognize the most common clinical conditions with an emphasis on diagnosis and management.

**Objectives:**
Medical students will learn how to recognize, diagnose and treat the most common problems related to the oral cavity and to oral and maxillofacial surgery in general, as well as when to make a referral.

**Location:**
Jackson Memorial Hospital (60%) and UHealth Tower (40%)

**Participating Faculty:**
Drs. Lawrence Armentano, Michael Peleg, Yoh Sawatari, Daniel Atallah and Robert Marx, Division Chief.

**Prerequisite:**
None
**Expectations:**
The medical student is expected to be in attendance and on time every day of the two to four week rotation. If the student must be absent during his/her rotation, he/she must get permission from Dr. Jesus Gomez and must make up the missed days, unless specifically excused by Dr. Gomez. The student is expected to participate in all activities (consultations, procedures, rounds, clinics, conferences, and lectures), and to remain in clinic until all patients have been seen and residents have been dismissed.

**Student Evaluation and Grading:**
Medical students rotating through Oral and Maxillofacial Surgery are evaluated on the following:
1. Fund of Knowledge
2. Professionalism
3. Participation
4. Attendance
5. Promptness
6. Interaction with Peers

**REPORT TO:** Jackson Memorial Hospital, ACC East Building, 2nd Floor, Room 234 @ 8:00 am. However, please contact Mrs. Digna Rivera (305-585-5326) prior to your rotation.

Reviewed December 2018
PEDIATRIC SURGERY SUB-I

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Chad Thorson, M.D./Ana-Christina Brady, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1968</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera [JMH, East Tower #2169]</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:egotera@med.miami.edu">egotera@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year, except block 7AB</td>
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<td>U.S. VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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**NOTE:** ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

**Overview:**
This very busy surgical service will allow the 4th year student the opportunity to care for common and uncommon, yet very interesting, surgical problems in the pediatric population.

**Course Design:**
The experience includes abdominal surgery, hernia surgery, and thoracic procedures. There is close supervision by the pediatric surgery attendings with daily rounds and a chance to follow patients closely. Outpatient clinics also provide for close patient follow up.

**Goals/Objectives:**
Students will learn how to recognize, diagnose and treat the most common surgical problems in the pediatric population.

**Location:** Experiences occur at JMH (100%).

**Prerequisite:** Must have completed all the core clerkships.

**Expectations:**
Students hours on the sub-internship are from 6 AM to 7PM Monday through Friday. Students are required to take night call at most every third day and weekend call at least once a month. Students will not have clinical responsibilities post call after AM rounds but may be required to stay for educational activities. Students participating in on-call responsibilities are not to exceed 80 hours per week or more than 24 consecutive hours of new patient contact, with 6 hours allowed for patient follow-up and hand-off (total of 30 hours consecutive). The students will have one day off in seven.

**Student evaluations and grading:** All students will be evaluated by the attending in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

**REPORT TO:** JMH East Tower 6B (Pediatric Surgery Special Care Unit) – 7:00 a.m; 8:00 am on weekends.

Revised November 2019
PLASTIC SURGERY ELECTIVE

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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Zubin Panthaki, M.D. (305) 243-4500</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1968</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera [JMH, East Tower #2169]</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:egotera@med.miami.edu">egotera@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine &amp; Surgery</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
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<td>U.S. VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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</table>

NOTE: ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

Overview:
This rotation provides comprehensive exposure to all facets of aesthetic plastic and reconstructive surgery at UM affiliated clinical institutions and educational venues.

Course Design:
Students participate in the pre-operative planning, operative management, and post-operative care of plastic and reconstructive surgery patients, on the wards and in the clinics; learn plastic techniques in the operating and emergency rooms. Participation in the on-call activities with the residents is optional. Students are also welcome to actively participate in all of educational programs of the division including Grand Rounds, Journal Clubs & Didactic Sessions. Medical students will be encouraged to participate in any ongoing research projects.

Goals/Objectives:
At the completion of the rotation, students should:

- Understand the basic principles of wound healing
- Understand the “reconstructive ladder” approach to any wound, from skin grafts to free tissue transfer
- Understand the basic evaluation of reconstructive and aesthetic surgical candidates

Location:
Experiences occur at JMH (60%) and UMH (40%).

Prerequisite:
Must have completed core clerkships in Internal Medicine and Surgery

Expectations:
In addition to clinical work, the senior students are required to give a 5-10 minute presentation on a subject agreed upon by the faculty and individual student.

Suggested Reading: Students will be given a basic Plastic Surgery handbook describing core knowledge in Plastic Surgery.
**Student evaluations and grading:**
All students will be evaluated by their attendance, participation and the short presentation on a plastic surgery topic of their choice.

**REPORT TO:** Contact senior resident or fellow for time and location to meet.
PLASTIC SURGERY SUB-I

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1029</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Zubin Panthaki, M.D. (305) 243-4500</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1968</td>
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<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera [JMH, East Tower #2169]</td>
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<tr>
<td>EMAIL:</td>
<td><a href="mailto:egotera@med.miami.edu">egotera@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<td>PREREQUISITE:</td>
<td>Completion of Core Clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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**NOTE:** ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

**Overview:**
The primary objective of this rotation is to promote the development and mastery of clinical core plastic, aesthetic, and reconstructive competencies and to review common reconstructive and cosmetic conditions. The practice of evidence based medicine is promoted by encouraging students to conduct literature search for current guidelines.

**Course Design:**
Sub interns are assigned to our primary teaching hospitals either University of Miami Hospital or Jackson Memorial Hospital. They will assume primary responsibility for patient care under close supervision provided by an assigned attending faculty member or senior plastic surgery resident. They are afforded the unique opportunity of collaborative management with other specialties, participate in perioperative evaluation and co management with our plastic surgical team.

Sub interns will participate in a series of educational opportunities addressing key competencies and common plastic surgery clinical conditions. These include weekly grand rounds, indications conferences, and didactic sessions, as well as monthly journal clubs. At the completion of the rotation, they will be expected to present a short presentation at grand rounds on “their favorite flap”. They participate in daily clinical activities such as rounds, handoffs, clinics, and assigned operative cases. They take part in night and weekend calls every fourth night

**Objectives:**
At the completion of the rotation, students should:
1. Gather information through relevant and focused history taking.
2. Conduct directed and complete physical examinations.
3. Order appropriate tests and to effectively interpret results.
4. Engage in clinical reasoning, propose sensible differential diagnoses and formulate appropriate therapeutic recommendations.
5. Document encounters efficiently and accurately.
7. Anticipate patient needs and organize discharge planning.
8. Ensure safe transition of care.
9. Demonstrate the understanding of the pathophysiology and natural history of human diseases.
10. Understand the interconnection and impact of cultural, psychosocial and environmental processes on disease manifestation.
11. Review and apply current literature and to place emphasis on the practice of evidence-based medicine.
12. Effectively communicate with the patient, his/her caregiver and with other physician and non-physician members of the healthcare system.
13. Efficiently coordinate multidisciplinary care through appropriate utilization of consultative and ancillary services.
14. Use information technology to access online medical information, review evidence from scientific studies and formulate appropriate management decisions.
15. Understand the risks and benefits of a procedure and to learn how to obtain informed consent.
16. Recognize the importance of quality improvement, risk management and to promote patient safety.
17. Maintain timely communication with primary care physicians, sub-specialists and consulting physicians.
18. Commit to excellence and to personal/professional growth through self-directed learning; to perform evaluation of one’s performance and develop plan for improvement.

**Location:**
- University of Miami Hospital Inpatient Service (40%)
- Jackson Memorial Hospital: Inpatient & Outpatient Service (60%)

**Participating Faculty:**
Full-time University of Miami Division of Plastic Surgery Faculty

**Prerequisite:**
Completion of Core Clerkships

**Expectations:**
- The sub intern is an integral part of the plastic surgical team. The sub-intern works under the close supervision of a plastic surgery attending or senior resident. He/she participates in the following aspects of patient care:
  - Initial evaluation (admission note, on service note…)
  - Daily management (progress notes, handoffs…)
  - Coordination of care with other specialties and ancillary services
  - Final Disposition (off service note, discharge summary, outpatient follow up…)
- The sub intern carries 3-5 patients.

**Readings:**
- A set of prerequisite reading material is assigned upon the initiation of the rotation. This will serve as the template for preparing for assigned surgical cases and patient assignments.
- A PreTest and PostTest will be administered to the student to evaluate the knowledge and the experience acquired during the rotation. This will be used mostly for program evaluation and student feedback. It will NOT be graded or used towards the student’s final evaluation.

**Student evaluations and grading:**
The supervising attending plastic surgery faculty will provide periodic verbal feedback to the sub intern over the course of the rotation and will submit a written evaluation of the sub intern at the end of the rotation.
The sub intern will complete an evaluation of the supervising attending and the rotation at the conclusion of the rotation. These evaluations will be anonymous.

REPORT TO: Contact the chief resident at JMH or fellow for time and location to meet.

Revised November 2019
SURGICAL INTENSIVE CARE UNIT

<table>
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<th>COURSE CODE:</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Gabriel Ruiz, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1968</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera [JMH, East Tower #2169]</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:egotera@med.miami.edu">egotera@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2/4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine &amp; Surgery</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year, EXCEPT block 7AB</td>
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<td>U.S. VISITING STUDENTS:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
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</table>

**NOTE:** ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

**Overview/Course Design:**
This rotation is offered to give 4th year students an introduction to the environment of the ICU and the unique subject matter that pertains to it. It also gives you the opportunity to see what happens after surgical emergencies, surgical complications, and transplants. Education is provided by morning rounds, student and housestaff presentations, reading, and by paying attention and asking questions!

**Goals/Objectives:**
- Describe systematic approach to a complicated patient
- Define techniques and complications of vascular access
- Describe basics of cardiovascular flow disorders, hemodynamic monitoring, and resuscitation
- Describe Respiratory failure, oxygenation and ventilation, and basics of mechanical ventilation
- Appreciate infection in the ICU and choice of antimicrobial therapy
- Describe basics of fluid and electrolyte disorders
- Describe basics of nutrition in the ICU

**Location:**
Students will rotate through the JMH SICU (100%).

**Prerequisite:**
Must have completed core clerkships in Internal Medicine and Surgery.

**Expectations:**
**Students’ role on the ICU team:**
- Pick-up up one to three patients to present on morning rounds.
- Strive to follow and understand all activity with all other patients.
- In the afternoon there is opportunity to watch and perform procedures and follow-up on the plan from the morning.
- To get the full ICU experience, students are required to stay for night call at least once per week. It is best to stay on the nights when the ICU fellow is on call.
• Additionally, students are expected to prepare a 15-minute talk, with handouts, once a week on a topic pertaining to one of their critically ill patients.
• Attendance at morning trauma report, M&M conferences, and noon teaching conferences is required.

**Suggested Reading:** The ICU Book, 2nd edition. Paul L. Marino.

**Student evaluations and grading:**
All students will be evaluated by the attending/ARNP in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

**REPORT TO:**  SICU-A (3rd floor, DTC) at 7 a.m. on the first day of your rotation and introduce yourself to Jennifer Kaliff, ARNP, before rounds to obtain your orientation packet.

Revised November 2019
**TAYLOR BREAST HEALTH CENTER**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Eli Avisar, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1968</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:egotera@med.miami.edu">egotera@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT/ADDRESS:</td>
<td>Evelyn Gotera [JMH, East Tower #2169]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<td>PREREQUISITE:</td>
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</table>

**NOTE:** ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

**Overview:**
This elective will consist of a 2 week or a 4 week block at the Taylor Breast Health Center. During this time, the student will have the opportunity to participate in the diagnosis and follow-up of patients with the full spectrum of breast diseases, most importantly breast cancer.

**Course Design:**
Didactic sessions will provide an introductory overview of benign breast disease and malignant breast disease. Clinical research opportunities may be available during the rotation at the student’s request. Patient interaction will be directed by the supervising physician.

**Goals:**
- Obtain a comprehensive breast-specific history
- Perform a comprehensive breast examination
- Become oriented to correct display and preliminary interpretation of mammograms and ultrasounds
- Observe needle biopsy procedures

**Objectives:**
To achieve a global understanding of multi-disciplinary care of breast disease and cancer, ideal for those interested in breast surgery, medical oncology, women’s health, breast imaging, and general medicine.

**Location:** JMH Taylor Breast Health Center, located in the first floor of the Diagnostic Treatment Center (75%) and Sylvester Cancer Center (25%).

**Prerequisite:**
Must have completed core clerkships in Internal Medicine and Surgery

**Participating faculty:**
Eli Avisar, M.D., Steven Rodgers, M.D., Susan Kesmodal, M.D., Christine Takita, M.D., Judith Hurley, M.D., Pedro Velez, M.D., Mecker Moller, M.D., Neha Goel, M.D.
Expectations:
- Arrive on time.
- Give notice of anticipated absence if applicable.
- Mature, professional demeanor and dress.

Student evaluations and grading:
There will be a pre and post clerkship examination. At the conclusion of the rotation the student will be given the opportunity to present a case at our weekly breast presentation.

REPORT TO: JMH Taylor Breast Center, 1st floor, DTC. Email Dr. Avisar the week prior for contact info.

Revised November 2019
TRANSPLANT SURGERY

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<tr>
<th>COURSE CODE:</th>
<th>MDR 930</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Rodrigo Vianna, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1968</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera [JMH, East Tower #2169]</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:egotera@med.miami.edu">egotera@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine &amp; Surgery</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>2 days (4wks), with prior approval</td>
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</table>

NOTE: ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

Overview/Course Design:
The student will have responsibilities similar to a junior house officer, under strict supervision of the Transplant Team because of the critical care of these patients. The student will be present at the operation for vascular access surgery, general surgery on transplantation patients and chronic renal failure patients, which would include bilateral native nephrectomies (usually for difficult to control hypertension), kidney, liver, pancreas, and pancreatic islet transplants, and related surgery. In addition, issues related to native organ disease – kidney, pancreas, liver, leading to need for transplantation – will be covered. There will be weekly conferences and seminars in research and clinical problems in kidney, liver, and pancreas transplantation and participation in weekly immunobiology transplant conferences.

Goals/Objectives:
Objectives will be to observe and learn about transplantation surgery.

Location: Experiences occur at JMH (100%).

Prerequisite:
Must have completed core clerkships in Internal Medicine and Surgery

Expectations:
The student will have responsibilities similar to a junior house officer, under strict supervision of the Transplant Team because of the critical care of these patients.

Student evaluations and grading:
All students will be evaluated by the attending in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

REPORT TO: JMH West Wing 15 Transplant Unit @ 7:00 a.m.

Revised November 2019
TRAUMA SURGERY

COURSE CODE: MDR 931
CLERKSHIP DIRECTOR: Gabriel Ruiz, MD
TELEPHONE: 305-585-1968
CONTACT: Evelyn Gotera [JMH, East Tower #2169]
EMAIL: egotera@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Internal Medicine & Surgery
NUMBER OF STUDENTS: 1
AVAILABLE: All year, EXCEPT block 7AB
U.S. VISITING STUDENTS: Yes
INTERVIEWING TIME: 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

Overview:
The trauma teams treat all patients requiring surgery who are admitted through the emergency room. In addition, the trauma teams are responsible for management of all major trauma victims brought to the Ryder Trauma Center, a Level-I Center.

Course Design:
This rotation will allow the student to care for major trauma victims and patients with non-trauma surgical emergencies.

Goals/Objectives:
Objectives will be to observe and learn about major trauma victim management and consults, including non-trauma surgical emergencies in the Emergency Care Center.

Location: JMH Ryder Trauma Center and Emergency Care Center (100%)

Prerequisite:
Must have completed core clerkships in Internal Medicine and Surgery

Expectations:
Students will be assigned to a fellow or chief resident and act as a sub-intern and are expected to remain until 10:00 PM on call days (staying overnight is encouraged but not required). All students are expected to participate fully in all team responsibilities.

Student evaluations and grading:
All students will be evaluated by the attending in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

REPORT TO: Ryder Trauma Center, room T-215 contact Dr. Lisette DiFilippi 305-585-1868.
Revised November 2019
TRAUMA INTENSIVE CARE UNIT

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<td>CLERKSHIP DIRECTOR:</td>
<td>Gabriel Ruiz, MD</td>
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<tr>
<td>TELEPHONE:</td>
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</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine &amp; Surgery</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>U.S. VISITING STUDENTS:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
</tr>
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<td>TYPE:</td>
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</table>

**NOTE:** ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

**Overview/Course Design:**
The students will gain an initial understanding of critical care and complex postoperative care of the critically ill trauma and surgical patient. Education is provided by morning rounds, student and housestaff presentations, reading, and by paying attention and asking questions!

**Goals/Objectives:**
- Describe systematic approach to a complicated patient
- Define techniques and complications of vascular access
- Describe basics of cardiovascular flow disorders, hemodynamic monitoring, and resuscitation
- Describe Respiratory failure, oxygenation and ventilation, and basics of mechanical ventilation
- Appreciate infection in the ICU and choice of antimicrobial therapy
- Describe basics of fluid and electrolyte disorders
- Describe basics of nutrition in the ICU

**Location:**
Students will rotate through the JMH Ryder Trauma Center TICU (100%).

**Prerequisite:**
Must have completed core clerkships in Internal Medicine and Surgery

**Expectations:**
**Students’ role on the ICU team:**
- Pick-up up one to three patients to present on morning rounds.
- Strive to follow and understand all activity with all other patients.
- In the afternoon there is opportunity to watch and perform procedures and follow-up on the plan from the morning.
- To get the full ICU experience, students are required to stay for night call at least once per week. It is best to stay on the nights when the ICU fellow is on call.
· Additionally, students are expected to prepare a 15-minute talk, with handouts, once a week on a topic pertaining to one of their critically ill patients.
· Attendance at morning trauma report, M&M conferences, and noon teaching conferences is required.

**Suggested Reading:** The ICU Book, 2nd edition. Paul L. Marino.

**Student evaluations and grading:**
All students will be evaluated by the attending/ARNP in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

**REPORT TO:** JMH Ryder Trauma Center, 2nd floor, room T-215 contact Dr. Lisette DiFilippi 305-585-1868.

Revised November 2019
VASCULAR SURGERY

COURSE CODE: MDR 960
CLERKSHIP DIRECTOR: Stefan Kenel-Pierre, M.D.
TELEPHONE: 305-585-1968
CONTACT: Evelyn Gotera [JMH, East Tower #2169]
EMAIL:egotera@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Internal Medicine & Surgery
NUMBER OF STUDENTS: 2
AVAILABLE: All year, EXCEPT block 7AB
U.S. VISITING STUDENTS: Yes
INTERVIEWING TIME: 2 days (4wks), with prior approval
TYPE: Clinical

NOTE: ANY schedule changes involving ALL General Surgery rotations must be authorized by Evelyn Gotera (see above for contact information) before your schedule can be officially changed.

Overview:
This rotation is a busy service treating the complete spectrum of vascular diseases including aneurysms of the aorta, cerebrovascular disease, mesenteric vascular disease, renovascular disease and peripheral vascular disease. In addition, endovascular procedures will be observed.

Course Design:
This rotation will allow the student to care for patients both pre-operatively and post-operatively. There will also be some experience interpreting non-invasive diagnostic tests to tailor the operation for specific vascular problems. Conferences with the attendings are held on a weekly basis.

Goals/Objectives:
Students will learn how to recognize, diagnose and treat the most common vascular diseases.

Location: The student will be at JMH (50%), VAMC (25%), and UMH (25%) hospitals.

Prerequisite: Must have completed core clerkships in Internal Medicine and Surgery

Student evaluations and grading:
All students will be evaluated by the attending in charge on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

Students are required to stay until 10 PM when on night call.

REPORT TO: JMH East Tower (Holtz Center), 3016-Vascular Surgery Office at 7:30 a.m. or JMH pager 0909 or 0906

Revised November 2019
WOUND HEALING
(Listed under both Dermatology and Surgery)

COURSE CODE: MDR 806
CLERKSHIP DIRECTOR: Hadar Lev-Tov, MD (Director)
Robert S Kirsner MD, PhD (Co-Director)
TELEPHONE: 305-243-4472
EMAIL: jpmares@miami.edu
CONTACT: Jessenia Pomares - 305-243-4472
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: None. Medicine and Surgery is preferred.
NUMBER OF STUDENTS: 1
AVAILABLE: All year EXCEPT Blocks 9B-10A and 12A-12B
U.S. VISITING STUDENTS: Yes
INTERVIEWING TIME: 1 day with prior approval
TYPE: Clinical with research opportunity if 4 week rotation

Overview:
- The student will be will have the opportunity to participate in the management of a multitude of difficult-to-heal wounds including common wounds such as diabetic foot ulcers, venous ulcers, pressure ulcers), as well as atypical wounds such as wounds due to connective tissue disease and pyoderma gangrenosum.
- Students will interview patients and identify critical pathways that will lead to the diagnosis, etiology, pathophysiology and treatment of these difficult-to-heal wounds.
- Students will learn to care for these wounds by designing treatment plans as part of a multidisciplinary team.

Course Design:
The student will spend four days a week at the University of Miami Wound Healing Center participating in the care of patients with complex wounds. The student will have the opportunity to see a multi-disciplinary approach to complex wound care working with University of Miami Dermatologists, Surgeons, Hyperbarists, Wound Nurses and Podiatrists (depending on who is staffing the wound care clinic that day). During this time, they will also spend time working with physicians performing hyperbaric medicine. Students will also attend the weekly wound clinic at Jackson Memorial. All students will meet with Dr. Lev-Tov, the course director, weekly (typically on Thursdays), and they are expected to attend wound care conferences if given and any pertinent dermatology wound care related didactic lessons if given that week as well as weekly Dermatology Grand Rounds.

Goals:
- Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiology examinations, and cognitive skills as they relate to the diagnosis and treatment of acute and chronic wounds.
- Familiarize the medical student with the care of acute and chronic wounds using various methods including:
  o Debridement, both mechanical, chemical and enzymatic, to obtain a clean non-infected wound
  o Chronic care, with a multitude of current state of the art wound care therapies using gels, dermal and epidermal substitutes, xenografts, etc.
• Familiarize the student with the care of patients with wounds of pressure, arterial, venous, and lymphatic etiologies.
• Familiarize the patient with vacuum assisted therapy biology and indications.
• Familiarize the patient with hyperbaric oxygen treatment and its current indications.
• Reinforce a critical approach to the medical literature.

Objectives:
B. The medical student will be expected to be familiar with the basic evaluation and management of the following disorders by attendance in the wound care clinic:
   • Venous leg ulcers
   • Diabetic foot ulcers
   • Pressure sores of the sacrum, ischium, greater trochanter, limbs
   • Inflammatory ulcers
   • Acute surgical and post surgical wounds

C. The medical student will be expected to have read and discussed with fellows and/or faculty members the basic aspects of the following clinical evaluations and interventions to wound healing:
   • Basic analysis of a chronic wound including staging and measurement analysis
   • Vascular examination of a limb with Doppler examination, ABIs, PVRs, and transcutaneous oxygen measurement
   • Debridement
   • Basic wound care therapy with enzymatic debriders, vacuum assisted therapy, compression, off loading and gels
   • Application of xenografts, dermal and epidermal skin substitutes.

D. Students will be evaluated on their ability to perform the following competencies:
   • Perform and interpret the findings of a problem-focused history, physical examination with completion of a medical record and a differential diagnosis.
   • Understand the multi-disciplinary approach to the care of a patient with a chronic wound.
   • Demonstrate the ability to perform effective debridement and dressing skills.
   • Perform hand hygiene before and after patient care.
   • Ability to interpret lab studies. (i.e. WBC, H/H, BUN and Cr levels and ability to describe significance).
   • Formulate and implement an appropriate plan of management for consultations and referrals.
   • Ability to make an adequate assessment of a pressure sore according to staging criteria.
   • Ability to adequately assess a chronic wound of the leg, including a vascular exam with Doppler ultrasound, and ABI
   • Ability to interpret special studies (i.e. PVRs, MRI, Bone Scan and CTs)
   • Understand and respect the ethical boundaries and interactions with patients, colleagues and employees.
   • Read, interpret and critically examine present medical and scientific literature.

Location:
UHealth Tower Wound Care Center (80%) and Jackson Memorial Hospital (20%).

Participating Faculty:
Faculty and staff from the Wound Care and Hyperbaric Medicine Clinic at the University of Miami Hospital, some of whom are also faculty in the Departments of Surgery, Dermatology, Physical Medicine/Rehabilitation, and Internal Medicine.

Prerequisite:
None. Medicine and Surgery Clerkships are preferred.
Non-UM students must apply in order to participate in this rotation. This is done by submitting a CV to the clerkship directors for review.

**Expectations:**
The student will be expected to participate in all activities (wound care clinic, procedures in clinic and operating room) and be on time. The course director needs to be informed of all absences. Professionalism as mandated by the Miller School of Medicine is expected.

**Student Evaluation and Grading:**
The medical student will receive a written evaluation at the end of the 2 weeks or month. This will be reviewed with the student by the faculty evaluator.

Revised January 2020
General Surgery BOOT CAMP – TRANSITION TO RESIDENCY

COURSE CODE: MDR 925
CLERKSHIP DIRECTOR: Rishi Rattan, MD
TELEPHONE: 305-585-1968
EMAIL: rrattan@miami.edu
CONTACT: Evelyn Gotera; egotera@med.miami.edu; 305-585-1968
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Completion of Core Clerkships, Senior Boot Camp Preferred
NUMBER OF STUDENTS: Maximum 10
AVAILABLE: Block 11A
U.S. VISITING STUDENTS: Yes
INTERVIEWING TIME: None
TYPE: Clinical

Overview:
The purpose of this course is to allow all MS4 students who match in surgical residencies or surgery preliminary internship to enter their intern year with a solid knowledge base and set of procedural skills related to preoperative, intraoperative, and postoperative care of the surgical patient. Participation in the two-week course will allow students to practice procedural and basic surgical skills, enhance their surgical knowledge, and review practices to enhance their abilities to perform confidently and competently as a new intern. This course is intended to consolidate and expand upon skills learned on the core clerkship and surgical M4 electives.

Course Design:
This two-week elective is designed to combine didactic, case-based, multidisciplinary simulations, procedural, and team-based education experiences. Real time self-assessment using feedback from instructors as well as final course evaluations will provide students with an understanding of their preparedness for internship. Novel multidisciplinary pager exercises will improve communication skills, triaging of patient management, and experience with common clinical scenarios.

Goals:
- The goal of this course is to ensure students entering a surgical internship have the clinical competencies necessary to be prepared for their first year of residency.
- This course will focus on the material suggested by the American College of Surgeons, Association of Program Directors in Surgery, and the Association for Surgical Education as essential for interns to be proficient in when entering surgical specialties.
- The content areas will align with the Association of American Medical Colleges (AAMC) Core Entrustable Professional Activities (EPAs). Seven EPAs will be the focus:
  - EPA 2: Prioritize a differential diagnosis following a clinical encounter
  - EPA 4: Enter and Discuss Orders and Prescriptions
  - EPA 8: Give or Receive a Patient Handover to Transition Care Responsibility
  - EPA 9: Collaborate as a member of an interprofessional team
  - EPA 10: Recognize a patient requiring urgent or emergent care and initiate evaluation and management
  - EPA 11: Obtain Informed Consent for Tests and/or Procedures
  - EPA 12: Perform General Procedures of a Physician

Objectives:
• Introduce MS4 students to internship roles and general responsibilities
• Consolidate and solidify fundamental skills and knowledge relevant to a surgical internship.
• Expand upon core experiences in anatomy, surgical procedures, office procedures, resuscitation techniques, critical care management, and emergent case management
• Evaluate the course through pre- and post-surveys

Location:
• CRB Departmental Conference Rooms on 4th Floor
• Rosenstiel Medical Science Building, Minimally Invasive Surgical Training & Education Center (MISTE)
• Rosenstiel Medical Science Building, Classrooms

Participating Faculty and Residents:
• Core faculty: Rishi Rattan MD
• Core Course Co-Directors: Emily Ryon MD MPH, Joshua Kronenfeld MD
• Supporting faculty: Various faculty from the Department of Surgery
• Elective Coordinator: Evelyn Gotera

Prerequisite:
• Completion of all core clerkships
• Completion of the Senior Boot Camp – Transition to Residency is preferred and recommended
• Students entering a surgical internship are preferred.

Expectations:
• Attend and participate in all classes and skills sessions during the two-week program
• Complete pre-course quiz/survey
• Complete a written evaluation at the end of the course
• Complete skills competition at culmination of course
• Excused absence based on Miller School of Medicine Criteria and with prior permission

Student Evaluation and Grading:
Grading will be Pass/Fail and based on:
• Attendance to and participation in assigned activities
• Completion of pre-course and post-course knowledge evaluation
• Completion of written evaluation of the course

Revised November 2019
HCH CARDIOTHORACIC SURGERY SUB-I

<table>
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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Irving David, M.D. and Alexander Justicz, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>954-732-1299</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:idavidmd@gmail.com">idavidmd@gmail.com</a> or <a href="mailto:Alexander.Justicz@holy-cross.com">Alexander.Justicz@holy-cross.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito, <a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>, 561-886-1202</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

Students are required to obtain clerkship director approval before registration is considered final – Please contact Joseph Sollecito prior.

Overview: This unique surgery sub-internship will allow the student to learn in a preceptor-based model about the surgical management of cardiovascular and thoracic diseases. The students will be exposed to a wide variety of surgical experiences, including open and minimally-invasive surgical approaches. The student will also engage in preoperative and postoperative assessment and treatment of patients. The students will have primary responsibility for the care and management of their patients.

Course Design: The student will work with Dr. David and Justicz and other colleagues at Holy Cross. Students will participate in rounds, scrub on OR cases, and discuss current problems and treatment options. Students will be expected to present cases demonstrating pertinent background reading.

Goals/Objectives: Students will learn how to recognize, diagnose and treat conditions encountered by the Cardiovascular and the Thoracic Surgeon. The student will also be able to develop, demonstrate and articulate appropriate operative and perioperative management of the common diseases encountered by the CV surgeon.

Location: (100%)
Holy Cross Hospital and Clinics
Jim Moran Heart and Vascular Center
4725 North Federal Highway
Fort Lauderdale, FL 33308

Participating Faculty:
- Irving David, M.D.
- Alexander Justicz, M.D.

Prerequisite: Must have completed all core clerkships.
Expectations: Students’ hours on the elective are from 6 AM to 7PM Monday through Friday and one day on the weekend. Students are required to take night call from home during the rotation on a limited basis. Students’ duty hours will not exceed 80 hours per week, and will have at least one day off in seven.

Specifically, the student will:
- act as primary provider, under the supervision of the above named faculty, of selected patients, with duties to include:
  - Perioperative evaluation
  - Order writing
  - Discharge planning
- evaluate surgical patients in the Emergency Room and present each case to the faculty member
- formulate and articulate care plans for Surgical patients
  - scrub on appropriate operations and serve as 1st or 2nd assistant
  - learn to perform appropriate post-operative wound care
  - evaluate for post-operative complications
- perform cardiovascular and thoracic surgery consultations, under the supervision of the faculty
  - demonstrate an ability to interpret chest x-rays, chest CT scans, and EKG’s

The students will also be expected to attend the following conferences:
- Medical Grand rounds
- Thoracic Oncology conference
- Combined Cardiac Surgery/Cardiology conference

Student Evaluation and Grading: All students will be evaluated by the faculty on their professionalism, clinical skills, and participation. Attendance is mandatory for all assigned conferences, rounds and/or presentations and will be taken into consideration.

Reviewed November 2019
JUPITER MEDICAL CENTER CARDIOTHORACIC SURGERY

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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>K. Adam Lee, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-886-1202</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a></td>
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<tr>
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<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine and Surgery Clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>U.S. VISITING STUDENTS:</td>
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Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

Overview:
This elective in cardiothoracic surgery will provide students the ability to learn in a preceptor based model about the management of diseases of the thorax. The student will work as an active member of the thoracic team; engaging with patients in the thoracic clinic, performing preoperative and post-operative assessment, as well as hospital rounds. The student will be introduced with hands on experience with leading edge technologies as EndoBronchial Ultra-sound (EBUS), Navigational bronchoscopy, Robotic surgery as well as VATS and open procedures.

Course Design:
The student will function as a member of the thoracic division, working closely with Dr. K. Adam Lee and colleagues at Jupiter Medical Center. Students will participate in rounds, consults, scrub on operative cases, present in tumor board and lung nodule clinic, and examine patients in clinic and hospital.

Goals:
Students will learn how to recognize, diagnose, and treat conditions involving the thorax. The student will also be able to develop, demonstrate and articulate pre-op, operative, and post-operative management as well as non-operative options for the treatment of common diseases encountered by the thoracic surgeon.

Location: (100%)
Jupiter Medical Center
1240 S. Old Dixie Hwy
Jupiter, FL 33458

Participating Faculty:
K. Adam Lee, M.D.

Prerequisite:
Internal Medicine and Surgery
**Expectations:**

- Student hours on the elective are Monday-Friday from 7:30-4pm with option to stay later with ongoing surgical cases and consults. Student duty hours will not exceed 80 hrs. per week. Specifically, the student will:
  - act as primary provider, under the supervision of the above named faculty, of selected patients, with duties to include:
    - Perioperative evaluation
    - Order writing
    - Discharge planning
  - evaluate surgical patients in the Emergency Room, clinic and present each case to the faculty member
  - formulate and articulate care plans for Surgical patients
  - scrub on appropriate operations and serve as 1st or 2nd assistant
  - learn to perform appropriate post-operative wound care
  - evaluate for post-operative complications
  - perform thoracic surgery consultations, under the supervision of the faculty
  - demonstrate an ability to interpret chest x-rays, chest CT scans, and EKG’s

The students will also be expected to attend the following conferences:

- Thoracic Oncology conference
- Lung nodular clinic conference

**Student Evaluation and Grading:**

- The medical student will receive a written evaluation at the end of the month.
- **Pass/Fail** dependent upon attendance, participation, professionalism, clinical skills, and assigned presentations.
- Attendance is mandatory for all assigned conferences and clinical activities.

Reviewed November 2019
HCH GENERAL SURGERY

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<th>COURSE CODE:</th>
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<tr>
<td>COURSE DIRECTOR:</td>
<td>Michael Perez, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>954-351-7770</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Michael.Perez@holy-cross.com">Michael.Perez@holy-cross.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito, <a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>, 561-886-1202</td>
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<td>NUMBER OF STUDENTS:</td>
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</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year, EXCEPT Block 11A</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

Please contact a minimum of a month before the start of the rotation to complete hospital specific orientation requirements. Some hospitals have significant paperwork and backgrounds checks that need to be done far in advance. There may be a costly fee for the background check.

Students must be approved by the Clerkship Director before they are considered final. Students should email to obtain prior approval.

Overview:
This elective in General Surgery will focus on Open and Laparoscopic General Surgery, Surgical Oncology, Colorectal Surgery and Vascular Surgery. The cases include cholecystectomies, colon resections, hepatobiliary and pancreatic surgery, complex hernia repairs, distal bypasses, aortic aneurysms and vascular stenting. In addition, appendectomies, hernias, hemorrhoid operations, as well as other outpatient procedures will be part of the surgery experience.

Course Design:
During this elective the student will work one on one with the assigned faculty member. This will include daily teaching rounds on the inpatient ward, pre-operative and post-operative assessments, as well as operative experience in the areas mentioned. Work round responsibilities, clinics and the student’s level of responsibilities on the wards, outpatient clinic and in the operating room will be that of a sub-intern. The student will be supervised directly by the assigned attending faculty member. Although there are no overnight call requirements, the student will be asked to participate in after-hour evaluations of emergency patients.

Goals/Objectives:
Students will learn how to recognize, diagnose and treat the most common surgical problems. In addition, the student will be able to improve his or her surgical skills.

Faculty:
Michael Perez, M.D.

Location:
Holy Cross Hospital
4725 North Federal Highway
Ft. Lauderdale, FL 33308
Holy Cross Medical Group General Surgery/Bariatric Practice
4800 NE 20th Terrace, Suite#303
Fort Lauderdale, FL 33308

**Prerequisite:**
Must have completed all the core clerkships.

**Expectations:** The student will be expected to work on a daily basis, including one weekend day. Although there is no overnight call, the student may be asked to come into the hospital for patients who require emergency intervention after hours. The student’s schedules will adhere to the duty hour regulations for medical students. Students must be provided with one day (24 hrs) in seven free from all required clinical and educational responsibilities. The student must abide by the 80 hour limit. In addition, on-site duty must not exceed 16 consecutive hours, plus an additional six hours to participate in didactic activities and the transfer of care of patients.

**Student evaluations and grading:**
All students will be evaluated by the attending in charge on their participation, professionalism, clinical skills, and medical knowledge. Attendance is mandatory for all assigned conferences and rounds.

Reviewed January 2017
UROLOGY
FEMALE PELVIC MEDICINE AND SURGERY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 934</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Laura Martin, D.O.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3670</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Jackie Meneses (Dominion Tower #501 M-814)</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jmeneses@med.miami.edu">jmeneses@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 to 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine &amp; Surgery</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<tr>
<td>U.S VISITING STUDENTS:</td>
<td>Yes</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

Overview:
Female Pelvic Medicine and Reconstructive Surgery is a surgical subspecialty within Urology and Gynecology dealing with problems of the anatomy and/or function of the pelvic floor in women. These issues may effect urination, defecation, pain sensation, and sexual function. During this elective, the senior clerk will have the opportunity to participate in the evaluation and the medical and surgical treatment of women in this patient population.

Course Design:
The rotation will be divided between outpatient clinic, the operating room, and teaching conferences.

Goals/Objectives:
Students will learn how to recognize, diagnose and treat the most common illnesses of the female genitourinary tract.

Location:
Students will rotate through the outpatient clinics and surgery at UM (75%) and surgery at JMH (25%).

Prerequisite:
Must have completed core clerkships in Internal Medicine and Surgery

Student evaluations and grading:
Dr. Martin, Dr. Amin, or Dr. Syan will evaluate students based on professionalism, clinical skills for their level, and on their level of participation (i.e. attendance at conference, punctuality for rounds, etc.)

Must check-in with Jackie Meneses one week prior to the beginning of the rotation.
All students must meet with the course director, Dr. Martin, on the first day of the rotation.

Revised November 2019
OUT-PATIENT UROLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 935</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Nicholas Hauser, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3670</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Jackie Meneses</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jmeneses@med.miami.edu">jmeneses@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 to 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine &amp; Surgery</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
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<tr>
<td>AVAILABLE:</td>
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<td>U.S VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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<td>TYPE:</td>
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</tbody>
</table>

Overview:
This elective is designed for students who are interested in learning more about urologic chief complaints and patient presentations, as well as the office-based management of many urologic disease. Students interested in Urology as a career choice should consider the Urology Sub-I (course MDR 937).

Course Design:
Students will learn to do a complete examination of the male genitourinary system. They will attend the outpatient clinics at Jackson, UM, and the VAMC where they will become familiar with office based procedures (cytoscropy, stent removal, ultrasound and biopsy, vasectomy) on both male and female patients and will have the opportunity to present their findings to both the housestaff and the faculty. They will also observe the faculty caring for patients in the private outpatient setting.

Goals/Objectives:
Students will learn how to recognize, diagnose and treat the most common illnesses of the genitourinary tract in both males and females.

Location:
Students will rotate through the outpatient clinics at Jackson (50%) and our faculty private clinics at PAC (50%).

Prerequisite: Must have completed core clerkships in Internal Medicine and Surgery

Expectations:
Supervision will be by housestaff and faculty. The student will spend about twenty percent of his/her time in the operating room. The student will attend all teaching conferences during the elective time.

Student evaluations and grading:
Students will be evaluated by the faculty based on observation and informal oral examinations. They are judged on their professionalism, clinical skills for their level, and on their level of participation (i.e. attendance at conference, punctuality for rounds, etc.)

Must check-in with Jackie Meneses one week prior to the beginning of the rotation.

Reviewed October 2019
# REPRODUCTIVE UROLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Ranjith Ramasamy, MD and Nicholas Hauser, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-4562</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Ramasamy@miami.edu">Ramasamy@miami.edu</a>, <a href="mailto:nhauser@miami.edu">nhauser@miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Jackie Meneses; <a href="mailto:jmeneses@med.miami.edu">jmeneses@med.miami.edu</a>; 305-243-6370</td>
</tr>
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<td>LENGTH OF ELECTIVE:</td>
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<td>PREREQUISITE:</td>
<td>Surgery Clerkship</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>1 day (2wks) OR 2 days (4wks), with prior approval</td>
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<td>TYPE:</td>
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</table>

**Overview:**
The Reproductive Urology elective rotation focuses on the care and treatment of urologic patients, specifically related to andrology and male fertility. The student will work with the urology residents and attending faculty in the operating rooms, wards, and clinics. The student will attend weekly urology didactic conferences on Thursday and Friday mornings.

**Course Design:**

**Patient Care**

- Accept appropriate feedback regarding surgical skills from attending physicians
- G. Demonstrate an understanding of the management of urologic cases and indications for surgical intervention.
- H. Act as surgical assistant for these types of cases, under the supervision of attending faculty and the Andrology fellow.

7. Microscopic varicocele repair
   - Testis biopsy
   - PESA
   - TESE
   - Vasectomy
   - Vasectomy reversal

- Demonstrate an understanding of managing patients in the outpatient clinic setting for a variety of common and less common urologic disease processes including male hypogonadism and male infertility

**Goals and Objectives:**

**Medical Knowledge**

- Develop an understanding of the AUA infertility and andrology guidelines and begin to apply the guidelines in clinical settings
- Develop a systematic approach for the evaluation and treatment of erectile dysfunction
- Demonstrate an ability to interpret semen analyses and indications and timing for collection
- Describe the etiology, evaluation and initial treatments available for:

  - Male factor infertility
  - Azoospermia
  - Hypogonadism
Location:
Lennar Foundation Medical Center (40%)
Jackson Memorial Hospital (20%)
Urology Clinic (40%)

Participating Faculty:
- Ranjith Ramasamy, MD
- Nicholas Hauser, MD

Prerequisite:
- Completion of all core clerkships

Expectations:

Systems-based practice
- Be familiar with the unique financial issues related to the treatment of male-factor infertility

Practice-based learning
- Attend weekly pre-operative conferences

Professionalism
- Be appropriate in dress and appearance, including:
- Develop greater comfort level performing genitourinary exam
- Demonstrate a commitment to ethical principles pertaining to patient confidentiality and informed consent

Interpersonal and communication skills
- Put patients at ease during genitourinary exam
- Develop effective communication with infertile couples
- Effectively communicate and elucidate daily plans with physician assistant
- Communicate treatment plans with attending faculty

Student Evaluation and Grading:
- The medical student will receive written feedback. This will be reviewed with the student by the faculty evaluator.
- Feedback about the rotation will be discussed with the student

Reviewed October 2019
## UROLOGY SUB-I

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 937</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Nicholas Hauser, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3670</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Jackie Meneses</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jmenezes@med.miami.edu">jmenezes@med.miami.edu</a>, <a href="mailto:nhauser@miami.edu">nhauser@miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
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<td>AVAILABLE:</td>
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<td>U.S VISITING STUDENTS:</td>
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<td>INTERVIEWING TIME:</td>
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<td>TYPE:</td>
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### Overview:
This elective is designed for those students considering Urology as a career choice, and for those interested in learning more about the University of Miami urology residency program. Students will participate in inpatient and outpatient urology at both the University of Miami and the Jackson Healthcare System. Sub-interns will participate as members of the resident team on both the UM and Jackson rotations, and will accept responsibilities and perform duties commensurate with their ability.

### Course Design:
Students will participate in regular daily rounds, assist in the operating room and outpatient clinics, and will attend teaching conferences on both Thursday and Friday mornings. Over the course of the month, approximately one week will be spent at Jackson, two to three weeks at the University hospital, and up to one week in faculty clinics or outpatient surgical settings.

### Goals/Objectives:
Students will learn how to recognize, diagnose and treat the most common illnesses of the genitourinary tract in both males and females.

### Location:
The student will rotate through the Urology services at Jackson (25%), at UMH (65%), and at the UM faculty private clinics (10%).

### Prerequisite:
Must have completed core clerkships in Internal Medicine and Surgery

### Expectations:
In addition to functioning as a sub-intern to assist the residents with daily rounds, in the operating room, and in outpatient clinics, each student will give a short didactic talk (15-20 minutes) on a urologic topic of their choice. Because Urology is an early match specialty, it is most beneficial if the student completes the rotation before November of their senior year.

### Student evaluations and grading:
Students are evaluated on their professionalism, clinical skills for their level, and on their level of participation (i.e. attendance at conference, punctuality for rounds, etc.)
All sub-interns must check-in with Jackie Meneses one week prior to the beginning of the rotation, and must meet with the course director on the first day of the rotation. Please email Dr. Hauser at nhauser@miami.edu one week in advance to arrange a meeting.

Reviewed October 2019
UROLOGY ELECTIVE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
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</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3670</td>
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<tr>
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<td>Jackie Meneses</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jmeneses@med.miami.edu">jmeneses@med.miami.edu</a></td>
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<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 to 4 weeks</td>
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<td>PREREQUISITE:</td>
<td>Internal Medicine &amp; Surgery</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>U.S VISITING STUDENTS:</td>
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</tr>
<tr>
<td>TYPE:</td>
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</table>

Overview:
This elective is designed for students who are interested in learning more about urologic chief complaints and patient presentations, and gaining exposure to both the office-based and surgical management of urologic disease. Students interested in Urology as a career choice should consider the Urology Sub-I (course MDR 937).

Course Design:
In this elective the student will have both outpatient and operating room exposure to the evaluation and management of urologic disease. Students will split their elective time between outpatient clinics and inpatient services at both JMH and UM.

Goals/Objectives:
Students will learn how to recognize, diagnose and treat the most common illnesses of the genitourinary tract in both males and females.

Location:
- JMH, including ACC Clinic (50%)
- UMH (40%)
- UM PAC faculty private clinics (10%)

Prerequisite:
Must have completed core clerkships in Internal Medicine and Surgery

Student evaluations and grading:
The housestaff and the faculty will supervise the student. Students are evaluated on their professionalism, clinical skills for their level, and on their level of participation (i.e. attendance at conference, punctuality for rounds, etc.).

Must check-in with Jackie Meneses one week prior to the beginning of the rotation.

Reviewed October 2019
MISCELLANEOUS
EXTERNSHIPS

Below is included information on applying for externships. This information is also available on the MedEd website under Important Documents for students.

Note –
MDR 912 “Externship Placeholder” – This will be used as an Externship Placeholder for scheduling purposes while a student goes through the process of applying.

MDR 815 “Externship” - Once the student has been accepted for an externship, once they present the proper paperwork to the Office of Student Affairs, this Placeholder will be changed to MDR 815 setting apart the specific dates of the externship.

EXTERNSHIP POLICY / PROCEDURE: A maximum of 12 weeks may be spent in elective time away from UMMSM. Externship time in excess of the allowable 12 weeks will be counted for credit but will not count towards fulfillment of the required 14 weeks of Electives, unless a student obtains prior written approval from the Senior Associate Dean for Undergraduate Medical Education. Externship experiences must be described in the course catalog of the host institution. No externships with physicians in private practice will be approved.

A rapidly increasing number of schools are now using the Visiting Student Application Service (VSAS) to offer and accept applications for externships. The procedure for applying to programs for both, externships at schools who use VSAS and at schools that do not, are posted on the UMMSM medical education website under the section “Important Administrative Documents for Students” – “Applying for Externships”. Also located there is information on obtaining Immunization records, BLS certification and other required documents needed for your application. You will also find online “Contact Information for Seniors on Externships” form which needs to be filled out and handed in to the Office of Student Affairs prior to your leaving.

Please refer to the Medical Education website for additional information and instructions: http://www.mededu.miami.edu/MedEd/link_pages/importantStudentDocs/
INTERNATIONAL STUDY ABROAD

Students must meet with one of the Deans of Student Affairs both prior to leaving on this elective (to review safety measures) and upon their return (to review their experience).

All students going abroad on international programs (ie, medical mission trips and others), regardless if UM or non-UM sponsored/related, must obtain proper approval from the Office of Student Affairs. Required forms can be found on the MedEd website under Important Documents for Students – “Administrative Requirements for International Study”.

MDR 996 “International Study Abroad” – Senior medical students may obtain academic credit for selected international clinical experiences. Only senior students are allowed to receive credit for such experiences. Credit is counted towards their Elective requirements. Individual rotations may be 2 or 4 weeks, and no more than a total of 8 weeks may be taken abroad. The above mentioned forms must be filled out. Additional information is also required, including written goals/objectives for the rotation, expectations, student responsibilities, location/institution for the clinical experience, how the student will be evaluated, and the name/contact of physician who will complete the evaluation form. This information needs to be presented in advance to the Senior Associate Dean for Undergraduate Medical Education for approval prior to the trip, preferably far in advance.
REMEDIATION / MAKEUP PLACEHOLDER

MDR 1004 “Remediation / MakeUp Placeholder” – This will be used as Placeholder for scheduling purposes to block out time on the calendar during which a student has been required to remediate or makeup lost time. There will be no credit granted for this time.
RESEARCH CREDIT AND DISTINCTION

Guidelines for obtaining academic credit for research are found on the subsequent pages. This information is also available on the MedEd website under Important Documents for students.

Note –
MDR 916 “Research” – Used to designate credits student has been awarded. Seniors are required to always have on their scheduled an appropriate number of credits required for graduation. Since Research Credits are frequently granted late in the Senior year, students must schedule Electives late in the year that they may drop if and when Research credit is granted.
Guidelines for Obtaining Research Credit or Research Distinction

The Miller School of Medicine encourages all medical students to participate in a research activity during their medical education. Students are eligible to receive Research Credits and to graduate with Research Distinction as a result of their efforts. Students must apply for credits or to graduate with research distinction. The Medical Student Research Committee has the responsibility to review and approve a student’s request for Research Credits and Research Distinction. The following describes the guidelines and the application process for the award of Research Credits and Research Distinction.

Research Credit

1. The student and the mentor must submit a detailed plan of the research project (not to exceed 3 pages). The plan should state the hypothesis, the specific aims, the methods, and the data analyses proposed for the project. It should also outline the student’s role in the project and note that the mentor accepts responsibility for mentoring the student. This plan should be signed by the mentor, co-signed by the student, and approved by the Medical Student Research Committee.

2. The research should be performed at UM or other academic institution approved by the committee.

3. In general, 40 hours of research effort is considered approximately 1 credit hour provided that the appropriate type of research participation has occurred. The award of 4 credit hours is typical. Only in exceptional situations will more than 4 credit hours be awarded. Credit requests of over four credit hours must have the approval of the Senior Associate Dean for Undergraduate Medical Education.

4. A short paper is to be submitted by the student at the end of the project. This paper is authored by the student who did the work and should be between 5 and 15 double spaced pages. The paper needs to discuss the hypothesis of the project, the methods used to research the project, the results of the project and the implications and conclusions of the research project.

5. A letter of support from the mentor is required. The letter should evaluate the student’s work on the project and clearly state the faculty member’s involvement in the project and the amount of time the student committed to the project.

6. The deadline for all research submission is February 1st of the student’s senior year. February 1st is also the deadline for research submission for students in the first three years of medical school. This deadline is firm and requests for research credit submitted after this deadline will not be considered by the committee.

7. M.D – Ph.D students will receive additional research credits only in unusual circumstances. Credits requests by M.D. – Ph.D. students must be approved by the Senior Associate Dean for Medical Education.

Research Distinction

1. The student and the mentor must submit a detailed plan of the research project (not to exceed 3 pages). The plan should state the hypothesis, the specific aims, the methods, and the data analyses proposed for the project. It should also outline the student’s role in the project and note that the faculty member accepts responsibility for mentoring the student. This plan should be signed by the mentor, co-signed by the student, and approved by the research committee.

2. The project must test a hypothesis as the focus of the study. The project may be done in either a basic science or clinical discipline. The student may not simply carry out a survey, data collection, write a paper on collected data for a faculty member, or review other’s opinions.

3. The project should be performed at the University of Miami or other academic institution approved by the committee.

4. A minimum time commitment of at least 4 months of full-time activity is recommended.

5. Annual progress reports must be submitted to the committee by the student.

6. Research results and conclusions should be presented at a meeting such as the Eastern Student Research Forum or other national meeting.
7. A student will write a detailed research paper as the sole author. The paper will be reviewed by the research committee and needs to contain a statement of the hypothesis, specific objectives for the project, data collection, analysis of the data and methods used, interpretation of the results, and the conclusions and implications derived from the research project. Published papers can be submitted as an appendix to the medical student’s paper. The best papers will receive distinction.

8. The final research paper submitted to the committee must be composed of a title page, an abstract, an introduction, a material and methods section, a results section, a discussion section, a bibliography of cited literature section, figure captions, figures and tables that illustrate the collected data and observations of the study.

9. A letter of support for research distinction from the mentor is required. The letter should critically evaluate the student's work on the project, clearly state the faculty member's involvement in the project, the mentoring process, and note the time commitment of the student.

10. The final deadline for all research submission is February 1st of the student’s senior year. February 1st is also the deadline for research submission for students in the first three years of medical school. This deadline is firm and requests submitted for research distinction after this deadline will not be considered by the committee.

Research Requirements for Research Credit and Research Distinction

<table>
<thead>
<tr>
<th>Requirements for Research</th>
<th>Credit</th>
<th>Distinction</th>
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</thead>
<tbody>
<tr>
<td>1. Submit a research proposal plan</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>2. Letter of support from mentor/student outlining the student role in the project</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>3. Time for research</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>4. Location of research</td>
<td>Generally @ UM</td>
<td>Generally @ UM</td>
</tr>
<tr>
<td>5. Progress reports to research committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Short paper on research to be evaluated by the Research committee</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>7. Detailed paper of the research to be judged by the research committee</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>8. Evaluation of student performance from mentor</td>
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<tr>
<td>9. Letter of support from mentor</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>10. Research to be presented at ESRF or another national or international research meeting</td>
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</tbody>
</table>

ALL DOCUMENTS SHOULD BE SUBMITTED TO THE OFFICE OF MEDICAL CURRICULUM (Julie Johnson, jjohnson2@med.miami.edu, Tel. 305-243-6180, RMSB #2187) Reviewed January 2017
CORE CLERKSHIPS
TRANSITION TO CLINICAL ROTATIONS

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 1030</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Julia Belkowitz, MD, MPH and Casandra Mateo, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>561-886-1202</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jbelkowitz2@med.miami.edu">jbelkowitz2@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Joseph Sollecito (<a href="mailto:jsollecito@med.miami.edu">jsollecito@med.miami.edu</a>)</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>Longitudinal over approximately an 8 week period, with a one week mandatory experience in June of the third year.</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Successful completion of the pre-clerkship curriculum</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>50 (the entire third year MD/MPH class)</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>U.S. VISITING STUDENTS:</td>
<td>No</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>N/A</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
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**Overview:**

- Students will take part in mandatory activities, including didactic, experiential and independent activities to prepare them to take part in clinical rotations at the Regional Medical Campus
- This experience is required for all students prior to participating in the MD/MPH third year rotations

**Course Design:**

- Activities will include:
  - BLS/ ACLS training
  - Online training modules for clinical sites
  - Physical exam practice
  - Didactic sessions including: Working with interpreters, critical thinking, writing summary statements, wellness during clinical rotations, professionalism based discussions, taking charge of your education, the medical record

**Goals/Objectives:**

- Provide students with the knowledge to transition effectively from pre-clinical to clinical curriculum and function as a part of medical teams in the clinical setting
- Provide students with the required skills to participate in the clinical curriculum at the Regional Medical Campus sites

**Location:**

- Activities will take place at varied locations including
  - UMMSM Medical Campus
  - UMMSM Regional Medical Campus in Boca Raton
  - JFK Medical Center
  - VA Medical Center in West Palm Beach
  - Holy Cross Medical Center
  - St. Mary’s Medical Center

**Participating Faculty:**
Daniel Lichtstein, MD
Gauri Agarwal, MD
Julia Belkowitz, MD, MPH
Amy Zito, MD
Other faculty and staff of the various hospital sites and training courses

Prerequisite:
Successful completion of the pre-clinical curriculum for the MD/MPH program.

Student Evaluation and Grading:
This is a pass/fail course and will be based upon completion of all required activities

Created October 2016