**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.

<table>
<thead>
<tr>
<th>Date Updated</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Comment</th>
</tr>
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<tbody>
<tr>
<td>03/18/2010</td>
<td>N/A</td>
<td>N/A</td>
<td>Initial update for year</td>
</tr>
<tr>
<td>03/18/2010</td>
<td>MDR 964</td>
<td>JFK Medical Center Infectious Disease Elective</td>
<td>New Course</td>
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<tr>
<td>03/18/2010</td>
<td>MDR 962</td>
<td>JFK Medical Center Intensive Care Unit</td>
<td>New Course</td>
</tr>
<tr>
<td>03/18/2010</td>
<td>MDR 959</td>
<td>JFK Ward Medicine</td>
<td>New Course</td>
</tr>
<tr>
<td>03/18/2010</td>
<td>MDR 961</td>
<td>VAMC Ward Medicine</td>
<td>New Course</td>
</tr>
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<td>03/18/2010</td>
<td>MDR 963</td>
<td>Obstetrics &amp; Gynecology Ambulatory Elective</td>
<td>New Course</td>
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<td>03/18/2010</td>
<td>MDR 822</td>
<td>Cardiac Catheterization Lab</td>
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<td>03/18/2010</td>
<td>MDR 853</td>
<td>Gynecology (Clinical)</td>
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<td>03/18/2010</td>
<td>MDR 889</td>
<td>Pediatric Gastroenterology &amp; Nutrition</td>
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</table>
GENERAL INFORMATION

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

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REQUIREMENTS FOR GRADUATION

GENERAL RULES: A student MUST complete a total of 82 weeks of satisfactory third & fourth year clinical work to fulfill the requirements for graduation. These 82 weeks consist of 68 weeks of core and required clerkships (the mix varies by campus) and 14 weeks of electives. Students are not allowed to receive more than 8 weeks of research credit without expressed written permission from the Office of Student Affairs.

CLINICAL COURSEWORK REQUIREMENTS – MIAMI CAMPUS:

<table>
<thead>
<tr>
<th>CORE Clerkships (42 weeks)</th>
<th>REQUIRED Clerkships (26 weeks)</th>
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</thead>
<tbody>
<tr>
<td>Internal Medicine (8 weeks)</td>
<td>Anesthesiology (2 weeks)</td>
</tr>
<tr>
<td>Surgery (8 weeks)</td>
<td>Emergency Medicine (4 weeks)</td>
</tr>
<tr>
<td>Generalist Primary Care (4 weeks)</td>
<td>Geriatrics (4 weeks)</td>
</tr>
<tr>
<td>Family Medicine (4 weeks)</td>
<td>Neurology (4 weeks)</td>
</tr>
<tr>
<td>Obstetrics &amp; Gynecology (6 weeks)</td>
<td>Radiology I (4 weeks)</td>
</tr>
<tr>
<td>Pediatrics (6 weeks)</td>
<td>Subinternship “A” (4 weeks)</td>
</tr>
<tr>
<td>Psychiatry (6 weeks)</td>
<td>Subinternship “B” (4 weeks)</td>
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</table>

Electives (14 weeks)

CLINICAL COURSEWORK REQUIREMENTS – REGIONAL MEDICAL CAMPUS:

<table>
<thead>
<tr>
<th>CORE Clerkships (48 weeks)</th>
<th>REQUIRED Clerkships (20 weeks)</th>
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<tbody>
<tr>
<td>Internal Medicine (8 weeks)</td>
<td>Inpatient Medicine (2 weeks)</td>
</tr>
<tr>
<td>Surgery (8 weeks)</td>
<td>Geriatrics (2 weeks)</td>
</tr>
<tr>
<td>Family Medicine (6 weeks)</td>
<td>Emergency Medicine (4 weeks)</td>
</tr>
<tr>
<td>Obstetrics &amp; Gynecology (6 weeks)</td>
<td>Neurology (4 weeks)</td>
</tr>
<tr>
<td>Pediatrics (6 weeks)</td>
<td>Subinternship “A” (4 weeks)</td>
</tr>
<tr>
<td>Psychiatry (6 weeks)</td>
<td>Subinternship “B” (4 weeks)</td>
</tr>
<tr>
<td>Anesthesiology (2 weeks)</td>
<td></td>
</tr>
<tr>
<td>Radiology (4 weeks)</td>
<td></td>
</tr>
<tr>
<td>Geriatrics / Palliative Medicine (2 weeks)</td>
<td></td>
</tr>
</tbody>
</table>

Electives (14 weeks)

Each core and required clerkship must be taken at a UMMSM teaching facility. Please see below regarding the Emergency Medicine waiver of this rule.

All students must complete the required clinical course work before graduation. The USMLE Step 2 CS and CK exams must be taken before graduation, though passing grades are not required. Students at the Regional Medical Campus must also complete their Professional Enrichment Experience (6 weeks).
SPECIFICS REGARDING SCHEDULING

INPATIENT MEDICINE REQUIREMENT: Students from the Regional Medical Campus are required to take 2 weeks of an inpatient medicine elective. These are identified in the following table of course labeled as “IP-M” under “Type”. If a 4 week elective is chosen, 2 weeks will count towards your inpatient medicine requirement and 2 weeks will count towards your elective requirement.

EMERGENCY MEDICINE WAIVER: Because UMMSM and JMH do not have an accredited Emergency Medicine Residency Program, students who are committed to applying to Emergency Medicine Residency Programs may request a waiver of taking our Emergency Medicine Clerkship at JMH. They instead would have to take two externships in Emergency Medicine, in addition to completing the required ACLS training. Further details are included at the end of this Manual.

EXTERNSHIP POLICY / PROCEDURE: A maximum of 12 weeks may be spent in elective time away from the University Of Miami Miller School Of Medicine. 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 Medical Student Administration. Externships 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 located at the end of this document.

All documents **must** be submitted to the Coordinator for Student Services, RMSB #2011 **prior** to one’s departure.

A grading/evaluation form will be sent to the host institution once the Office of Student Affairs receives the acceptance letter. The Coordinator for Student Services must be notified immediately if any changes/cancellations regarding an externship occur. Externship(s) will not appear on the senior schedule until all the above documents have been submitted.

FAILURE TO COMPLY WITH THIS PROCEDURE WILL RESULT IN NO CREDIT FOR THE EXTERNSHIP.

RESEARCH: The Miller School of Medicine encourages all medical students to participate in a research activity during their medical education. Students can receive either Research Credits or 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 students awarded research credit and graduating in May 2011, the deadline for submitting the final research paper is February 1, 2011.

ELECTIVES NOT DESCRIBED: Students who wish to participate in an elective that is not described in this manual must consult with their advising dean and obtain advanced written approval from the Office of Student Affairs.

For further information in regards to externships and international electives, please see the UMMSM Student Rights Responsibilities Handbook.

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 notification. 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.

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 some required courses and electives have a MINIMUM number of students required. If the minimum number of students is not met, the course will be cancelled. Please keep this in mind, especially if you decide to schedule a required course late in your senior year.

CHANGE OF SCHEDULES: Each course establishes its own add/drop policy. Any requested scheduling changes must be submitted in writing on an Add/Drop Form and given to the Coordinator for Student Services in the Office of Student Affairs, RMSB #2011. Changes in core clerkships must be authorized by the Assistant Dean for Clinical Curriculum. Changes in required or elective courses do not require the permission of the course coordinators if made prior to the “add/drop” deadline set by the coordinator. Signatures of the coordinators are required if a student seeks to add and/or drop a course after the add/drop deadline. In all cases, students who seek to add or drop a course within 2 weeks of the start of the course must obtain the written approval of the course coordinator.

No course may be dropped once it has begun without the expressed permission by the Office of Student Affairs.

For the Class of 2011, the deadline for all senior schedule changes is January 31, 2011
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 any making any changes in schedule.
ACADEMIC CALENDAR
2010-2011

Mon. June 21, 2010……………………………………… Orientation and Registration
Tue. June 22, 2010………………………………….…….. Senior Electives begin
Wed. November 24 @ 5 p.m. – Sun. Nov 28, 2010........ Thanksgiving
Mon. January 3, 2011………………………………….…… Clinical Rotations Resume
TBA………………………………….…… Rank Order List Input Deadline
Thurs, March 17, 2011 (tentative)......................... MATCH DAY
Mon. May 9 thru Fri. May 13, 2011......................... Senior Week
Sat, May 14, 2011 (tentative)................................. Miller School of Medicine Commencement Ceremony

No Guaranteed Holidays – Please check with your clerkship Director/Coordinator

No Guaranteed Holidays – Please check with your clerkship Director/Coordinator
### Senior Block Schedule 2010-2011

<table>
<thead>
<tr>
<th>Block #</th>
<th>DATES</th>
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<tbody>
<tr>
<td>1A</td>
<td>June 21 – July 4</td>
</tr>
<tr>
<td>1B</td>
<td>July 5 – July 18</td>
</tr>
<tr>
<td>2A</td>
<td>July 19 – August 1</td>
</tr>
<tr>
<td>2B</td>
<td>August 2 – August 15</td>
</tr>
<tr>
<td>3A</td>
<td>August 16 – August 29</td>
</tr>
<tr>
<td>3B</td>
<td>August 30 – September 12</td>
</tr>
<tr>
<td>4A</td>
<td>September 13 – September 26</td>
</tr>
<tr>
<td>4B</td>
<td>September 27 – October 10</td>
</tr>
<tr>
<td>5A</td>
<td>October 11 – October 24</td>
</tr>
<tr>
<td>5B</td>
<td>October 25 – November 7</td>
</tr>
<tr>
<td>6A</td>
<td>November 8 – November 21</td>
</tr>
<tr>
<td>*6B</td>
<td>November 22 – December 5</td>
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<tr>
<td>7A</td>
<td>December 6 – December 17</td>
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<td><strong>WINTER BREAK</strong></td>
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<td><strong>December 18, 2010-</strong></td>
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<td><strong>January 2, 2011</strong></td>
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<td>7B</td>
<td>January 3 – January 16</td>
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<tr>
<td>8A</td>
<td>January 17 – January 30</td>
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<tr>
<td>8B</td>
<td>January 31 – February 13</td>
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<tr>
<td>9A</td>
<td>February 14 – 27</td>
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<td>9B</td>
<td>February 28 – March 13</td>
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<td>10A</td>
<td>March 14 – 27</td>
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<td>10B</td>
<td>March 28 – April 10</td>
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<td>11A</td>
<td>April 11 – April 24</td>
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<td>11B</td>
<td>April 25 – May 8</td>
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<td>12A</td>
<td>May 9 – May 22</td>
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<td><strong>Graduation</strong></td>
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<td><strong>May 14, 2011</strong></td>
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<td>12B</td>
<td>May 23 – June 5</td>
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## COURSE CODES 2010-2011

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<thead>
<tr>
<th>COURSE CODE</th>
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<td><strong>Anesthesiology</strong></td>
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<td>MDR 712</td>
<td>Anesthesiology Clerkship</td>
<td>REQ</td>
<td>2</td>
<td>IM or SURG</td>
<td>8-10</td>
<td>JMH</td>
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<td>MDR 809</td>
<td>Anesthesiology Senior Elective</td>
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<td>4</td>
<td>ANES</td>
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<td>JMH</td>
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<td>MDR 953</td>
<td>Cardiac Anesthesiology / CV &amp; Thoracic ICU</td>
<td></td>
<td>4</td>
<td>ANES, SURG, IM</td>
<td>2</td>
<td>JMH</td>
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<tr>
<td>MDR 954</td>
<td>Pediatric Anesthesiology</td>
<td></td>
<td>2</td>
<td>ANES, IM, PED, SURG</td>
<td>2</td>
<td>JMH</td>
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<tr>
<td></td>
<td><strong>Cell Biology &amp; Anatomy</strong></td>
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<tr>
<td>MDR 807</td>
<td>Gross Anatomy (Senior Elective)</td>
<td>2/4</td>
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<td><strong>Dermatology</strong></td>
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<tr>
<td>MDR 811</td>
<td>Dermatology</td>
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<td>ALL CORES</td>
<td>6</td>
<td>JMH, VAMC</td>
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<tr>
<td>MDR 886</td>
<td>Pediatric Dermatology (also listed in Pediatrics)</td>
<td>2/4</td>
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<td>None</td>
<td>1</td>
<td>JMH</td>
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<td><strong>Education/Leadership</strong></td>
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<tr>
<td>MDR 939</td>
<td>Prof. Development for Medical Student Leaders</td>
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<td>(see Elective description)</td>
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<td><strong>Emergency Medicine</strong></td>
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<td>MDR 812</td>
<td>Emergency Medicine Clerkship</td>
<td>REQ</td>
<td>4</td>
<td>IM, SURG, PED</td>
<td>16</td>
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<td></td>
<td><strong>Family Medicine</strong></td>
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<td>MDR 828</td>
<td>Community Preventive Medicine</td>
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<td>Community</td>
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<td>MDR 816</td>
<td>Family Medicine in the Florida Keys</td>
<td>2/4</td>
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<td>FM</td>
<td>4</td>
<td>Community</td>
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<td>MDR 817</td>
<td>Family Medicine Preceptorship</td>
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<td>FM</td>
<td>4</td>
<td>Community</td>
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<tr>
<td>MDR 941</td>
<td>Primary Care of HIV/AIDS Patient</td>
<td>2</td>
<td></td>
<td>FM</td>
<td>1</td>
<td>Community</td>
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<tr>
<td>MDR 819</td>
<td>Ward Family Medicine</td>
<td>A</td>
<td>4</td>
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<td>2</td>
<td>JMH</td>
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<tr>
<td></td>
<td><strong>Human Genetics</strong></td>
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<tr>
<td>MDR 890</td>
<td>Genetics and Metabolic Diseases</td>
<td>2/4</td>
<td></td>
<td>None</td>
<td>2</td>
<td>Mailman, JMH, UM clinics</td>
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<td></td>
<td><strong>Medicine</strong></td>
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<tr>
<td>MDR 820</td>
<td>Ambulatory Internal Medicine</td>
<td>2/4</td>
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<td>None</td>
<td>1</td>
<td>JMH</td>
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<td>MDR 821</td>
<td>Arthritis</td>
<td>2/4</td>
<td></td>
<td>None</td>
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<td>JMH, VAMC</td>
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<td>MDR 823</td>
<td>Cardiology Teaching Lab—Harvey 4 week</td>
<td>4</td>
<td>IM</td>
<td>20</td>
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<td>CRME</td>
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<tr>
<td>MDR 951</td>
<td>Cardiology Teaching Lab—Harvey 2 week</td>
<td>2</td>
<td>IM</td>
<td>20</td>
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<td>CRME</td>
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<td>MDR 824</td>
<td>Cardiology Consult (JMH or VAMC)</td>
<td>IP-M</td>
<td>2/4</td>
<td>IM</td>
<td>2</td>
<td>JMH, VAMC</td>
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<tr>
<td>MDR 829</td>
<td>Coronary Care Unit (CCU)</td>
<td>IP-M</td>
<td>2/4</td>
<td>IM</td>
<td>2</td>
<td>JMH</td>
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<tr>
<td>MDR 826</td>
<td>Endocrinology, Diabetes &amp; Metabolism</td>
<td>4</td>
<td>IM</td>
<td>4</td>
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<tr>
<td>MDR 830</td>
<td>Gastroenterology</td>
<td>4</td>
<td>IM, SURG</td>
<td>3</td>
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<td>JMH, UMH, UMHC, VA</td>
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<tr>
<td>MDR 957</td>
<td>Geriatrics Clerkship</td>
<td>REQ</td>
<td>4</td>
<td>None</td>
<td>14</td>
<td>VAMC</td>
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<tr>
<td>MDR 827</td>
<td>Geriatrics (Clinical)</td>
<td>2/4</td>
<td>GER</td>
<td>2</td>
<td></td>
<td>VAMC, others</td>
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<tr>
<td>MDR 832</td>
<td>Geriatrics Supplemental Clerkship</td>
<td>REQ</td>
<td>2</td>
<td>RMC Integrated Medicine Clerkship</td>
<td>TBA</td>
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<tr>
<td>MDR 833</td>
<td>Hematology</td>
<td>2/4</td>
<td></td>
<td>None</td>
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<td>UMHC, JMH</td>
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10
<table>
<thead>
<tr>
<th>MDR</th>
<th>Elective/Rotation</th>
<th>Type</th>
<th>Credits</th>
<th>Core Sites(s)</th>
</tr>
</thead>
</table>
| 834     | Hepatology                                 | IP-M | 2/4     | ALL CORES, 2 UMHC, UMH |}
<p>| 835     | Infectious Disease Consult Service at Mt. Sinai Medical Center | IP-M | 4       | ALL CORES, 1 MSMC |
| 836     | Infectious Disease Consultation Service    | IP-M | 4       | ALL CORES, 3 JMH, VAMC |
| 964     | JFK Medical Center Infectious Diseases Elective | IP-M | 4       | ALL CORES, 1 JFK |
| 962     | JFK Medical Center Intensive Care Unit     | IP-M | 4       | ALL CORES, 1 JFK |
| 838     | Latin American Externship Elective         |      | 4       | None, 4 Latin America |
| 839     | Medical Intensive Care Unit (JMH)          | IP-M | 2/4     | ALL CORES, 3 JMH |
| 840     | Medical Intensive Care Unit (VA)           | IP-M | 2/4     | ALL CORES, 3 VAMC |
| 842     | Nephrology                                 | IP-M | 4       | None, 6 JMH, VAMC |
| 859     | Oncology                                   |      | 4       | None, 2 JMH, UMHC |
| 956     | Procedure Team Medical Student Elective    | IP-M | 2       | IM, SURG, 1 JMH |
| 843     | Pulmonary                                  | IP-M | 4       | IM, 4 JMH |
| 845     | Special Immunology                         |      | 2/4     | None, 4 JMH |
| 846     | Student Health Clinic                      |      | 2       | ALL CORES, 1 Student Clinic |
| 959     | JFK Ward Medicine                          | A    | 4       | ALL CORES, 2 JMH |
| 847     | JMH Ward Medicine                          | A    | 4       | ALL CORES, 10 JMH |
| 958     | UMH Ward Medicine                          | A    | 4       | ALL CORES, 2 UMH |
| 961     | VAMC Ward Medicine                         | A    | 4       | ALL CORES, 4 VAMC |
|         | Neurological Surgery                       | B    | 4       | ALL CORES, 4 JMH |
| 707     | Neurology Clerkship                        | REQ  | 4       | None, 14 JMH |
| 848     | Brain Injury Neurorehab                    |      | 2/4     | NEU, 2 JMH |
| 849     | Neurology Consultation                     |      | 2/4     | NEU, 2 JMH, VAMC |
| 850     | Inpatient General Neurology and Clinics    |      | 2/4     | NEU, 2 JMH, VAMC |
| 851     | Stroke Neurology                           |      | 2/4     | NEU, 2 JMH |
| 856     | Gynecologic Oncology                       | B    | 4       | ALL CORES, 2 JMH, SCCC |
| 857     | Maternal Fetal Medicine                    | A    | 4       | ALL CORES, 1 JMH |
| 963     | Obstetrics &amp; Gynecology Ambulatory Elective|      | 4       | OBG, 1 JMH |
| 858     | Reproductive Health                        |      | 2/4     | OBG, 2 UMH |
| 952     | Reproductive Endocrinology and Infertility |      | 2       | OBG, 2 JMH, UMHC |
| 955     | Urogynecology- Female Medicine and Reconstructive Surgery |      | 2/4     | OBG, 1 JMH, UMHC |
| 860     | Ophthalmology                              | B    | 4       | ALL CORES, 10 BPEI |
| 861     | Ophthalmology @ VAMC                       |      | 2/4     | None, 1 VAMC |
| 862     | Adult Orthopedic Trauma Elective           |      | 2       | 6 months of core clerkships incl SURG, 1-2 JMH |
| 863     | Adult Orthopedic Trauma                    | B    | 4       | ALL CORES, 1-2 JMH |
| 866     | Hand Surgery                               |      | 2       | 6 months of core clerkships incl SURG, 2 JMH |
| 867     | Musculoskeletal Oncology Service           |      | 2       | ALL CORES, 1 UMH, JMH |</p>
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**MISC**

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**TYPE REQ**

- **A** – Type A “Medical” Sub-internship
- **B** – Type B “Surgical” Sub-internship
- **IP-M** – Inpatient Medicine – fulfills Regional Medical Campus requirement
### Sub-internships in Medicine – Type A

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NOTE: ANY schedule changes involving ALL Anesthesiology rotations, must be authorized by Victor Chacon before your schedule can be officially changed.
ANESTHESIOLOGY CLERKSHIP (Required)

COURSE CODE: MDR 712
CLERKSHIP DIRECTOR: Edgar Pierre, MD
TELEPHONE: 305-585-1191 / FAX 305-545-6195
EMAIL: epierre1@med.miami.edu
CONTACT: Victor Chacon (vchacon@med.miami.edu)

LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Internal Medicine or Surgery
NUMBER OF STUDENTS: 8 students until Oct 24th, 10 students starting Oct 25th
AVAILABLE: All year (except Blocks 1A, 1B, 2A, & 2B)
INTERVIEWING TIME: 1 day with MANDATORY PRIOR approval
TYPE: Required Clinical

NOTE: ANY schedule changes involving ALL Anesthesiology rotations, must be authorized by Victor Chacon (see above for contact information) before your schedule can be officially changed.

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 shadow the resident during this period. When the resident is on call, the student will be expected to stay with them at least until 8:00pm. The next day, the student will be assigned another resident for the post call day. 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.

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:
Internal Medicine or Surgery

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

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.

Orientation is mandatory.
## ANESTHESIOLOGY SENIOR ELECTIVE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 809</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Edgar Pierre, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1191 / FAX 305-545-6195</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:epierre1@med.miami.edu">epierre1@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Victor Chacon (<a href="mailto:vchacon@med.miami.edu">vchacon@med.miami.edu</a>)</td>
</tr>
<tr>
<td></td>
<td>Ryder Trauma Center Room T-215</td>
</tr>
<tr>
<td></td>
<td>Phone: Same as above</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Anesthesiology Clerkship (Required)</td>
</tr>
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<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year (except Blocks 1AB &amp; 2AB)</td>
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<tr>
<td>INTERVIEWING TIME:</td>
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</table>

**NOTE: ANY schedule changes involving ALL Anesthesiology rotations, must be authorized by Victor Chacon (see above for contact information) before your schedule can be officially changed.**

### 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, the pain clinic, and the obstetric suite. The time schedule is from 7:30 a.m. to 3:30 p.m. One night or weekend call is required; however, students may take more.

A textbook will be provided to borrow:
- Essentials of Anesthesiology, by Chung and Lam
- Clinical Procedures of the Massachusetts General Hospital, by Lebowitz, Newberg and Gillette.

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

Each student will be required to write a 250-word essay on an anesthesia topic of choice.

A weekly symposium on topics of interest will be conducted for the senior students.

### 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.

**Prerequisite:**
Anesthesiology Clerkship (Required)

Reviewed March 2010
**CARDIAC ANESTHESIOLOGY/CARDIOVASCULAR & THORACIC ICU**

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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Edgar Pierre, MD</td>
</tr>
<tr>
<td>TELEPHONE/FAX:</td>
<td>305-585-6973</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:epierre1@med.miami.edu">epierre1@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Victor Chacon (<a href="mailto:vchacon@med.miami.edu">vchacon@med.miami.edu</a>/305-585-1191)</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Anesthesiology, Surgery, Internal Medicine</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year (except Blocks 1AB &amp; 2AB)</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
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</tr>
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</table>

**NOTE: ANY schedule changes involving ALL Anesthesiology rotations, must be authorized by Victor Chacon (see above for contact information) before your schedule can be officially changed.**

1. **Overview:**
   - During this rotation, the student will be exposed to the principles and the practice of cardiothoracic anesthesia, applied cardiovascular physiology and pharmacology, and the management of the cardiothoracic surgical patient in the post-surgical ICU setting.
   - The course will provide the student exposure to and experience performing the preoperative assessment, intraoperative management, and postoperative intensive care management of cardiothoracic surgical patients from the perspective of the cardiac anesthesiologist and critical care specialist. The student will work with faculty, fellows, and residents delivering anesthetic care to adult patients undergoing cardiothoracic and vascular procedures and under the supervision of the ICU attendings and fellows, and share in the responsibility for direct day-to-day ICU patient care.

2. **Course Design:**
   - The student will initially spend 2 weeks in the OR participating in the preoperative and intraoperative care of at least one CT surgery patient per day and the following 2 weeks in the Cardiac-Surgery-ICU assisting in the postoperative management of CT surgery patients.
   - **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 anesthesiology 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. Cardio-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) (OR)
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.

### 3. Goals/Objectives:
- The goal of this course is to educate students on the anesthetic considerations related to cardiothoracic surgery and familiarize the students to the management of cardiothoracic surgical patients in the post-surgical ICU setting.
- During the OR portion of the course, the student will participate in preoperative evaluations and be involved with the intra-operative management of the patient. It will also be important for the student to follow the post-operative course of the patients.
- During the ICU portion of the course, the student will make rounds each day, perform evaluations of postoperative patients, and help in their management. Students will be expected to present at daily rounds.

### 4. 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, and the post-surgical CT-ICU. Students may also be assigned to cases in the VAMC operating rooms and SICU.

### 5. 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, in addition to several additional members of the UM Dept of Anesthesiology faculty including but not limited to:
- Jonathan Katz, M.D., fellowship trained Cardiac Anesthesiologist, will be the course coordinator.
- Ricardo Martinez-Ruiz, M.D., Assistant Professor of Anesthesiology with Board Certification in Critical Care Medicine will assist Dr. Katz in coordinating the Cardiac Surgical ICU portion of the elective.
- 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.

### 6. Prerequisites:
- Anesthesiology Clerkship (Required), Internal Medicine, and Surgery

### 7. 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.

8. **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
     - Performance in simulation sessions
     - Motivation and involvement with patient management
     - Patient evaluation and presentation skills

Reviewed March 2010
PEDIATRIC ANESTHESIOLOGY

COURSE CODE: MDR 954
CLERKSHIP DIRECTOR: Jacqueline Tutiven, M.D.
TELEPHONE/FAX: 305-326-6543  Pgr: 305-750-5275
EMAIL: JTutiven@med.miami.edu / vchacon@med.miami.edu
CONTACT: Victor Chacon 305-585-1191 ; Ryder Trauma Center T-215)
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Anesthesiology, Surgery, Pediatrics, Internal Medicine
NUMBER OF STUDENTS: 2
AVAILABLE: All year (except Blocks 1AB & 2AB)
INTERVIEWING TIME: Yes – 1 day with prior notification
TYPE: Clinical

NOTE: ANY schedule changes involving ALL Anesthesiology rotations, must be authorized by Victor Chacon (see above for contact information) before your schedule can be officially changed.

1. Overview:

- This elective will introduce the subspecialty of Pediatric Anesthesiology to medical students interested in careers in Anesthesiology, Pediatrics and related specialties. The rotation will consist of a 2-week consecutive period that will expose the medical student to the basic knowledge and skills inherent to the practice of pediatric anesthesia. Techniques of basic procedural skills will be reviewed along with discussions on topics integral to pediatric peri-operative care.

- The course will provide the student exposure to and experience performing the preoperative assessment, intra- and post-operative management of pediatric surgical patients from the perspective of the pediatric anesthesiologist.

- Students will have the opportunity to complete Pediatric Advanced Life Support (PALS) Certification.* Due to the pre-set monthly schedules at the two sites (GCRME & PICU) PALS certification is offered, PALS may not be available during every Pediatric Anesthesiology rotation. If you register for the course when PALS certification is not available, after successful completion of the elective, you will be eligible to take PALS at no cost on a date it is offered at either the GCRME or the PICU which does not conflict with your other scheduled clerkships.
*Please see the GCRME website for the dates PALS is offered at that location: http://www.crme.med.miami.edu/emst_courses.html

2. 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, Cardiothoracic, Orthopedic, Trauma, and General Surgery.

- Tentative layout for the ten-day course: (subject to change based on Attending and Operative Schedules)
  - Day #1: Introduction in JMH OR #15: review of pediatric airway anatomy, intubation technique, and anesthesia machines and equipment used in the OR
  - 2 days at BPEI with Dr. Tutiven in ENT cases
- Each Wednesday at 7 am, there will be a 45-minute lecture by an Attending/Fellow/Resident on a core topic in Pediatric Anesthesiology.
  - On the second Wednesday of each rotation, students will present a short discussion based on a patient of interest they encountered during the first week of their rotation. The Fellow and the student will decide on the topic to be presented.

- At a minimum, the following topics will be discussed and reviewed with the students during the rotation. Students will be provided case-study worksheets where they will need to determine the proper fluid management, medication dosing, ABG interpretation and corrective management, etc. These worksheets will be used to stimulate discussion and reinforcement of the core learning objectives:
  - 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
  - The pediatric pre-operative assessment and care
  - PALS

- The student will be exposed to the intensive care management of pediatric surgical patients by following the post-operative course of at least one patient admitted to the PICU after a surgery that the student observed.

3. Goals/Objectives:

- The goal of this course is to educate students on the anesthetic considerations related to pediatric surgery and familiarize the students to the management of pediatric surgical patients in the pre-, intra- and post-operative settings.

- The student will participate in preoperative evaluations and be involved with the intra-operative management of the patient. It will also be important for the student to follow the post-operative course of the 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, 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.
    - 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
• List the normal vital sign ranges for infants and children
• Discuss the physiologic differences between pediatric and adult patients and understand how these differences are applied to the pre-operative evaluation, peri-operative management, and post-operative care of the pediatric patient
• Appreciate the wide range of surgically-correctable congenital anomalies and their specific pathophysiologic considerations
• List NPO times and nutritional requirements for pediatric surgical patients
• Recognize and interpret abnormal laboratory values in the pediatric population
• Recognize and treat respiratory compromise in the pediatric patient

• Clinical skills/procedure goals:
  • Perform a complete pre-operative history and physical 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 for 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:
    o Mask ventilation
    o LMA placement
    o Endotracheal intubation
  • Assess post-op pain and assist in management of pain in a post-op pediatric patient.

• PALS Certification (*not available during all Pediatric Anesthesiology rotations)
  The following excerpt is taken from the AHA website:
  
  **PALS Course Description:**
  The completely redesigned American Heart Association Pediatric Advanced Life Support course is based on new science evidence from the 2005 AHA Guidelines for CPR and ECC and a new teaching methodology. The goal of the PALS course is to aid the pediatric healthcare provider in developing the knowledge and skills necessary to efficiently and effectively manage critically ill infants and children, resulting in improved outcomes. Skills taught include recognition and treatment of infants and children at risk for cardiopulmonary arrest; the systematic approach to pediatric assessment; effective respiratory management; defibrillation and synchronized cardioversion; intraosseous access and fluid bolus administration; and effective resuscitation team dynamics.

  **Course Length:** 14 hours approximately.

4. Location:

• The rotation will take place in several venues including, but not limited to:
  o JMH Operating Rooms designated for pediatric general surgery (OR 1-4) and pediatric cardiothoracic surgery (OR 72)
  o Pre-operative holding area (PACU)
  o Bascom Palmer Eye Institute Operating Rooms.
  o Students may also spend time in the radiology and radiation oncology wings if anesthetic care is required in those settings
  o Pediatric Intensive Care Unit
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 including but not limited to:
  - Jacqueline Tutiven, M.D., Assistant Professor of Clinical Anesthesiology; will be the course coordinator.
  - Michael Vigoda, M.D., M.B.A., Fellowship-trained Pediatric Anesthesiologist, Assistant Professor of Clinical Anesthesiology.
  - Norman J. Halliday, M.D., Fellowship-trained Anesthesiologist, Professor of Clinical Anesthesiology and Chief of Pediatric Anesthesiology division.
  - Jimmy Windsor, M.D Fellowship-trained, Assistant Professor for Pediatric Cardiac Anesthesiology.
  - Lydia Jorge, M.D., Assistant Professor of Clinical Anesthesiology, Pediatric Anesthesiology.
  - Stephan Klumpp, M.D Assistant Professor of Clinical Anesthesia, Pediatric Anesthesiology.

6. Prerequisites:

- Anesthesiology Clerkship (Required), Internal Medicine, Pediatrics, and Surgery

7. Student evaluations and grading:

- The course coordinator 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
  - Completion and discussion of case-study worksheets on Fluid management, principles of pharmacokinetics in the pediatric patient, anesthesia and the cardio respiratory system and the anesthesia machine.
  - Student presentation during scheduled Pediatric Anesthesiology Lecture on second Wednesday of course

Revised March 2010
CELL BIOLOGY AND ANATOMY
GROSS ANATOMY (Senior Elective)

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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Robert Blanks, MD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-8861</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:r.blanks@miami.edu">r.blanks@miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>RMSB, 2nd floor, #4137</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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Overview:
Intended primarily for students applying for surgical residency programs, this elective combines instruction in advanced regional anatomy with opportunities for students to develop teaching and presentation skills.

Course Design / Expectations:
Students will perform detailed dissections of selected regions of the human body, then review their dissection with Anatomy faculty. Students will also be required to prepare and present short oral presentations in PowerPoint format of the regions dissected. Upon successful completion of these requirements, students will instruct in the first and second year Anatomy courses.

Prerequisite:
None

Reviewed March 2010
DERMATOLOGY
### DERMATOLOGY

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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Brian Berman, MD, PhD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-5620 / FAX 305-243-6468</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:rblandon@med.miami.edu">rblandon@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Rosa Blandon (RMSB # 2023 R-250)</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Must have completed core clerkships</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
<td>Starts August 3, 2009 and all remaining blocks</td>
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<td>INTERVIEWING TIME:</td>
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**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 Veterans Administration 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.

**Prerequisites:**
All the core clerkships

**Expectations / Student Evaluation and Grading:**
Students are evaluated based on attendance, promptness, professionalism and participation in clinics. They will be expected to have an understanding of dermatology based on the Miami Medical Student Guide for Dermatology, which will be distributed to all rotating students. At the end of the rotation, a short quiz will be administered based on this Guide and selected from the questions at the end of this soft-covered pocket-size book. Students should have mastered the approach to the dermatologic patient, basic dermatology terminology, and the rudiments of punch and shave biopsies.

Reviewed March 2010
PEDIATRIC DERMATOLOGY

COURSE CODE: MDR 886 (This course is also listed under Pediatrics)
CLERKSHIP DIRECTOR: Jan Izakovic, M.D.
TELEPHONE: 305-243-6735 / FAX 305-545-9153
EMAIL: jizakovic@med.miami.edu
CONTACT: Maria Enamorado @ 305-243-6735
LENGTH OF ELECTIVE: 2-4 weeks
PREREQUISITE: None
NUMBER OF STUDENTS: 1
AVAILABLE: All year
INTERVIEWING TIME: Yes - 2 days maximum on 4 wk rotation
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.

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

Prerequisite: NONE

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 March 2010
EDUCATION / LEADERSHIP
PROFESSIONAL DEVELOPMENT FOR MEDICAL STUDENT LEADERS

COURSE CODE: MDR 939
CLERKSHIP DIRECTOR: Alex J. Mechaber, MD
TELEPHONE: 305-243-6180 / FAX 305-243-6748
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)
INTERVIEWING TIME: Yes
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. At the beginning of the fourth year, approximately 20 hours of 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.
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.

Revised March 2010
EMERGENCY MEDICINE CLERKSHIP (Required)  

COURSE CODE:   MDR 812  
CLERKSHIP DIRECTOR:  Larry Zaret, DO / Kathleen Schrank, MD  
TELEPHONE:    305-585-6913  /  FAX 305-585-0000  
EMAIL:    Izaret@jhsmiami.org; vedwards@jhsmiami.org; kschrank@med.miami.edu  
CONTACT: Vinessa Edwards (JMH Holtz #1195 ECC Adm. Office M-842)  
LENGTH OF ELECTIVE:  4 weeks  
PREREQUISITE:   Internal Medicine & Pediatrics  
NUMBER OF STUDENTS:  16  
AVAILABLE:      All year (every 4 weeks through Block schedule)  
INTERVIEWING TIME: Scheduling is flexible with at least 2 weeks advanced notice to accommodate a max. of 2 interviews. Orientation day, 2 ACLS days, Sim Lab, and the final Friday – Case Presentation and Final Exam cannot be missed or rescheduled.  
TYPE:     Required/Clinical  

Overview:  
The Emergency Medicine four-week rotation will provide both classroom teaching 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 or senior resident. 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 component and will include 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 pre-hospital emergency care with a Fire Rescue EMS crew. The EM rotation will include:

- shifts in all emergency areas (ER-A, ER-B, ER-C, Express Care, Pediatrics)  
- 1 eight-hour shift with an EMS crew  
- ACLS course (2 days) at the Gordon Center for Research in Medical Education  
- required classroom sessions (lectures, skills labs, case conferences)  
- 2 four-hour simulation lab sessions (the second with grades)  
- written examination  
- Emergency Response to Terrorism Class and Computer Modules  

Scheduling/Attendance:  
Specific shifts are assigned, so that only one student is working in each treatment area per shift. Scheduling of shifts for the entire rotation is completed one week prior to start date. Therefore, specific requests must be received at least two weeks prior to the start date. We cannot guarantee that all requests will be accommodated. 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 3 skills labs) and 2 ACLS days (usually the first Tuesday and first Friday of each rotation unless otherwise specified), the two Sim Lab Days per student, 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 or Coordinator. 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 Vinessa Edwards, the Coordinator.

If for any reason, a student misses ACLS class as scheduled, the student is responsible for scheduling and paying the cost for another 2-day ACLS class provided by an American Heart Association-approved sponsor, which must include BLS and a written examination; advise the Coordinator of those dates; and turn in the final ACLS grade to the Coordinator, when complete. Completion of ACLS certification is a UM requirement for graduation.

Orientation: MANDATORY SESSION.
At least one week prior to the start of your rotation, the Coordinator, Vinessa Edwards, will email information regarding orientation and scheduled activities of the first day. You must report to orientation at 07:00 a.m. Orientation materials, reading lists, and evaluation forms will be provided. EM textbooks are available on loan. Texts, computer access, and reference articles are available while on duty.

REQUIRED ATTENDANCE:
Classroom:
- Simulation Lab – every Thursday from 1:00 p.m. to 5:00 p.m. Practicum on the 1st and 2nd Thursday; examination on the 3rd and 4th Thursday (each student attends two Sim Lab sessions)
- Student Case Presentations to EM Faculty Members – last Friday of the rotation.
- Skills Labs (e.g. wound management, airway skills, central line, ACLS)

Course Completion:
Students will be required to submit written logs (shift attendance, patient care logs, write-ups, procedure logs, power point presentation, and course evaluation forms), and to return the textbooks 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. Zaret, the Director. A final examination (multiple choice questions) will be given on the last Friday of the rotation combining EM, suture skills, airway skills, and simulation lab questions. Textbooks must be returned on the day of the final exam or the student is responsible for the cost. All other documentation must be turned in within 5 business days after the rotation ends, or grade will be submitted as an incomplete.

End of Rotation:
You can be scheduled up to the 4th Sunday of the rotation, which ends at 11 p.m. on that day.

Prerequisite:
Internal Medicine and Pediatrics

Revised March 2010
EMERGENCY MEDICINE ORIENTATION DATES
2009/2010

Orientation Dates for the 2009/2010 school year are as follows:

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>Tuesday, June 22, 2010</td>
</tr>
<tr>
<td>Monday, July 19, 2010</td>
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<tr>
<td>Monday August 16, 2010</td>
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<tr>
<td>Monday, September 13, 2010</td>
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<tr>
<td>Tuesday, October 12, 2010</td>
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<td>Monday, November 8, 2010</td>
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<td>Monday, December 6, 2010</td>
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<td>Tuesday, January 18, 2011</td>
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<td>Tuesday, February 15, 2011</td>
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<td>Monday, March 14, 2011</td>
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<tr>
<td>Monday, April 11, 2011</td>
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<td>Monday, May 9, 2011</td>
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FAMILY MEDICINE
COMMUNITY/PREVENTIVE MEDICINE
Sociocultural Answers to Urban and Rural Effectiveness

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 828</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Arthur Fournier, M.D./Terri Schilthorn, M.S.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-597-3635</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Sira Abraham 8600 NW 53 Terrace, Suite 200 Miami, FL 33161</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:sabraham@mdahec.org">sabraham@mdahec.org</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
<td>30</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes 3-5 days on 4 wks rotation with permission</td>
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<td>TYPE:</td>
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</table>

**Goal:**
Learn how primary care delivery must adapt to the specific population being served in order to maximize effectiveness.

**Objectives:**
- Provide students an opportunity to participate in and objectively review the present health care system as it addresses the health care needs of underserved populations.
- Expose students to a comprehensive approach of health care delivery from an applied socio-cultural perspective.
- Improve students’ diagnostic skills to address both symptom and cause of presenting problems.
- Broaden students’ understanding of curative medicine as it applies to preventable health care problems including not only the therapeutic treatment of the symptom, but also the necessary and appropriate health education and community outreach/referrals needed to eliminate the cause.
- Teach students appropriate preventive medicine methodologies.

**Course Design:**
This two or four week elective is an ideal opportunity to introduce medical students to a holistic approach of clinical and preventive health care delivery within the broader context of socio-cultural understanding. Students will be providing direct patient care, and will be precepted on a one-to-one basis.

This program will feature a cross-cultural comparison of health care delivery in urban and rural primary care settings. A focus will be placed upon the needs of undeserved populations of differing socio-cultural backgrounds, to include the following: Migrant/Farmworkers, Hispanic or Haitian Immigrants, and Inner-City/Rural African Americans.

An emphasis will be placed on health care delivery from a community-oriented perspective and from the patient’s point of view, given the socioeconomic constraints, ethnic belief system and other factors effecting one’s health and well-being. This elective will integrate training in clinical/preventive medicine with a socio-cultural preparation often lacking in medical education, yet necessary to enhance professional effectiveness as a physician. It will serve to demonstrate how this understanding impacts the availability, accessibility, and adaptability of health care services, and how this in turn influences provider effectiveness.

**Location**
Federal Qualified Health centers, community health centers and clinics.
**Prerequisite:**
None

**Expectation**
Students enrolled in this course should contact course coordinator Sira Abraham via email at least 2 weeks prior to the start of the rotation.
Students will be provided a binder at orientation with reading materials that will be discussed each week at the reflection classes. Students are expected to read these materials prior to the classes.
Student will work at their clinical site for 8 hours per day 5 day a week.

**Student Evaluation and Grading:**
Students will be evaluated by their preceptor using a written standardized form. Students will be evaluated on their clinical competence, professionalism, reliability, peer relations and attendance. The student’s grade is based on the subjective evaluation of their preceptor in relation to the criteria mentioned above.

Revised March 2010
FAMILY MEDICINE IN THE FLORIDA KEYS

<table>
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<th>COURSE CODE:</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 / FAX 305-243-6871</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:asanto@med.miami.edu">asanto@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Andrea Santo (HPG #420)</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks (based on availability)</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Family Medicine Clerkship</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>Based on availability</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes (3 days max-strictly enforced), due to travel distance to Miami, we recommend arrangements be made from Marathon or Key West Airport.</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</table>

**NOTE:** ANY schedule changes involving ALL Family Medicine rotations must be authorized by Andrea Santo (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:**
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 over the past five years and have attended annual 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.
Prerequisite:
Family Medicine Clerkship

Revised March 2010
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<th>COURSE CODE:</th>
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<tr>
<td>CONTACT:</td>
<td>Andrea Santo (HPG 420)</td>
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<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
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<td>PREREQUISITE:</td>
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<td>INTERVIEWING TIME:</td>
<td>Yes - 2 days</td>
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**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:**
The student will work one-on-one with a family physician in solo or group practice in our community. A varied list of family physicians and locations in Broward, Dade and Monroe counties is available in the clerkship office.

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.**

**Prerequisite:**
Family Medicine Clerkship

Revised March 2010
PRIMARY CARE OF THE HIV/AIDS PATIENT

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<tr>
<th>COURSE CODE:</th>
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<tr>
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<tr>
<td>CONTACT:</td>
<td>Andrea Santo (HPG 420)</td>
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<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Family Medicine Clerkship</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>INTERVIEWING TIME:</td>
<td>Yes – 2 days</td>
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**NOTE: ANY schedule changes involving ALL Family Medicine rotations must be authorized by Andrea Santo (see above for contact information), before your schedule can be officially changed.**

**Overview:**
This two week elective focusing on the primary care of HIV/AIDS patients will give students the opportunity to acquire greater skills in the ambulatory care of HIV/AIDS.

**Course Design:**
Through this clerkship, students will participate in a day of orientation designed to introduce them to the clerkship and to provide them with basic didactic information. Subsequently, students will spend the majority of their time with community or hospital based physicians who have the care of HIV/AIDS patient as a main focus in their practice.

Whenever appropriate, students will attend departmental conferences, seminars, grand rounds, or other relevant educational activities taking place on the UMMSM campus, in the community, or in the surrounding areas. Students will also conduct site visits to agencies or organizations specializing in providing support to HIV/AIDS patients in order to become familiar with available community resources. Hours are approximately 8:00 A.M. - 5:00 P.M. Monday through Friday.

**Course Objectives:**
After completing this elective, students will be able to:
1. Describe and discuss the epidemiological data of the HIV epidemic in Florida, the U.S., and the world.
2. Identify those problems, epidemiological and clinical, associated with HIV infection in women.
3. Discuss the goals and objectives of pre-and post-test counseling.
4. Effectively elicit a sexual and drug use history in a non-judgmental manner.
5. List and discuss the major psychosocial issues for HIV infected individuals, their families, significant others, and caregivers.
6. Identify the central nervous system complications of HIV/AIDS.
7. Identify the particular behaviors that place people at high risk for HIV, and discuss the factors that help or inhibit prevention efforts in each area.
8. Identify the link between HIV infection and other sexually-transmitted diseases.
9. Describe the goals of anti-retroviral therapy and review the major adverse reactions to the most commonly prescribed medications.
10. Explain the risk of occupational exposure to HIV and the means of minimizing that risk.
11. Outline the major opportunistic infections, malignancies and neurological complications of HIV infection.
12. Discuss the role of prophylaxis in the care of the HIV infected patient.
Prerequisite:
Family Medicine Clerkship
WARD FAMILY MEDICINE

[TYPE A]

<table>
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<tr>
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</tr>
<tr>
<td>CONTACT:</td>
<td>Andrea Santo (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>
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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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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes – 2 days</td>
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<td>TYPE:</td>
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</table>

NOTE: ANY schedule changes involving ALL Family Medicine rotations must be authorized by Andrea Santo (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:
The student will work on the Family Medicine inpatient unit (South Wing 8) and other floors at the medical hospital center) 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:
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:
  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 FinalDisposition (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.

Revised March 2010
HUMAN GENETICS
GENETICS AND METABOLIC DISEASES

COURSE CODE: MDR 890
CLERKSHIP DIRECTOR: Stephanie Sacharow, MD / Mustafa Tekin, MD
TELEPHONE: 305-243-2559   FAX 305-243-2523
EMAIL: ssacharow@med.miami.edu, mtekin@med.miami.edu
CONTACT: Lourdes Acosta [Mailman Center Rm. #5050 D-820]
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITE: None
NUMBER OF STUDENTS: 2
AVAILABLE: All year
INTERVIEWING TIME: Yes - 2 days
TYPE: Clinical, with exposure to Cytogenetic laboratory

Overview: This elective exposes students to diagnosis and management of a variety of genetic syndromes, inheritable metabolic diseases 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, Specialty Genetics Clinics at UM, and the Jackson Memorial Hospital wards. The specialty clinics include Neurogenetics clinic, craniofacial clinic, Genodermatosis clinic, Cancer Genetics clinic, Muscular Dystrophy clinic, Fragile X clinic, Cardiovascular Genetics 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, UM clinics, JMH clinics and in-patients.

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 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. 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 cancer cell progression, and Molecular genetics analysis of
Mendelian and complex inheritance. Skills in identification of common syndromes. Skill 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 2009
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** - 305-585-6498 or email at mgarcia11@med.miami.edu. Please contact her for further questions and information if needed.
   b. **Faculty Coordinators: Yvonne Diaz, MD and Marco Gonzalez, MD**

2. **Conferences:** Conferences generally run from 8 to 9am in ACC West 302. The content and exact dates vary so, you should refer to the schedule provided. Common topics include issues in women’s health, ambulatory morning report, and preoperative evaluation in the ambulatory setting among others. In additions, students are invited to attend the Academic ½ day on Wednesday afternoons held at the VAMC.

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).

4. **Session specifics:** Forth year students will initially work with the residents seeing patients. Once they feel comfortable in the clinic system, they will be seeing patients independently. All patients must be presented to the supervising attending and the attending will see the patient.
   a. **MAC:**
      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 MAC appointment if they cannot be scheduled with a resident in continuity clinic in a timely manner.
iii. **Walk-ins:** Patients with acute medical complaints. Visit should be focused on the presenting complaint. Patients should be referred to their primary care physician for follow-up based on their assigned clinic (refer to zip code list).

iv. **ER follow-up:** These patients were recently discharged from the ER. Patient visits should be focused on the complaint that brought them to the ER. Follow-up of these patients should be at their assigned primary care site as dictated by their zip code.

b. **Hospital Discharge:** Patients in this clinic have recently been discharged from the inpatient setting. Care should be focused on their inpatient issues. In addition, patients should be set up with their primary care physician for routine screening and preventive care.

c. **Preop Clinic:** Patients in this clinic are referred for preoperative assessment of surgical risk. Surgeries are elective (although some are urgent such as surgeries for malignancy).

5. **Absences or changes in the schedule**
   a. **All absences or changes must be approved by the clinic directors and/or the MAC attending supervising you.**

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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 generic proficiencies including interviewing skills, comprehensive and focused physical examination based on clinical presentation.

- **Medical Knowledge:** By the end of the ambulatory month rotation, learners should be able to:
  - Demonstrate an open, analytical approach to the acquisition and application of knowledge to patient care by participation in ambulatory morning reports and morning conference series.
  - 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 participating in patient care.
  - Developed proficiency in chart documentation.

- **Professionalism:** Learners should:
  - Demonstrate motivation for self-learning, demonstrating a desire for self-improvement.
  - Demonstrate responsiveness to others’ cultures, age, gender, and disabilities.

- **Practice-Based Learning and Improvement:** By the end of the ambulatory rotation, learners should demonstrate:
  - Assessment of patient compliance to the ambulatory regimen 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 to help improve their knowledge and/or patient care.

- **Systems-Based Practice:** Learners should:
  - Demonstrate knowledge of the Public Health Trust system and its resources to ensure optimal patient care.
  - Foster awareness of and responsiveness to the contexts and systems 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 Miriam Garcia in the ACC West Clinic 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>
</tr>
</thead>
<tbody>
<tr>
<td>MED AMB (3B)</td>
<td>MED AMB (3B)</td>
<td>MED AMB (3B)</td>
<td>WCC (3B)</td>
<td>MED AMB (3B)</td>
</tr>
<tr>
<td>ER walk-in</td>
<td>Hospital Discharge (3A)</td>
<td><strong>Academic ½ day or MED AMB (3B)</strong></td>
<td>ER walk-in</td>
<td>PRE-OP (3B)</td>
</tr>
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</table>

Conferences are held in the morning from 8 to 9 am in ACC West 302. Learners should refer to their specific schedule provided on the first day of the rotation.

**Learners may also go to the VAMC 10th floor for Academic ½ day or may stay at ACC clinic on Weds afternoons.**

Revised March 2010
ARTHRITIS

COURSE CODE: MDR 821
CLERKSHIP DIRECTOR: Elaine Tozman, M.D.
TELEPHONE: 305-243-7545 FAX 305-243-7546
CONTACT: Cristina Flores Clinical Research Building #974
EMAIL: cflores@miami.edu
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITE: None
NUMBER OF STUDENTS: 2
AVAILABLE: All year
INTERVIEWING TIME: Yes - 2 days max (1 day per week of rotation)
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 and VAMC 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 (243-7545) one week prior to rotation for schedule and book.

Reviewed March 2010
CARDIOLOGY TEACHING LAB – HARVEY
4 WEEK PROGRAM

COURSE CODE: MDR 823
CLERKSHIP DIRECTOR: Joseph Esterson, M.D.
TELEPHONE: 305-243-6491 FAX 305-243-6136
EMAIL: jesterson@med.miami.edu
CONTACT: Donna Fye dfye@med.miami.edu
Gordon Center for Research in Medical Education [D-41]
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Internal Medicine
NUMBER OF STUDENTS: 20
AVAILABLE: 4AB, 6AB, 8AB, 9AB
INTERVIEWING TIME: Yes – 3 days with prior notification
TYPE: Clinical

Overview:
This rotation consists of a comprehensive review of cardiology for the clinician. A clinician must be able to
evaluate and treat cardiology patients, as they represent the largest subset of patients they see with significant
disease.

Goals:
Each student is trained to develop the knowledge and skills needed to conduct a complete cardiovascular
history and bedside examination.

Course Design:
The rotation includes the integration of the bedside evaluation with the current indications for non-invasive and
invasive diagnostic testing. The diagnosis and management of valvular heart disease, coronary heart disease,
hypertensive heart disease, congestive failure, and congenital lesions are covered by didactic lectures, patient
presentations, and review of highly selected material during Self-Learning time, and by group and individual
sessions with Harvey, the Cardiopulmonary Patient Simulator.

Each student will read, interpret and review electrocardiograms and arrhythmias with clinical faculty. Students
are tested pre and post course, on their skills and cognitive knowledge. The UMedic multimedia computer
curriculum has been incorporated into the elective to further interactive self-learning. While patients are
evaluated, there are no specific patient responsibilities. Time during the elective is tightly structured and
scheduled. Attendance is closely monitored.

Location:
Gordon Center for Research in Medical Education

Prerequisite:
Internal Medicine Clerkship

Student Evaluation and Grading:
Evaluation is achieved by several methods, including day-to-day contact with faculty during conferences, small-group sessions and rounds.
CARDIOLOGY TEACHING LAB – HARVEY
2 WEEK PROGRAM

<table>
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<tr>
<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  FAX 305-243-6136</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>2 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
<td>5A, 5B, 7B, 10A</td>
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<td>Yes – 2 days with prior notification</td>
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</table>

**Overview:**
This rotation consists of a focused review of the most important skills in cardiology.

**Goals:**
Each student is trained to further develop and hone the skills needed to conduct a complete cardiovascular bedside examination.

**Course Design:**
The rotation includes the integration of the bedside evaluation with the current indications for non-invasive and invasive diagnostic testing. The diagnosis and management of valvular disease, coronary disease, hypertensive heart disease, heart failure and congenital lesions are covered by the UMedic multimedia computer curriculum during self-learning sessions, and by group and individual sessions with Harvey, the Cardiopulmonary Patient Simulator.

Students will learn 12-lead ECG and arrhythmia interpretation through daily small group sessions with faculty. While patients are evaluated, there are no specific patient responsibilities. Time during the elective is tightly structured and attendance is closely monitored.

**Location:**
Gordon Center for Research in Medical Education

**Prerequisite:**
Internal Medicine Clerkship

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

Reviewed March 2010
CARDIOLOGY CONSULT (JMH or VAMC)

<table>
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<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Robert J. Myerburg, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5523 / FAX 305-585-7089</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Norma Etkins    JMH Central 402 (D-39) 585-5525</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2/4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year, except 4 week elective in block 7AB</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes - 2 days max on 4 week rotation</td>
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</table>

**Overview / Course Design:**
This rotation includes consultative diagnosis, electrocardiography, and intensive medical and surgical cardiac care at either JMH or VAMC. 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.

**Location:**
JMH and/or VAMC.

**Prerequisite:**
Internal Medicine Clerkship

Reviewed March 2010
CORONARY CARE UNIT (CCU)

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Rafael Sequeira, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5530 FAX 305-585-7089</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Norma Etkins (JMH Central 402 D-62)</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<td>PREREQUISITE:</td>
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<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME:</td>
<td>Yes - 1 day per week of rotation</td>
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</table>

**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.

**Prerequisite:**
Internal Medicine Clerkship

Reviewed March 2010
ENDOCRINOLOGY, DIABETES, & METABOLISM

<table>
<thead>
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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Maria Pilar Solano, MD.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-1062  FAX 305-243-1200</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Maria Pilar Solano, MD.</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks minimum</td>
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<td>PREREQUISITE:</td>
<td>Internal Medicine clerkship</td>
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<td>AVAILABLE:</td>
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<td>INTERVIEWING TIME:</td>
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<td>TYPE:</td>
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</table>

Overview / Courses Design:
Students participate in the evaluation and care of patients with endocrine, diabetes and metabolic disorders as part of the integrated programs at JMH, UMH, UMHC, and VAMC. Activities include a structured program of student tutorial session with faculty and fellows, guided reading, and attendance at conference, in addition to supervised in-patient consultation and out-patients clinical and private care.

At the beginning of the rotation students received an orientation and are provided with information (in writing and verbally) regarding the evaluation method. Attendance is mandatory to all clinics, conferences, rounds and case presentation meetings. A sign-in sheet is provided at all meetings for accountability purposes.

Location:
JMH, UMH, UMHC, and VAMC.

Prerequisite:
Internal Medicine Clerkship

Student Evaluation and Grading:
A form is used for evaluation purposes and the students are evaluated on the following:

- **Medical Knowledge** (thoroughness in gathering information)
- **Physical Information** (identifies relevant information)
- **Laboratory Utilization** (chooses diagnostic tests appropriate to patient’s problem)
- **Patient Rapport** (communication skills and rapport)
- **Medical Team Rapport** (cooperation w/other health professionals)
- ** Dependability and Availability** (present and conscientious)
- **Professional Appearance and Conduct** (exhibits proper demeanor and attitude)
- **Overall Competence**

Evaluations are discussed with the students at the end of the rotation.

Revised March 2010
GASTROENTEROLOGY

COURSE CODE: MDR 830
CLERKSHIP DIRECTOR: Amar R. Deshpande MD
Dominion Tower, #1114
TELEPHONE: 305-243-8644 FAX 305-243-3762
EMAIL: mjohnson@med.miami.edu
CONTACT: Michelle Johnson 305-243-8644
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Internal Medicine and Surgery
NUMBER OF STUDENTS: 3
AVAILABLE: All year
INTERVIEWING TIME: Yes – 4 days maximum (1 day/week)
TYPE: Clinical

OVERVIEW
This is a 4-week elective intended to expose the senior medical student to spectrum of experiences in gastroenterology. Each week, the student will rotate through a different hospital/clinic setting and see patients/procedures based on the emphasis at that location.

COURSE DESIGN
The student 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 student will also watch endoscopy and learn its indications and findings. At the University of Miami Hospital, students will be exposed to a more private practice setting, also rounding with the fellow and attending and watching procedures, some of which are more advanced and not done at Jackson. At the University of Miami Hospital and Clinics, the student will be given an outpatient experience, both at the Inflammatory Bowel Disease clinic and while watching advanced endoscopic procedures. Finally, the student will have the opportunity to go to clinic and watch procedures at the VA. All students will meet with Dr. Deshpande, the rotation coordinator, weekly, and they are expected to attend conferences and the VA and JMH fellows’ clinics.

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 gastrointestinal diseases.
B. Familiarize the medical student with gastrointestinal endoscopy (general indications for the procedure, major risks, observation of actual endoscopy being performed)
   1. Understand the general indications for the procedure
   2. Major risks of the procedure
   3. Observation of the actual endoscopy being performed, especially if they were involved with the evaluation of the patient
C. 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:
   1. Diseases of the esophagus
   2. Acid peptic disorders
   3. Irritable bowel syndrome
4. Inflammatory bowel disease
5. Gastrointestinal and pancreatic neoplasm
6. Pancreatitis
7. Gastrointestinal manifestations of HIV

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. Dysphagia
   2. Abdominal pain
   3. Nausea and vomiting
   4. Diarrhea
   5. Constipation
   6. Gastrointestinal bleeding

C. There is a separate Hepatology division; therefore, specific topics dealing with liver disease will not be the systemically discussed during the rotation.

LOCATION
Jackson Memorial Hospital, University of Miami Hospital, University of Miami Hospital and Clinics, Veterans Administration Miami Hospital

PARTICIPATING FACULTY
Faculty from the Division of Gastroenterology

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 needs to be informed of all absences. Professionalism as mandated by the School of Medicine is expected.

STUDENT EVALUATION AND GRADING
A. 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.
B. Two written inpatient assessments performed by the medical student will be reviewed.
C. Faculty performance will be evaluated by the medical student (anonymously submitted).
D. Credit will be given for exceptional performance.

Revised March 2010
GERIATRICS CLERKSHIP (Required)
This is a required four-week course in geriatric medicine for medical students

<table>
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<tr>
<th>COURSE CODE:</th>
<th>MDR 957</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Juan Carlos Palacios, M.D</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-575-3388 / FAX 305-575-3365</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jpalacios@med.miami.edu">jpalacios@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td><a href="mailto:geriatriceducation@med.miami.edu">geriatriceducation@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<tr>
<td>PREREQUISITE:</td>
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<td>AVAILABLE:</td>
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Overview:
The medical student will spend four weeks at the VA Medical Center and assume responsibility for the care of older patients under the supervision of board-certified geriatricians, 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 Intermediate Care Unit, the Community Living Center, and the Geriatric Primary Care Clinic.

Course Design:
Clinical activities take place weekdays between 8:00 and 4:00 PM. Clinical activities are complemented by mandatory small group sessions, independent self-learning (training modules on GeriU, assigned readings, and EBM assignments) and divisional Geriatrics Grand Rounds and other educational conferences. The clerkship has a strong competency-based component which focuses on core geriatric syndromes. The student must complete an online and a simulated patient competency assessment and achieve the performance standard on each component in order to receive a passing final grade.

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
- Give students experience with end-of-life issues including breaking bad news, recognizing imminent death, and pronouncing death
- Teach students how 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:
Each learning activity has its own set of objectives. Below is the subset of clerkship objectives that are linked to the two competency assessments.

**Cognition**

1. State the diagnostic criteria for dementia and apply the criteria to a clinical vignette
2. Given a case description, identify the medical illnesses, physical limitations, psychological and demographic factors that may impact the MMSE score
3. Given a clinical case, choose targeted diagnostic tests to help identify the cause of dementia
4. Given a dementia patient with common behavioral problems, choose appropriate nonpharmacological and pharmacological therapeutic strategies
5. Given a clinical case description, identify the risk factors for delirium
6. State the CAM criteria for delirium and apply the criteria to a clinical vignette
7. Propose (list) supportive measures appropriate for any patient with delirium
8. Given case descriptions of patients with behavioral manifestations of delirium, select those patients for whom a pharmacological treatment strategy is appropriate
9. Given a description of a patient with delirium, identify the likely complications and outcomes
10. Given case descriptions of confused older adults, distinguish between those with dementia, depression, delirium or other causes of impaired cognitive function
11. Administer and score a Mini-Mental State Exam according to the guidelines defined in the *Mini-Mental State Examination User's Guide*

**Pressure Ulcers**

1. Given a case scenario identify the factors that increase the risk for skin breakdown (pressure ulcers)
2. Given a case scenario with descriptions of different types of wounds (pressure, venous, diabetic, skin tear) and a list of options, identify (select) the most likely diagnosis
3. List general measures for pressure ulcer prevention and management

**Location:** VA Medical Center

**Participating Faculty:**

Juan Carlos Palacios, MD – Clerkship Director
Michael J. Mintzer, MD – Director, Longitudinal Theme in Geriatrics, Pain Management, and Palliative Care
Rose van Zuijen, PhD – Co-Director, Longitudinal Theme in Geriatrics, Pain Management, and Palliative Care
Irena San Roman, MD – Co-Director, Community Living Center
Khin Zaw, MD – Director, Hospice and Palliative Care
L. Fernando Samos, MD – Director, Community Living Center
E. Paul Cherniack, MD – Director, Geriatrics Primary Care Clinic
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 and grades received on a progress note, an EBM presentation, a final exam, and for attendance and participation. Students are expected to maintain a patient encounter log on GeriU and turn in a learning objective checklist to the Geriatric Medicine Education Office at the end of the rotation.

Revised March 2010
GERIATRICS (Clinical)

<table>
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<tr>
<th>COURSE CODE:</th>
<th>MDR 827</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Michael J. Mintzer, MD</td>
</tr>
<tr>
<td></td>
<td>VA CLC207</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-575-3388 / FAX: 305-575-3365</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Rose van Zuilen, PhD, Clerkship Co-Director</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:geriatriceducation@med.miami.edu">geriatriceducation@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Completion of Geriatrics Clerkship (MDR 957)</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
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<td>AVAILABLE:</td>
<td>June 21, 2010 – April 24, 2011</td>
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<td>INTERVIEWING TIME:</td>
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<td>TYPE:</td>
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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).

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 geriatric services.

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.

Students should contact Dr. van Zuilen at least one week 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.

Prerequisite:
Geriatrics Clerkship (MDR 957)

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 March 2010
### GERIATRICS SUPPLEMENTAL CLERKSHIP

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 832</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td></td>
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<tr>
<td>TELEPHONE:</td>
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<tr>
<td>CONTACT:</td>
<td></td>
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<tr>
<td>EMAIL:</td>
<td></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of Integrated Medicine Clerkship at the Regional Medical Campus or the Geriatrics Clerkship</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
<td></td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td></td>
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<tr>
<td>INTERVIEWING TIME:</td>
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<td>TYPE:</td>
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</table>

This clerkship is still in development. It is a 2 week clerkship set up for the students who completed 2 weeks of Geriatrics during the Integrated Medicine Clerkship at the Regional Medical Campus and still have 2 more weeks to complete.

It is planned to have two clerkships available to fulfill this requirement, one in Palm Beach County and one in Miami. Details will follow when the course has been set.
HEMATOLOGY

COURSE CODE: MDR 833
CLERKSHIP DIRECTOR: Mark Goodman M.D.
TELEPHONE: 305-243-6520 / FAX 305-243-9299
EMAIL: mgoodman@med.miami.edu
CONTACT: Keisha (Secretary)
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITE: None
NUMBER OF STUDENTS: 4
AVAILABLE: All year
INTERVIEWING TIME: Yes - 2 days on 2 wk rotation (1 day per week)
                   3 days beyond 2 wks
TYPE: Clinical

IMPORTANT!
Students should email Dr. Mark Goodman (mgoodman@med.miami.edu) a week prior to their rotation
to confirm that you will be joining the rotation for the month and if any questions exist.

Students will in general work with the hematology consult fellow/attending on the month of their
rotation. A few days prior to the rotation the student shall call 305-243-1000 (or email Dr Goodman) in
order to determine whom the fellow is that month. The student should ask for the name and beeper of
the JMH hematology consult fellow for the month of their rotation. It is expected he or she should
contact and meet up with the hematology fellow by 9am on the first day their rotation.

**Once the rotation is complete you should again email Dr. Goodman the name of the attending
hematologist whom supervised you so your grade sheet form will be sent to the proper person.

** All students will meet with Dr Goodman the first Thursday of their rotation for group case discussion
and delivery of key reading materials. Depending on Dr Goodman's availability additional discussion
days may be scheduled. These discussions will take place in Dr Goodman's office Sylvester 3400
between 2-3 pm Thursday. You should page/call Dr Goodman upon your arrival if he is not in the office
(pager 305-272-6619, cell phone 305-726-8620). This will begin 5/2009.

Goals / Objectives:
The objective of this clinical hematology program is to allow students to obtain experience in the diagnosis and
management of hematological disease, in the performance of marrow aspiration and in the study of
morphology of peripheral blood cells and bone marrow.

Overview:
Students are expected to participate in the workup of hematology consults, hematology conferences, rounds,
and seminars. Direct contact during teaching rounds between the students and faculty provides ongoing
evaluation of the progress and comprehension.

Participating Faculty:
Unless otherwise requested or specified, medical students will be assigned to the hematology consult service
and be evaluated by the attending that supervising the month. It is best to call 305-243-1000 (beeper operator)
a few days prior to beginning the rotation and ask to speak to the JMH consult fellow of the month.
Course Design / Expectations:

- Consults will be assigned to the student by the fellow. It is expected that each student will present a minimal 3 patients (assuming adequate consults requested that month) to the consult attending/fellow during his or her rotation.
- All students must attend the Wednesday Morning conferences held from 8-10 am at Sylvester first floor conference center (8-9 case presentation; 9-10 didactic conference)
- All students will attend Attending rounds which will occur minimally 3X week.
- All students will be expected to review Bone marrows and peripheral blood smears in conjunction with the fellow and hematopathologists. This will generally occur 3X/week.
- It is encouraged but not mandatory that the student presents a case or help prepare (literature review etc) an “interesting” case in conjunction with the fellow for the hematology case presentation held on Wednesday morning at 8AM at Sylvester conference room first floor.
- Depending on the availability of Dr Goodman or other alternative faculty, all students will meet with Dr Goodman the first Thursday of their rotation at 2 pm in his office (Sylvester 3400) from 2 -3 pm. Each student should be able to present one case. Dr Goodman will discuss the case and make available key reading information. This will tentatively begin in 5/2009
- Each student will attend at least a one hour session per two week rotation in hematopathology in addition to the above routine review of BM and smears. Hematology cases will be presented to the students that illustrate key and/or interesting morphologic findings of common hematology issues. In some instances, active cases with interesting findings will be presented. Dr Goodman will attend some of these sessions to give the clinical perspective. This will tentatively begin in 5/2009

Opportunities for Additional Hematology Participation:

- Each student may request a minimal of a day per week with a hematology attending at his/her private clinic. You can either contact the hematology attending directly or discuss with Dr Goodman for an appropriate assignment. If you are at a private clinic you must make the hematology fellow aware of your alternative assignment.
- Bone marrow rotation: You may choose to spend 1 week of a 2-4 week rotation at the bone marrow transplant unit at JMH. This will be limited to only two students in a given week. You may contact Dr Goodman if you are interested in this assignment.

Prerequisite:

None

Reviewed March 2010
HEPATOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 834</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Paul Martin, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-2325 / FAX 305-243-3877</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:pvillaco@med.miami.edu">pvillaco@med.miami.edu</a>;</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Patricia Villacorta [Jackson Towers 1101 R-10]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 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>2</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year, except blocks 1A &amp; 5B</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>No</td>
</tr>
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<td>Clinical</td>
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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:
The student may opt for a predominantly outpatient or inpatient exposure or a combination of both. In the outpatient rotation the student will be assigned to the clinic fellow and will attend daily outpatient clinic at UMHC with different faculty members. In the inpatient rotation the student will round with the inpatient fellow and attending on the patients admitted to the Hepatology service at UMH and inpatient Hepatology consults. In a 4-week rotation the student may opt to spend 2 weeks in the outpatient and 2 weeks in the outpatient setting or all 4 weeks in one of them. There are daily morning conferences at 8:00 a.m., weekly liver biopsy 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:
UMHC (outpatient) and UMH (inpatient)

Participating Faculty:
Paul Martin, Eugene R. Schiff, Lennox Jeffers, Christopher O'Brien, Cynthia Levy, Leopoldo Arosemena, Ravi Ghanta

Prerequisite:
Completion of all core clerkships
**Expectations:**
The students are expected to be motivated to learn about liver disease 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 Center For Liver Diseases office at JMT, 1500 N.W. 12 Ave., Suite 1101-E at 7:30am 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 the Administrator, Patricia Villacorta, who will provide a Hepatology orientation manual and direct them to the morning conference.

Revised March 2010
INFECTIONOUS DISEASE CONSULTATION SERVICE  
AT MOUNT SINAI MEDICAL CENTER

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Kenneth Ratzan, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-674-2766 FAX 305-674-2765</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:shar42@bellsouth.net">shar42@bellsouth.net</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Sharon Blackwell [Mt. Sinai Med. Ctr. 4300 Alton Rd, Greene Pavilion, # 450, Miami Beach]</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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<tr>
<td>NUMBER OF STUDENTS:</td>
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AVAILABLE: Refer to ESS system for dates, or see below
INTERVIEWING TIME: Yes—3 days
TYPE: Clinical

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.

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<tr>
<td>6/22/10 – 7/18/10</td>
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<td>7/19/10 – 8/15/10</td>
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<td>8/16/10 – 9/12/10</td>
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<td>10/11/10 – 11/07/10</td>
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<td>4/25/11 – 5/22/11</td>
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<td>5/23/11 – 6/19/11</td>
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Reviewed March 2010
INFECTIOUS DISEASE CONSULTATION SERVICE

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<th>COURSE CODE:</th>
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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Gordon Dickinson, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-575-3267 / FAX 305-575-3139</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:gdickins@med.miami.edu">gdickins@med.miami.edu</a>; <a href="mailto:amperez@med.miami.edu">amperez@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Ana Perez (VAMC room #B1239)</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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<tr>
<td>NUMBER OF STUDENTS:</td>
<td>3 (2-JMH &amp; 1-VAMC)</td>
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<td>INTERVIEWING TIME:</td>
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**Overview:**
This elective provides a learning experience in the clinical discipline of Infectious Disease, a discipline that stresses accurate definition of disease and establishment of an etiologic diagnosis. The probability that a given etiologic agent is causing a disease process can usually be surmised. This approach involved making a diagnostic hypothesis and testing this hypothesis. Treatment can be rationally selected when the etiologic diagnosis is correctly identified. 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 either Jackson Memorial Hospital or Veterans Administration Medical Center. The monthly numbers of ID consultations at JMH and VAMC are estimated to be 80 and 30, respectively. Student 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 on the JMH, members of the consultation service participate in rounds with faculty for an estimated 18 hours per week. Members of the VAMC consultation service round with faculty for approximately 10 hours per week. Students perform the initial evaluation of assigned patients. Students are expected to perform a minimum of 12 ID inpatient consultations during a four-week rotation. A concerted effort is directed at accurate definition of the disease process and establishment of an etiologic diagnosis. Identification of a specific causative agent is a very important objective of each ID evaluation. This approach requires formulation of a diagnostic hypothesis and using microbiologic studies to test this hypothesis.

Microbiologists at each facility play an integral role in ID training and are available for consultation. There is a major interaction between the microbiologist in the Clinical Laboratory at JMH and the ID Division. There are bi-weekly microbiology laboratory conferences and Infectious Disease clinical conferences.

**Location:** JMH or VAMC.

**Prerequisite:** Completion of all core clerkships

**Student Evaluation and Grading:**
Students are given a pretest on the first day and a post test on their last day of their rotation. The fellows and attendings on the consultation service evaluate the students. The coordinator of the elective also evaluates the students. The process of teaching and evaluation is done daily on consultation rounds.

Reviewed March 2010
JFK MEDICAL CENTER INFECTIOUS DISEASES ELECTIVE

<table>
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<tr>
<th>COURSE CODE:</th>
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<tr>
<td>COURSE DIRECTOR:</td>
<td>Larry Bush, M.D.</td>
</tr>
<tr>
<td>TELEPHONE/FAX:</td>
<td>561-548-1273 / 561-548-1254</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:diane.fitz@hcahealthcare.com">diane.fitz@hcahealthcare.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Diane Fitz</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<tr>
<td>PREREQUISITE:</td>
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Overview:
Infectious disease medicine requires an understanding of the microbiology, prevention, and management of disorders caused by viral, bacterial, fungal, and parasitic infections, including the appropriate use of antimicrobial agents, vaccines, and other immunobiologic agents. Important elements include the environmental, occupational, and host factors that predispose to infection, as well as basic principles of the epidemiology and transmission of infection. The exposure to various patients with infectious diseases will enable the student to be able to evaluate symptoms that may be caused by a wide range of infectious disorders, and to understand the appropriate preventive (including optimal use of immunization and chemoprophylaxis), diagnostic, and therapeutic care for most infections. The M4 student will learn about diagnostic and management approaches to patients with HIV infection. The experience will include patients with early HIV infection who have few or no symptoms and also patients with advanced HIV infection who manifest the acquired immunodeficiency syndrome (AIDS).

Design:
The M4 student will be part of the infectious disease consult service, along with residents from the JFK UM/FAU affiliated medicine residency. The team will be lead by an infectious disease attending who is also an integral part of the teaching program at JFK. There will be one student assigned to the team. The patients will be assigned to the student by the attending, in order to provide the student with a broad experience and variation in patients.

Setting:
JFK hospital is a large tertiary care center. The student will work on the infectious disease inpatient consultation service in this center, as well as in the outpatient setting in a large, very busy office practice.

Goals:
The goals of the rotation are to provide the M4 student with the clinical skills and knowledge they will need for their future clinical training. With the guidance and oversight of the supervising attending, they will be taught the principles of infectious diseases and be given the opportunity to act in the role of a consultant in infectious diseases, in both the inpatient and outpatient setting.

Educational Objectives
The following objectives include material that should be reviewed from previous rotations and/or studied independently as only selected aspects will be formally encountered during a single rotation:
Objective 1 (Patient Care and Medical Knowledge)

While on the Infectious Diseases rotation, the student will be able to obtain an orderly history and understand the significance of:

- fever
- exposure to illness, animals, injury
- occupational history/exposures
- travel history
- recent medical procedures (surgical, dental)
- sexual history
- drug history (including illicit) and drug allergies
- immunization history
- co morbid conditions

Objective 2 Patient Care and Medical Knowledge

By the end of the rotation, the student will be able to perform a physical examination on patients and recognize and interpret:

- skin rashes, cellulitis and lymphangitis, wound infections
- bites
- lymphadenopathy
- pharyngitis and mucosal abnormalities
- otitis
- neck stiffness and neurologic abnormalities
- adventitious pulmonary sounds
- new or changing heart murmurs or rub
- abdominal or flank tenderness, organomegaly
- joint or limb swelling, tenderness
- urethral or vaginal/cervical discharge

Objective 3 Patient Care and Medical Knowledge

By the end of the rotation, the student will be able to understand the use of appropriate diagnostic tests with the corresponding clinical problem, and will be able to interpret the results of:

- direct body fluid exam
- gram stains of exudates or body fluids
- acid-fast stains
- fungal stains and KOH preps
- anaerobic and aerobic cultures
- catheter tip/segment cultures
- serologic antigen and antibody testing for viral, bacterial and fungal diseases
- antibiotic sensitivity testing
- PPD and other skin testing
- lumbar puncture
- thoracentesis
- paracentesis
- arthrocentesis
- bronchoscopy and bronchiolalveolar lavage (BAL)
- serum drug levels

Objective 4 Patient Care and Medical Knowledge
By the end of the rotation, the student will have developed a rational clinical approach (including history, physical examination, laboratory and imaging studies) for clinical problems including:

- night sweats
- fever
- cough/pulmonary infiltrate
- fatigue
- dysuria, frequency, urgency; genital/urethral discharge
- rashes or other lesions of the skin
- animal or human bite wounds
- wound infections, including infected ulcers and the diabetic foot
- osteomyelitis, bone pain or a draining sinus
- joint swelling or erythema
- lymphadenopathy
- jaundice
- diarrhea
- meningitis; fever with new neurologic abnormalities
- indications for immunization or prophylaxis
- evaluation of the HIV infected patient (all stages)
- evaluating infectious complications of or the above clinical presentations in the patient with:
  - HIV/AIDS
  - neutropenia
  - other immunosuppression (drug, disease specific, asplenia)
  - a history of travel or immigration

Objective 5 Patient Care and Medical Knowledge

By the end of the rotation, the student will be able to discuss the key aspects of the pathophysiology, epidemiology, clinical presentation, natural history, clinical diagnosis and management of disease caused by:

- Bacteria:
  - Streptococcus sp., including penicillin resistant S. pneumoniae
  - Staphylococcus sp., including MRSA
  - Enterococcus sp., including VRE
  - Neisseria gonorrhoea and N. meningitidis
  - Pseudomonas sp.
  - Enterobacteriaceae
  - anaerobes
  - mycoplasma, chlamydia and legionella
  - Mycobacterium tuberculosis
  - spirochetes - T. pallidum, B. burgdorferi

- Viral:
  - herpes simplex, varicella and herpes zoster, CMV and EBV
  - Hepatitis A, B, C
  - Influenza and other respiratory viruses
  - Human immunodeficiency virus

- Fungal:
  - Candida sp., H. capsulatum, C. neoformans, P. carinii

- Parasitic:
  - malaria, toxoplasma, ameba, giardia, trichomonas

Objective 6 Patient Care and Medical Knowledge
By the end of the rotation, the student will know the indications, complications and presumed mechanism of action for the following therapeutic agents:

- penicillins (including β-lactam/β-lactamase inhibitor combinations)
- cephalosporins and carbapenems
- vancomycin
- aminoglycosides (gentamicin, tobramycin, amikacin, streptomycin)
- macrolides (erythromycin, clarithromycin, azithromycin, clindamycin)
- sulfonamides and trimethoprim-sulfa
- fluoroquinolones
- antifungals (including amphotericin B, amphotericin B lipid complex and azoles)
- antimycobacterial agents (isoniazid, rifampin, ethambutol, pyrazinamide)
- antivirals and antiretrovirals
- exogenous immunoglobulins, immunologic modulators (interferons, Activated protein C)

Objective 7 Patient Care and Medical Knowledge

By the end of the rotation, the student should develop an understanding of:

- Common side effects of antimicrobials, including how to monitor and care for them.
- Empiric antimicrobial selection
- The appropriate indications for the use of newer, more expensive antimicrobials.

Objective 8 System-Based Practice and Practice-based Learning

By the end of the rotation, the student should develop an understanding of:

- Use of standard precautions and conditions requiring patient isolation.
- Appropriate collection and transport of specimens.
- Appropriate utilization of the medical microbiology laboratory to diagnose and monitor antimicrobial therapy of common, unusual and difficult to treat infections.
- The significance, evaluation for and management of nosocomial infections.
- Approach to complex medical situations, including the organization and analysis of diverse data.
- Use of medical literature to accomplish any of the listed objectives and to investigate unanticipated issues

Objective 9 Interpersonal and Communication Skills

By the end of the rotation, the student should develop an understanding of:

- Interactions between consulting and primary physicians and their effect on patient care.

Location:
JFK Medical Center

Participating Faculty:
Larry Bush, M.D.

Prerequisite:
Completion of Core Clerkships
Expectations:
Supervised patient care activities

- Inpatient consultation - the majority of the clinical time for this rotation is spent doing inpatient consultation for infectious disease-related questions. Students complete the initial evaluation and then present the patient on formal teaching/bedside rounds to the Infectious Disease Attending.

- Ambulatory ID/ HIV clinic - Students spend the equivalent of two half-days a week with the infectious disease attending in his outpatient practice which includes a significant percentage of HIV/AIDS patients. They will learn the fundamentals of outpatient HIV management, antiretroviral therapy, and opportunistic infection prevention.

- Didactic conferences - The infectious disease curriculum is incorporated into the noon conference series as well as morning report conferences. In addition, small group didactics will be part of the experience on the ID rotation

- ID Case Conference - one morning report a month is dedicated to reviewing interesting or complicated infectious disease cases seen at JFK Medical Center as presented by one of the ID consult team members.

Independent Study

- Students will spend time reading from the recommended textbook and researching the literature to answer clinical questions pertinent to their patients.

- Students are asked to complete and review all the questions of the Infectious Diseases module of the MKSAP for Students 4

Infection Control Meeting

Students on the infectious disease rotation attend the infection control meetings to learn about hospital protocols and nosocomial infection issues (Practice-Based Learning, System-Based Practice)

Microbiology Laboratory

The students will spend two days of the block at the IRL Laboratory in the microbiology laboratory learning about the technical aspects of culture and identification of infectious agents.

Resources: Recommended Textbooks

- Infectious Disease in 30 days, Frederick S. Southwick
- Pocketbook of Infectious Disease Therapy, John G. Bartlett

Electronic Resources

Students at  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.

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

Sample Schedule ID Rotation *

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<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
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</tr>
</thead>
<tbody>
<tr>
<td>8:30-9:30AM</td>
<td>Morning Report</td>
<td>Ambulatory ID Experience</td>
<td>Morning Report</td>
<td>Ambulatory ID Experience</td>
<td>Morning Report</td>
</tr>
<tr>
<td>9:30-12:00PM</td>
<td>Inpatient Consults</td>
<td>Inpatient Consults</td>
<td>Noon Conference</td>
<td>Noon Conference</td>
<td>Inpatient Consults</td>
</tr>
<tr>
<td>12:00-1:00PM</td>
<td>Noon Conference</td>
<td>Noon Conference</td>
<td>Noon Conference</td>
<td>Noon Conference</td>
<td>Noon Conference</td>
</tr>
<tr>
<td>1:00PM-7:00PM</td>
<td>Inpatient Consults and Rounds</td>
<td>Inpatient Consults and Rounds</td>
<td>Ambulatory ID Experience</td>
<td>Inpatient Consults and Rounds</td>
<td>Inpatient Consults and Rounds</td>
</tr>
</tbody>
</table>
Students will be asked to participate in weekend rounds at the discretion of the ID attending but will be guaranteed one full day a week free of patient care responsibilities.

**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 are evaluated at the end of each rotation using the approved UMMSM M4 evaluation form. A pre and post test is also administered for self assessment of learning through the rotation (see above).

The M4 student will complete written evaluations of the rotation and attending, at the conclusion of the rotation. Should any issues or questions arise during the rotation, the Course Director and Site Director are available at any time.

Created March 2010
JFK MEDICAL CENTER ICU MEDICINE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 962</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE DIRECTOR:</td>
<td>Jonathan Marcus, M.D.</td>
</tr>
<tr>
<td>TELEPHONE/FAX:</td>
<td>561-548-1273 / 561-548-1254</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:diane.fitz@hcahealthcare.com">diane.fitz@hcahealthcare.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Diane Fitz</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of 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>INTERVIEWING TIME:</td>
<td>3 days</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

Overview:
The objective of this rotation is to provide M4 students with hands on clinical experiences in an ICU setting that will expose them to the pathophysiology, and management of patients in a intensive care setting. The M4 will act as an integral member of the ICU team,

Design:
There will be two resident teams, designated Team A and Team B, during the ICU rotations each consisting of a senior resident and an intern. Each team will be assigned, and will follow 4 – 6 patients each per day. The M4 student will be a member of either Team A or Team B. There will be one student assigned to the team. The M4 student will follow patients with the supervising resident. The patients will be distributed by the teaching attending based on their teaching value and in order to provide each team with a broad experience and variation in patients.

Setting:
The Intensive Care Unit (ICU) is a 16 bed unit specializing in the care of critically ill patients with a wide spectrum of medical diseases. Conditions cared for in the ICU include, but are not limited to: acute hypoxia, respiratory failure, acute respiratory distress syndrome, acid-base imbalances, liver failure, renal failure, gastrointestinal bleeding, acute pancreatitis, acute stroke, sepsis, shock, congestive heart failure, myocardial infarction, intoxications, intracranial hemorrhage, status epilepticus, and coma. Student rotations in the ICU are four weeks in length. While in the ICU, residents and students work closely with the Critical Care Attending. The multidisciplinary team in the ICU also includes nurses, a social worker, a pharmacist, respiratory therapists, and a nutritionist.

Goals:
The goals of the rotation are to provide the M4 student with the clinical skills and knowledge they will need for their future clinical training. With the guidance and oversight of the supervising resident and attending, they will be taught the principles of critical care medicine and be given graduated levels of responsibility for the care of their patients in the ICU.

CRITICAL CARE ROTATION OBJECTIVES:

- To demonstrate an understanding of and incorporate into practice evidenced based critical care medicine
- To demonstrate an understanding of the manifestation of diseases as related to critically ill patients.
- To demonstrate understanding of and incorporate into practice multidisciplinary, collaborative patient care in the ICU.
• To observe pertinent ICU procedures.
• To demonstrate an understanding of the role of early goal directed therapy.
• To demonstrate an appreciation for appropriate healthcare utilization in the ICU.
• To demonstrate in the appropriate ordering of labs and interventions as well as the interpretation of ancillary data for critically ill patients.
• To describe the appropriateness of consultation requests.
• To develop a comprehensive plan for patient treatment, recovery and rehabilitation

**Location:** JFK Medical Center

**Participating Faculty:** Critical care specialists, and other medical specialists.

**Prerequisite:** Completion of Core Clerkships

**Expectations:**
The M4 student 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 M4 student will become the primary communicator with the patients’ families.

Patients will be distributed to the ICU resident teams each morning by the covering teaching attending. The PGY-2/3 will pre-round with the PGY-1’s and M4 students assisting in organizing data and synthesizing a plan for the day prior to Attending/Teaching Rounds. The M4 students are to write daily progress notes reflecting the assessment and plan on each patient under their care. Residents are responsible for performing all procedures on their patients under the supervision of the upper level teaching intensivist on service, and students are encouraged to actively participate.

Duty hours for the M4 students are the same as for the PGY-1 resident: 7:00AM-5:00PM Monday through Friday. Each student is expected to work one weekend day giving them a day off in a six day work week. All critical care units have 24-7 critical care attending in-house coverage and during normal working hours, a teaching attending will be on site.

The daily schedule is as follows:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 – 9:00 a.m.</td>
<td>House Staff Work Rounds</td>
</tr>
<tr>
<td>9:00 – 12:00 p.m.</td>
<td>Attending/Collaborative Rounds</td>
</tr>
<tr>
<td>12:00 – 1:00 p.m.</td>
<td>ICU Noon Conference</td>
</tr>
<tr>
<td>1:00 – 5:00 p.m.</td>
<td>Admits, Work Rounds, Procedures with Attending</td>
</tr>
</tbody>
</table>

Afternoons are dedicated to seeing and evaluating new patients, conduct research on patient diagnoses, perform procedures under the supervision of the attending and to conduct family rounds and meeting with the patients’ families.

There will be an ICU Lecture/Discussion Series conducted throughout the rotation. These will be provided by the Critical Care Attending as part of the ICU noon conference, as well as various teaching pulmonologists, cardiologist, nephrologists and infectious disease specialists. The M4 students are expected to attend these lectures.

**Conference Schedule:**
As above
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 M4 student 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 M4 student 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 Course Director and the Director of Clinical Curriculum are available at all times.

Created March 2010
# LATIN AMERICA EXTERNSHIP ELECTIVE

**COURSE CODE:** MDR 838  
**CLERKSHIP DIRECTOR:** J. Donald Temple, M.D.  
**TELEPHONE:** 305-243-6826 / FAX 305-243-6830  
**EMAIL:** ocata@med.miami.edu  
**CONTACT:** Olivia Cata  
[Jackson Medical Towers, East Bldg., Rm 1027 R-36]  
**LENGTH OF ELECTIVE:** 4 weeks  
**PREREQUISITE:** Fourth year medical students  
**NUMBER OF STUDENTS:** 4  
**AVAILABLE:** All year  
**INTERVIEWING TIME:** Three to six months prior to desired date  
**TYPE:** Clinical

### 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 #2011 **BEFORE** leaving.

Reviewed March 2010
MEDICAL INTENSIVE CARE UNIT (JMH)

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 839</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Daniel Kett, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-6664 / FAX 305-585-0086</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Cary Suarez [JMH – Central #455 D-60]</td>
</tr>
<tr>
<td>E-Mail:</td>
<td><a href="mailto:csuarez@med.miami.edu">csuarez@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>3</td>
</tr>
<tr>
<td>SIGN IN SHEET:</td>
<td>Students must sign in upon arrival with coordinator</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes 2 days max on 2 wk rotation; 2-4 days max on 4 week rotation but must check with coordinator first</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</tbody>
</table>

Overview:
The Medical Intensive Care Unit is an eighteen bed unit that provides care for critically ill medical patients.

Course Design:
Students will gain an understanding of caring for patients with acute and chronic respiratory failure, various types of shock, cardiogenic pulmonary edema, the acute respiratory distress syndrome, malignant hypertension, acute myocardial infarction and various complications of multi-organ system failure. Emphasis will be placed on the indications for admission to and discharge from the MICU, invasive hemodynamic monitoring and mechanical ventilatory support.

Education is provided during morning work rounds with the attending, core lectures on MICU related topics, biweekly critical care journal club and informal student and housestaff case presentations.

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: JMH

Participating Faculty:
Faculty from the Department of Medicine, Pulmonary, Critical Care

Prerequisite: Completion of all core clerkships

Expectations:
Students perform an integral member of the MICU team, providing primary care to patients. The students will work directly with a senior medical resident, and be closely supervised by the pulmonary critical care fellow and attending. On nights the senior resident is on call, the student is expected to be on call with the resident until the early evening, generally assisting with the admission of at least one patient. Daily rounds with the entire MICU team begin at 8:00 A.M.

Student evaluations and grading:
During the rotation, each student is given direct feedback related to their performance. The course evaluation is based on student’s performance related to patients care, case presentation and academic activities.

**Note:**
No backpacks or personal belongings are allowed in the unit. Students will have a locker available in the On-Call room. The student must provide a lock and empty contents of the locker upon completion of rotation. **No food or beverages in unit.**

Reviewed March 2010
MEDICAL INTENSIVE CARE UNIT (VA)

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 840</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Andrew A. Quartin, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-575-3223 / FAX 305-575-3366</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Cary Suarez [305-585-6664]</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:csuarez@med.miami.edu">csuarez@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 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</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes - 2 days max on 2 wk rotation; 2-4 days max on 4 week rotation but must check with coordinator</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

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

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.)

Revised March 2010
NEPHROLOGY

**COURSE CODE:** MDR 842  
**CLERKSHIP DIRECTOR:** Dollie Green, M.D.  
**TELEPHONE:** 305-243-6251 / FAX 305-243-3506  
**CONTACT:** Dollie Green, M.D.  
**LENGTH OF ELECTIVE:** 4  
**PREREQUISITE:** None  
**NUMBER OF STUDENTS:** 6  
**AVAILABLE:** All Year  
**INTERVIEWING TIME:** Yes - 2 days Max  
**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, plasmapheresis, evaluation of nuclear flow studies, and interventional nephrology.

**Course Design:**  
Students are assigned to a team (consisting of 2 students, 2 house officers, 1 fellow and a faculty Attending) at JMH (1 team) or VAMC (1 team). 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 or VAMC  
**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 (JMH and VAMC.) The generally recommend text is Primer in Renal Diseases. There is an open book (not graded) test that covers topics of importance. Answers are discussed in 2 workshops with Dr. Green.

**Student evaluations and grading:**  
The Fellows and Attendings evaluate students. Feedback is informal and readily available. Students are required to write a 5-10 page typed summary on a topic of their choice having to do with Nephrology.

Reviewed March 2010
## ONCOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 859</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Pasquale W. Benedetto, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-4909 / FAX 305-243-4905</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:pbenedet@med.miami.edu">pbenedet@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Kim Parish [SCCC-3rd Floor #3310 D8-4]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

### Overview:
The Division of Hematology/Oncology is responsible for the diagnosis and treatment of neoplastic diseases at the three teaching hospitals: Jackson Memorial (JMH), University of Miami Hospitals and Clinics (UMHC), and Veterans Hospital (VAMC). The Department provides consultative services at the VAMC, and both consultative and inpatient ward services at JMH. Only private outpatients are seen at UMHC.

### Course Design:
The four week clerkship should provide a basic knowledge of oncologic disease including natural history of prevalent tumors (lung, breast cancer), diagnostic work-up, treatment options, and areas of treatment controversy. The student should become familiar with common drug therapies, treatment of various oncologic emergencies (i.e., cord compressions, CNS disease, SVC syndrome, etc) and mechanisms of action and toxicities of chemotherapeutic agents.

For those students wishing to pursue a laboratory-based project, the possibility of working with one of the basic scientists exists. Areas of study include mechanisms of drug resistance, pain management, DNA repair processes, glutathione metabolism, anthracycline chemistry, retrovirus immunology, cell surface chemistry, mechanisms of apoptosis and mechanisms of the regulation of tumor cell growth.

The students can choose one of three rotation schedules:
1. Oncology consults/clinic at JMH with fellow and monthly attending. The student will see routine consults and present the cases to the attending and fellow outlining diagnostic and/or therapeutic options. In addition two half days per week will be spent in the outpatient clinics at JMH and 3-5 half days in the private outpatient clinics in a one-to-one experience with an attending physician.
2. Clinical clerkship at JMH management ward. The student will attend the daily ward attending teaching rounds on WW 12.
3. One-on-one clinical rotations with faculty member.

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

### Location:
Jackson Memorial (JMH) and University of Miami Hospitals and Clinics (UMHC)

### Prerequisite: NONE
**Expectations:**
Students will also attend the Hemo-Onc Didactic Conference on Wednesdays, Tuesday and Thursday Fellows Core Curriculum Conference, monthly Journal Club and Friday Multi-disciplinary Tumor Board.

Reviewed March 2010
PROCEDURE TEAM MEDICAL STUDENT ELECTIVE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 956</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Joshua D. Lenchus, DO, RPh, FACP</td>
</tr>
<tr>
<td>TELEPHONE/FAX:</td>
<td>305-585-5215</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:jlenchus@med.miami.edu">jlenchus@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Chief Medical Residents (305-585-5215) / Dr. Lenchus</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Internal Medicine and Surgery Core Clerkships</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year, dependent on IM resident schedules, see below</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>3 days for 4 week rotation</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical and research (if desired)</td>
</tr>
</tbody>
</table>

**NOTE:** Because of the need to sync this rotation with the Internal Medicine resident schedule, this 2 week rotation will “consume” an entire 4 week block. You cannot actually begin the rotation until week 2 of your 4-week block, as it corresponds to the first week of the resident rotation. You will spend weeks 2 and 3 on the rotation, and have the opportunity to stay on, without credit, for week 4.

You will only receive 2 weeks of credit for this elective (even though you will need to use a 4-week block in order to schedule it). The first and fourth weeks will need to be unscheduled time.

Please note available dates at the end of this description.

**Overview:**
The performance of an invasive bedside procedure carries with it inherent risks and potential complications. Incorrect accomplishment of such may adversely affect patient safety, increase hospital length of stay, necessitate the use of additional resources, and propagate incorrect procedural methods for the next generation of physicians. To this end a formal course in procedural instruction serves as a model for other institutions and as a standard within our own. The days of “see one, do one, teach one” are extinct. Students will undergo formal procedural instruction using task trainers/models. They will become familiar with relevant anatomy, and perfect the technical skills needed to successfully perform invasive bedside procedures, from pre-procedural assessment to post-procedure documentation and follow-up.

**Course Design:**
This course may be taken as a two or four week rotation (preferably four weeks). It is offered through a joint venture between the JMH Internal Medicine Residency and the UM-JMH Center for Patient Safety. The student will become familiar with the pre-procedural evaluation of patients, the informed consent process, the concept and applicability of a “time out,” the practice of aseptic technique, and the performance of various invasive bedside procedures. Medical students will complete 3 instructional half-days before joining the house staff on the Procedure Team, a service that operates daily as detailed below. The most commonly performed bedside procedures have been identified; other, more advanced, procedures can be incorporated at a future date. We have chosen those that are consistent with the American Board of Internal Medicine’s most recent required procedures for certification. These include:

- Abdominal paracentesis
- Thoracentesis
- Central venous catheter insertion
  - Ultrasound-guided internal jugular vein
The student is expected to observe, assist, scrub, and/or perform the above procedures as needed.

Instruction occurs via a multi-disciplinary group of faculty, assisted by the use of video modules, and task trainers/models. Kits and equipment used are identical to that employed in the hospital.

The schedule is somewhat fluid as procedure requests are triaged according to urgency. Students are expected to attend Monday through Friday from 0800 until 1700. There is no overnight call, or weekend or holiday duty. They will be expected to carry the service beeper on a rotating basis with the residents that comprise the Procedure Team.

Objectives/Goals:

Competency-based objectives
1. Detail the major indications for performing the procedure (MK, PBLI).
2. List the major contraindications to the procedure (MK, PBLI).
3. Describe the procedure adequately to the patient in order to properly obtain a written informed consent (MK, IPS, PC, P).
4. Identify the relevant anatomy for the procedure, including proper patient positioning (MK).
5. Perform the steps involved in a pre-procedure “time out” (MK, PC, P, SBP).
6. Demonstrate relevant aseptic technique, including donning protective gear (MK, PC, P).
7. Exhibit proper use of ultrasound as a guide to identify relevant anatomical target (MK, SBP).
8. Obtain the technical skills required to perform the procedure confidently and competently (MK, IPS, PC, P, PBLI, SBP).
9. Recognize and address potential complications of the procedure (MK, IPS, PC, P, PBLI, SBP).

MK: medical knowledge
IPS: interpersonal and communication skills
PC: patient care
P: professionalism
PBLI: practice-based learning and improvement
SBP: systems-based practice

Goals
1. Increase student exposure to invasive procedures required and/or suggested by the American Board of Internal Medicine, among others.
2. Teach students pre-procedure assessment including, but not limited to indications, contraindications, and potential complications.
3. Educate students regarding the processes of informed consent, “time out,” and aseptic technique.
4. Provide multidisciplinary, faculty-level supervision of procedural skills during practice.
5. Allow students to practice said procedural skills in a controlled environment, using task trainers, models, and/or simulators.
6. Afford students the opportunity to perform said procedures, on patients, under direct faculty supervision.
7. Improve student confidence and competence in the performance of these procedures.

The student will accomplish these goals and objectives through participation in the instructional period (described below), direct faculty observation with feedback, and procedural performance, both during training and bedside, in the clinical arena.
Each procedure was created as a self-contained module; each instructional module is divided into twelve sections:

- **Introduction** – faculty introduce themselves and the procedure.
- **Skills check** – individual participants attempt to perform the procedure on a model, task trainer, or simulator; no feedback is given. The attending instructor uses a checklist to assess performance. This is done for those with prior experience.
- **Pre-test** – brief quiz to assess baseline procedural medical knowledge; no feedback is given.
- **Informed consent** – brief overview of the necessary components, and how to facilitate an informed decision-making process. Emphasis is placed on the accomplishment of this task prior to beginning the procedure.
- **Aseptic technique** – brief overview on the importance of hand-washing, and the relevance of protective clothing and equipment.
- **“Time-out”** – the application of this concept is reviewed and underscored with attention on proper patient, proper procedure, and proper site.
- **Video instruction** – procedural videos via the New England Journal of Medicine website are primarily used (with explicit written permission) but may be augmented or substituted by other commercial videos.
- **Attending demonstration** – the faculty member demonstrates the complete proper technique on the model for the benefit of the participants.
- **Participant practice** – each participant has a chance for individual practice on the model, accompanied by one-on-one attending-level feedback. The participants are encouraged to practice as many times as needed to achieve comfort.
- **Post-test** – brief quiz to assess post-instructional procedural medical knowledge. The test will be reviewed by the faculty member and the group of participants.
- **Procedural documentation** – brief overview on the importance of such written documentation, along with the necessary components of the note; examples from other areas of the institution may be provided.
- **Module evaluation** – each participant has the opportunity to evaluate the model and instructor, among other items.

**Location:**
The rotation will occur primarily at Jackson, but may include one or more UM sites (i.e. Sylvester Comprehensive Cancer Center, University of Miami Hospital, etc).

**Participating faculty:**
Dr. Lenchus (office: Central 600A; assistant: Mary Ann Santiago; phone: 305-585-5215).

**Prerequisite:**
Medical students must have completed the Internal Medicine and Surgery core clerkships.

**Expectations:**
- Attend daily, arriving promptly
- Treat team, staff members, and patients with courtesy and respect
- Immediately communicate issues affecting performance and/or attendance, among others
- Be receptive to feedback, evidenced by modifications in behavior or procedural technique
- Function as an integral member of the Procedure Team
- Meet the goals of the rotation by fulfilling the learning objectives

**Student evaluations and grading:**
Grades will be pass or fail. The participants are evaluated through the following mechanisms:
Checklist assessment of technical proficiency – this is performed at the outset, using a model, for those with prior procedural experience. The identical tool is also used to evaluate the participant’s performance on a patient in a clinical area. The latter assessment differs from the former in its evaluation of several other items, namely:
  - Aseptic technique maintained throughout procedure
  - Number of attempts at procedure completion
  - Self-assessment of confidence (1-5) and competence (1-5)
  - Faculty assessment of confidence (1-5) and competence (1-5)

The checklists are reviewed with the participants at the end of each instructional module.

Direct observation – the performance of the procedure is observed by a faculty member. The checklist is employed, but the faculty member’s subjective assessment is included as above, and reviewed. These will be used as a measure of longitudinal technical improvement; information gleaned from these will contribute to the final grade (25%).

Pre- and post-tests – the participants complete a written test to assess their baseline medical knowledge at the outset of procedural instruction and again at the completion of each module. The tests are reviewed with the participants at the end of the module. These have no weight in determining the final grade.

The remainder of the grade will be a compilation of assessments reflective of the six ACGME core competencies. This portion will comprise the majority of the grade (75%) due to the intimate daily working environment between Team members and the supervising attending(s).

Instructional faculty members are evaluated by each participant at the completion of each module with respect to their preparation, knowledge, and communication. On the last day of the course/rotation, participants have the opportunity to perform a final evaluation. Components include feedback on the course’s overall utility, the equipment employed, strengths, and weaknesses, among others.

<table>
<thead>
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<th>Student Blocks</th>
<th>Actual Rotation Dates</th>
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Reviewed March 2010
PULMONARY

COURSE CODE: MDR 843
CLERKSHIP DIRECTOR: Horst Baier, M.D.
TELEPHONE: 305-585-7034 FAX 305-324-0869
CONTACT: Hattie Baker, [JMH-NW 224 D-60] hbaker@jhsmiami.org
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Internal Medicine
NUMBER OF STUDENTS: 4
AVAILABLE: All year
INTERVIEWING TIME: Yes - 2 days maximum
TYPE: Clinical

Overview/Course Design:
This elective is oriented towards subspecialty practice requiring more in depth knowledge of pulmonary disease then would be required of a general physician.

Goals/Objectives:
Students are expected to become proficient in the history and physical examination of patients with chest disease and the interpretation of Pulmonary Diagnostic tests.

Location: JMH

Prerequisite: Completion of Medicine core clerkship

Expectations:
There is no direct primary care responsibility, no night or weekend call. The student is to be present from 8:00 a.m. to 5:00 p.m. weekdays.

Students participate in rounds and conferences and are expected to spend time in the library. The student is a member of the consultation group under the direction of the attending.

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.

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

Reviewed March 2010
SPECIAL IMMUNOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Luis A. Espinoza, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-2398/6389 / FAX 305-243-4728</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:lespinoza@med.miami.edu">lespinoza@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Dr. Espinoza</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2/4 weeks</td>
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**Overview/Course Design:**
Students under the supervision of a Special Immunology Attending will act as Internist developing their skills of diagnosis and management of patients with advanced immune deficiency virus (HIV) disease in both a dedicated inpatient ward and outpatient ambulatory facility. The spectrum of patients includes those with predominantly advanced HIV disease and acute opportunistic infections and/or malignancies in an inpatient setting. In an outpatient setting, this will involve evaluation and screening of patients with mildly symptomatic to advanced HIV disease. Special emphasis is placed on Infectious Disease, allergy and Immunology, 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 advanced immune deficiency virus disease.

**Location:** JMH

**Prerequisite:** None

**Expectations:**
Students are assigned to a schedule with a fellow. Working shifts are approximately 8 hours. No student will work past 5:00 p.m. or on week-ends.

Reviewed March 2010
STUDENT HEALTH CLINIC

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<th>COURSE CODE:</th>
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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Howard Anapol, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-284-5921 / FAX 305-284-4905</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:studenthealth@miami.edu">studenthealth@miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Suelyn Chong [5513 Merrick Drive, C.G. Loc 5310]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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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 orthopaedics, 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.
- Orthopaedic 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 (Coral Gables campus)

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 March 2010
JFK MEDICAL CENTER WARD MEDICINE

[TYPE A]

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Joan E. St. Onge, M.D.</td>
</tr>
<tr>
<td>TELEPHONE/FAX:</td>
<td>561-548-1548</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:JESlonge@med.miami.edu">JESlonge@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Dr. St. Onge</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<td>PREREQUISITE:</td>
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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 a Hospitalist attending, two residents, 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-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 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 twice weekly sessions with sub-internship coordinators to review key inpatient topics.

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 M4 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

**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-I receives the hand off from the night staff. Morning report occurs at 8:30 M,T,W,F, and Attending Rounds occur at 10:30 AM. 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
4. Sub-I weekly Key topic Sessions: TBD

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.

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<tr>
<th>Rotation Dates</th>
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<tbody>
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<td>6/24/09 – 7/19/09</td>
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Created March 2010
**JMH WARD MEDICINE**

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<th>COURSE CODE:</th>
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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Mark A. Gelbard, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>585-5095/5215 / FAX 585-6136</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.  [JMH Central 600A, R-60] Mary Ann Santiago / Doris Jacobs</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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**Overview/Course Design:**
Two senior students will be paired, and together, will carry out all the duties and responsibilities of an intern, commensurate with their capabilities. The pair 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 the Attending Physician and a second or third year medical resident.

Students will be assigned to JMH medical teams. Every attempt will be made to pair students with their requested fellow student as well as with residents and attendings who have demonstrated excellence in student teaching and a high level of interest in education. 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 internal medicine ward team. They are expected to assume direct responsibility for patient care and to become increasingly proficient and competent as interpreters and managers.

**Location:** JMH

**Prerequisite:** Completion of all core clerkships

**Expectations:**
Sub-Interns will attend morning work rounds and go to daily attending rounds. They will attend interns’ report on Wednesday morning. They will also have rounds with Dr. Gelbard once per week. They will be responsible for patient presentations and will participate in the regular call schedule. Students participating in the ward medicine rotation must understand that the scheduling of this rotation is complex and any student who enrolls is obligated to the date and the rotation.

**Student evaluations and grading:**
The supervising Medical Resident and the Attending physicians are expected to evaluate the student both in writing and by providing feedback at the end of the rotation. Students, will in turn, evaluate their resident and attendings at the conclusion of the rotation.
NO CHANGES AFTER SCHEDULE IS COMPLETE (June 1, 2010).

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Reviewed March 2010
UMH WARD MEDICINE

[TYPE A]

COURSE CODE: MDR 958
CLERKSHIP DIRECTOR: Tariq Mahmood, M.D.
TELEPHONE/FAX: 305-243-1961 / Fax: 305-24305546
EMAIL: TMahmood@med.miami.edu
CONTACT: jjurado@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Completion of Core Clerkships
NUMBER OF STUDENTS: 2
AVAILABLE: Refer to ESS system for dates, or see below
INTERVIEWING TIME: None
TYPE: Clinical

Overview:
The primary objective of this rotation is to promote the development and mastery of clinical core internal medicine competencies and to review common internal medicine clinical conditions. The practice of evidence based medicine is promoted by encouraging students to conduct literature searches for current guidelines and treatment.

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. They are afforded the unique opportunity of collaborative management with other specialties, care for critically ill patients in the Intensive Care Unit and participate in perioperative evaluation and comanagement.

Subinterns will participate in a series of workshops addressing key competencies and common clinical conditions. They will also attend grand rounds and specialty conferences. They participate in daily clinical activities such as handoffs and multi-disciplinary rounds. They take part in night and weekend calls every fourth night.

Goals:
- Opportunity to develop a set of knowledge, skills and attitudes that are needed to master Clinical Core Competencies as prescribed by the Society of Hospital Medicine
- 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 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

Participating Faculty:
Faculty from the Department of Medicine’s Division of Hospital 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 participates in night calls with the nocturnist from 4:30 PM to 9:30 PM, every fourth day. He/she also partakes in weekend calls from 7:30 AM to 5:30 PM
- The subintern admits 1-3 patients on a given call day.
- Pre-Round begins at 7:00 AM.
- Turn Over, from the Nocturnist, takes place at 7:30 AM.
- Attending Rounds starts from 8:00 AM and ends 12:00 PM.
- Work Rounds takes place from 1:00 PM until 4:00 PM.
- Sign Out occurs at 4:30 PM.
- The subintern participates in interactive weekly workshops conducted by an assigned faculty attending. These workshops are designed to review common inpatient clinical conditions and key core competencies.
- 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:
- Hospital Medicine Grand Rounds at Jackson Memorial Hospital on the 1st and 3rd Tuesday of the month.
• Hospital Medicine Grand Rounds at the University of Miami Hospital on the 2nd and 4th Thursday of the month.
• General Medicine Grand Rounds at Rosenstiel Medical Science Building every Wednesday at noon.
• Sub-internship Weekly Workshop every Friday at Noon at the University of Miami Hospital.
• We encourage participation in the weekly Cardiology Conference at the University of Miami Hospital seminar room every Tuesday, from 8:00 AM to 9:00 PM.
• Division’s Chief Rounds every 3rd Thursday at noon time.

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

PreTest / PostTest:
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 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 and the rotation at the conclusion of the rotation. These evaluations will be anonymous.

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<th>Rotation Dates</th>
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Revised March 2010
VAMC WARD MEDICINE

COURSE CODE: MDR 961
CLERKSHIP DIRECTOR: Devora C. Kahn MD
TELEPHONE/FAX: (305) 575-3160/3147
EMAIL: devora.kahn@va.gov
CONTACT: devora.kahn@va.gov
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Completion of all core clerkships
NUMBER OF STUDENTS: 4
AVAILABLE: Refer to ESS system for dates, or see below
INTERVIEWING TIME: None
TYPE: Clinical

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 a Hospitalist attending, two residents, two interns and occasionally two third year clerks. 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.

They will attend daily attending rounds as well as participate in daily sign out/hand off rounds. Sub-Interns will attend daily noon conferences, weekly grand rounds, twice weekly academic rounds with interns, and twice weekly sessions with sub-internship coordinators to review key inpatient topics as well as a sub-internship journal club.

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

Location:
Miami VA Medical Center

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.

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 every fourth day. Every second day in the four day cycle, they will be on short call and can admit one additional patient. 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.

Work rounds will begin at 7 am after the sub-I receives the hand off from the night staff. Attending rounds are at 7:30 AM on post call days and 8 am on on-call days. Hand off/sign out rounds are daily at 6pm.

The sub-intern will attend all conferences delineated below. They will be expected to lead one journal club during the month long rotation which will occur weekly. 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, JMH
2. Internal Medicine Grand Rounds: Wednesdays at noon, 3rd Floor Auditorium, Rosenstiel Medical Science Building
3. Interns Report: Tuesdays 10am, Miami VA Medical Center
4. Interns Teaching Rounds: Thursdays 10am, Miami VA Medical Center
5. Sub-I weekly Key topic Sessions: Tuesdays 2pm, Miami VA Medical Center
6. Sub-I weekly Journal Club: Thursdays 2pm

Readings:
Articles related to key topics will be provided at the beginning of the rotation geared towards each weekly session.
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.

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<th>Rotation Dates</th>
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<tbody>
<tr>
<td>6/22/10 – 7/18/10</td>
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Created March 2010
NEUROLOGICAL SURGERY
# NEUROSURGERY

**COURSE CODE:** MDR 852  
**CLERKSHIP DIRECTOR:** Howard Landy, M.D.  
**TELEPHONE:** 305-243-6751/9605 / **FAX** 305-243-3180  
**EMAIL:** imenendez@med.miami.edu  
**PROGRAM COORDINATOR:** Lianny Reyes  
**CONTACT:** Ingrid Menendez [Lois Pope Life Ctr. 2nd floor]  
**LENGTH OF ELECTIVES:** 4 Weeks  
**PREREQUISITE:** Completion of all core clerkships  
**NUMBER OF STUDENTS:** 4  
**AVAILABLE:** All year, except block 7AB  
**INTERVIEWING TIME:** Yes – 3 days max  
**TYPE:** Clinical

**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. 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, otolaryngology, 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.

Students will generally be expected to rotate through segments of time on the spine, general cranial, and head trauma teams. Interested students may also rotate on the pediatric service.

**Goals/Objectives:**  
Students will be exposed to and participate in the surgical and nonsurgical care of patients on the neurosurgical service.

**Location:** JMH and Miami Children’s Hospital

**Prerequisite:** Completion of all core clerkships

**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 March 2010
NEUROLOGY
NEUROLOGY CLERKSHIP

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 707</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Janice Maldonado, M.D. and Richard Isaacson, M.D.</td>
</tr>
<tr>
<td>TELEPHONE/FAX:</td>
<td>305-243-6732 and 305-243-2120</td>
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<tr>
<td></td>
<td><a href="mailto:JMaldonado@med.miami.edu">JMaldonado@med.miami.edu</a> and <a href="mailto:RIsaacson@med.miami.edu">RIsaacson@med.miami.edu</a></td>
</tr>
<tr>
<td>EMAIL:</td>
<td>Chemene Michel 305-243-4904 [Clinical Research Building 1314]</td>
</tr>
<tr>
<td>CONTACT:</td>
<td><a href="mailto:cmichel2@med.miami.edu">cmichel2@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>TYPE:</td>
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Overview:
The Neurology Clerkship exposes students to common and emergency neurological diseases. Students are expected to become competent in the neurological examination, diagnosis, evaluation by various modalities of imaging and laboratory testing, and treatment options. Students are exposed to inpatient ward, consult and stroke services. Students are evaluated on their knowledge of neurology, their interpersonal skills, and their professionalism.

Reviewed March 2010
BRAIN INJURY NEUROREHAB

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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Richard Isaacson, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-2120 <a href="mailto:risaacson@med.miami.edu">risaacson@med.miami.edu</a></td>
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<tr>
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<tr>
<td>LENGTH OF ELECTIVE:</td>
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<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</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes – Negotiable, but permission required</td>
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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. There is an opportunity to get involved in clinical research activities that are ongoing in the division. Students will also have the opportunity to become familiar with Botulinum toxin injections and Baclofen pumps.

Goals/Objectives:
Students will be exposed to and participate in the care of patients undergoing neurorehabilitation.

Location: JMH Trauma Center

Prerequisite: Neurology required rotation

Expectations:
There is no call.

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.

On the first day of the elective rotation, students should report to Coordinator of Senior Electives & Externships, Dr. Richard Isaacson, at 9 AM in the Clinical Research Building (CRB), 13th Floor, Room 1383.

Revised March 2010
# NEUROLOGY CONSULTATION

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<td>CLERKSHIP DIRECTOR:</td>
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## Overview/Course Design:
On this service, students who have completed the neurology clerkship are provided the opportunity to evaluate off-service neurology problems with the neurology consulting resident and attending assigned to that service.

## Goals/Objectives:
Students will be exposed to and participate in neurology consults.

## Location:
JMH or VAMC

## Prerequisite:
Neurology required rotation

## Expectations:
During the elective, you will be expected to report each morning to the neurology consult resident, pager 305-585-2255, extension 0689.

## 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.

On the first day of the elective rotation, students should report to the Coordinator of Senior Electives & Externships, Dr, Richard Isaacson, at 9 AM at the Clinical Research Building (CRB), 13th Floor, Room 1383.

Revised March 2010
### INPATIENT GENERAL NEUROLOGY AND CLINICS

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<th>COURSE CODE:</th>
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<tr>
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**Overview:**
Third- or fourth-year students who have completed the clinical clerkship in neurology may perform an elective on the General Neurology service at Jackson Memorial 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-ophthalmology, Neuromuscular, Stroke, Pediatrics, and Migraine. Experience in EMG and Neuropathology can be arranged based on director approval and availability.

**Course Design:**
During this course students are expected to care for a limited amount of patients on a general Neurology service and be active members on a General Neurology team.

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

**Location:**
JMH or VAMC

**Prerequisite:**
Neurology required rotation

**Expectations:**
Students should attend Neurology Morning Report at the Jackson Central 2 Auditorium each morning at 7:15 AM and Neurology Grand Rounds 10:00 AM –12:00 PM each Friday morning. The student is expected to take at least one nighttime call per week from 4:00 PM-11:00 PM.

**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.

On the first day of the elective rotation, students should report to the Coordinator of Senior Electives & Externships, Dr. Richard Isaacson, at 9 AM in the Clinical Research Building (CRB) 13th Floor, Room 1383.

Revised March 2010
# STROKE NEUROLOGY

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**Overview:**
Third- or fourth-year medical students who have completed the clinical clerkship in Neurology may perform a 2- or 4-week Subinternship on the stroke neurology service at Jackson Memorial Hospital under the supervision of a stroke neurology attending.

**Course Design:**
During the course, the student is expected to care for a limited number of patients on the stroke service and to be an active member of the stroke team. The student should report each morning for stroke inpatient rounds on West Wing 11 at a time designated by the stroke attending.

**Goals/Objectives:**
Students will be exposed to and participate in the care of stroke patients.

**Location:** JMH

**Prerequisite:** Neurology required rotation

**Expectations:**
The student is expected to take at least one nighttime call per week from 4:00 PM-11:00 PM.

**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.

On the first day of the elective rotation, students should report to the Coordinator of Senior Electives & Externships, Dr. Richard Isaacson, at 9 AM in the Clinical Research Building (CRB) 13th Floor, Room 1383.

Revised March 2010
OBSTETRICS & GYNECOLOGY
GYNECOLOGIC ONCOLOGY

COURSE CODE: MDR 856
CLERKSHIP DIRECTOR: J. Matt Pearson, M.D.
TELEPHONE/FAX: 305-243-7481 / Fax 305-325-1469
EMAIL: MPearson@med.miami.edu
CONTACT: Tameka Collins; tcollins@med.miami.edu
EMAIL/PHONE: mpearson@med.maimi.edu 305-243-2233
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Completion of all core clerkships
AVAILABLE: All year
NUMBER OF STUDENTS: 2
INTERVIEWING TIME: Yes, no more than two days for interviewing and must be approved by the coordinator prior to the start of the rotation
TYPE: Clinical

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 common gynecologic procedures, and have an understanding of the 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.

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, endometrial biopsy, supervised colposcopy
- 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
- Demonstrate the complete pre and post operative evaluations required for common gynecologic oncology surgical procedures
- Develop teaching skills by developing a short five minute presentation of a gyn topic to the third year students
• Expand basic gynecologic oncology knowledge through reading materials, case discussions and direct patient care

Location:
• Main campus at Jackson Memorial Hospital (Holtz Center 7007A, Ward 7A, DTC operating rooms, and ACC 4A)
• Sylvester Comprehensive Cancer Center (Fellow’s Conference, Tumor Board, operating rooms)
• University of Miami Hospital (operating rooms)

Participating faculty:
• Dr. Matt Pearson (Office Sylvester SCCC 3500), Gynecologic Oncology (305)243-2233
• Assistant for the clerkship-Tameka Collins; (305) 243-7481

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 to be presented at Fellow’s Conference (PowerPoint)
• Meet with the coordinator during the rotation to review the project
• Attend rounds daily
• Attend Grand Rounds weekly
• Attend weekly Tumor Board - Rad. Onc. Conference room 1st floor SCCC Fridays 1:15 pm
• Attend clinic when assigned
• Attend assigned surgical cases (preference given to Sub-I’s within reason)
• Attend Fellow’s Conference SCCC 3500 conference room Fridays 2:15pm, lunch is served
• 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 March 2010
MATERNAL FETAL MEDICINE

COURSE CODE: MDR 857
CLERKSHIP DIRECTOR: Gene Burkett, MD
TELEPHONE/FAX: 305-243-7481 / Fax 305-325-1469
EMAIL: GBurkett@med.miami.edu
CONTACT: Tameka Collins; tcollins@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: OB/GYN
AVAILABLE: All year
NUMBER OF STUDENTS: 1
INTERVIEWING TIME: Yes, no more than two days for interviewing and must be approved by the coordinator prior to the start of the rotation
TYPE: Clinical

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 nonstress tests and biophysical profiles. 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. There will be no post-call responsibilities.
- 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. Cotter.

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 of 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

**Location:**
Main campus at Jackson Memorial Hospital (Holtz Center Labor and Delivery fourth floor, Floors 3A and 3B postpartum, and Ward 7B antepartum, and ACC 4A)

**Participating faculty:**
- Gene Burkett, MD; assistant for the clerkship-Tameka Collins; 305-243-7481

**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) 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

Revised March 2010
OBSTETRICS & GYNECOLOGY AMBULATORY ROTATION

COURSE CODE: MDR 963
CLERKSHIP DIRECTORS: Jorge Garcia, MD & Carla Lupi, MD
TELEPHONE/FAX: 305-585-5160 / Fax: 305-325-1469
EMAIL: jgarcia3@med.miami.edu
CONTACT: Tameka Collins; tcollins@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: OB/GYN clerkship
NUMBER OF STUDENTS: 1
INTERVIEWING TIME: Two days, approved prior to the start of the rotation
TYPE: Clinical

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 Fridays and gynecology clinics on Tuesdays and Wednesdays. They will assist Dr. Garcia in seeing colposcopy patients on Thursday mornings. Thursday 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 post operative 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 attendings

Location:
ACC 4A and JMH ER

Participating faculty:
Jorge Garcia, MD & Carla Lupi, 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 or Lupi during the rotation to review the project
- Attend Grand Rounds weekly
- Attend clinics as assigned
- Attend resident didactics on Thursdays
- 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
REPRODUCTIVE HEALTH

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 858</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Christopher Estes, M.D. / Paul Norris, M.D.</td>
</tr>
<tr>
<td>TELEPHONE/FAX:</td>
<td>305-243-7481 / Fax 305-325-1469</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:CEstes@med.miami.edu">CEstes@med.miami.edu</a>  <a href="mailto:PNorris@med.miami.edu">PNorris@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> 305-243-7481</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>OB/GYN</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>INTERVIEWING TIME:</td>
<td>Yes, no more than two days for interviewing and must be approved by the coordinator prior to the start of the rotation</td>
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<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

**Overview:**
The objectives are for the student to improve knowledge and skills in managing contraceptive cases that are routine and also highly 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. Participation in the 4 week course will allow the introduction of other material including sexual assault, addiction and other issues of reproductive health.

**Course Design:**
- During this two or four week course, the student will rotate through an abortion facility. 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 students will interact with Drs. Norris, Lupi, and Estes in the clinical setting.
- 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. At the culmination of the course, the student will present the findings to Dr. Norris. This presentation will be available for future students enrolled in Reproductive Health.

**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

**Location:**
- Reproductive Health Clinic at University of Miami Hospital West Buiding, Suite 201

**Participating faculty:**
Drs. Christopher Estes, Carla Lupi, and Paul Norris (Office Holtz Center 7007), clerkship coordinator -Tameka Collins; 305-243-7481
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
• Meet with the coordinator during the rotation to review the project
• Attend assigned clinics
• Submit a written evaluation of the rotation, faculty and overall educational experience
• Attend Grand Rounds on Thursday mornings

Student evaluations and grading:
Grading will be Pass/Fail and based on:
• Attendance to assigned activities
• Evaluation from faculty
• Completion of project/presentation

Reviewed March 2010
REPRODUCTIVE ENDOCRINOLOGY & INFERTILITY

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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>George Attia, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-7481</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></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>OB/GYN</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>INTERVIEWING TIME:</td>
<td>Yes, but must check with coordinator on # of days</td>
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<td>TYPE:</td>
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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:
- Seeing private patients with the attending physician at UMH office
- Seeing patients with the residents, under attending supervision, at JMH REI clinic every Monday afternoon
- Students will be encouraged to scrub on surgical cases and be present during the different stages of in vitro fertilization and intra-uterine insemination.
- Students will be encouraged to attend the OB/GYN Department Grand round every Thursday morning and residents academic day on Thursday afternoon
- 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
- Understand the basics of menstrual cycle and hormonal regulation
- Appreciate different causes of infertility, basic work up and basic treatment options
- Understand the basics for wide variety of endocrinological disorders such amenorrhea, polycystic ovarian syndromes, thyroid dysfunction, and hyperprolactinemia.
- Attend and observe different techniques of advanced reproductive technology, including in vitro fertilization, intracytoplasmic sperm injection, and intrauterine insemination.
- Scrub and observe a wide variety of endoscopic surgeries.

Location: JMH

Prerequisite:
Students must have completed the OB/GYN core clerkship.

**Expectations:**
Student will be required to attend private office hours and Monday reproductive endocrinology and infertility clinic at Jackson Memorial 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 March 2010
UROGYNECOLOGY – FEMALE MEDICINE & RECONSTRUCTIVE SURGERY

<table>
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<th>COURSE CODE:</th>
<th>MDR 955</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Carlos Medina, M.D.</td>
</tr>
<tr>
<td>TELEPHONE/FAX:</td>
<td>(305) 585-5160</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:cmedina@med.miami.edu">cmedina@med.miami.edu</a> and <a href="mailto:ptakacs@med.miami.edu">ptakacs@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Dr. Medina and Dr. Takacs</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>OB/GYN</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks or 4 weeks</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes – 2 days for 2 week rotation or 3 days for 4 week rotation</td>
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<td>TYPE:</td>
<td>Clinical, and research, if desired</td>
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**Overview:**
The objective of this course is to improve the students’ knowledge and skills in evaluating and managing women with pelvic organ prolapse (POP) and urinary incontinence. The student will develop an understanding of pelvic anatomy, become familiar with surgical principles and develop proficiency in evaluating and recognizing the various types of POP, urinary incontinence and voiding disorders. Student participating in the 4-week course will also become familiar with the surgical management of POP and urinary incontinence, and have greater exposure to other common types of pelvic floor dysfunction such as: fecal incontinence, constipation, urinary tract infections, bladder and pelvic pain, urethral diverticulum, and sexual dysfunction.

**Course Design:**
This course may be taken as a two or four week rotation (preferably four weeks) in the University of Miami Division of Female Pelvic Medicine and Reconstructive Surgery (Urogynecology). The rotation will be mostly at Jackson Memorial Hospital and University of Miami Hospital; however, additional time may be spent Jackson South Hospital (optional). The student will become familiar with the clinical setting and learn to evaluate patients with POP, urinary incontinence, fecal incontinence, voiding dysfunction, pelvic pain and sexual dysfunction. The student is expected to attend urogynecology clinic and evaluate patients under the supervision of the chief resident, urogynecology fellow and attending physician. The student will become familiar with the non-surgical and surgical treatments of these conditions and will learn to counsel patients regarding choice of treatment, preoperative evaluations and postoperative course. The student will have hands-on experience with basic office procedures, urodynamic studies and pessary fitting. The student is expected to scrub and assist in surgical cases (students in a four week rotation will be instructed in basic surgical techniques that will include opening and closing the abdomen and knot tying).

There will be several scheduled lectures and discussions with Dr. Medina and Dr. Takacs on pelvic anatomy, pathophysiology of POP and urinary incontinence, urodynamic testing and overall management of pelvic floor dysfunction. Students in both the 2 and 4 week rotation will be required to do a literature search on a selected topic and present the topic at the end of the rotation. During this period of time the student will also have the opportunity to be involved in research.
### Schedule

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>Urogynecology Clinic</td>
<td></td>
<td></td>
<td>1pm-5pm ACC 4A</td>
<td></td>
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<tr>
<td>Preoperative Clinic</td>
<td></td>
<td></td>
<td>9 am-12 pm ACC 4A</td>
<td></td>
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<tr>
<td>Cystoscopy Clinic</td>
<td></td>
<td></td>
<td>1pm-4pm 2nd and 4th Tue of month, ACC 4A</td>
<td></td>
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<tr>
<td>Urodynamic Laboratory</td>
<td></td>
<td></td>
<td>Optional Once during rotation</td>
<td></td>
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</tr>
<tr>
<td>Operating Room</td>
<td>7:30am-5pm, DTC</td>
<td>1pm-5pm, 1st and 3rd Tue</td>
<td></td>
<td>7:00am-5pm, DTC</td>
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<tr>
<td>Lectures, case presentations, preoperative meetings</td>
<td></td>
<td></td>
<td>10am – 12noon</td>
<td></td>
<td></td>
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<tr>
<td>PVT clinical experience</td>
<td></td>
<td></td>
<td></td>
<td>9am-3pm, Cedars or Jackson South</td>
<td></td>
</tr>
<tr>
<td>Ward rounds</td>
<td>None</td>
<td>7:30am-8am</td>
<td>7:30am-8am</td>
<td>8:30am</td>
<td>8:00am if at Cedars</td>
</tr>
<tr>
<td>Reading/Research time</td>
<td></td>
<td></td>
<td>8am-10am</td>
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</table>

### Objectives/Goals:

- Describe the surgical anatomy of the pelvic floor including genital, urinary, and colorectal elements to provide patient care, under appropriate supervision, as assigned by the training program director or his/her designee, consistent with the educational goals of the program and the highest standards of patient care ("patient care" includes responsibility for associated documentation in the medical record, which should be completed in a timely fashion, and attendance at patient care rounds as assigned)

- To make appropriate use of the available supervisory and support systems, seeking advice and input from the attending staff physician/s when and as appropriate, and in accordance with the Resident Supervision and Teaching Standards of the Health System;

- To participate fully in the educational and scholarly activities of the training program as specified by the training program director, including attendance at didactic conferences and other responsibilities which may include a research project, completion of examinations, maintenance of procedure logs or other items

- To develop a personal program of learning to foster continued professional growth, with guidance from the teaching staff

- To assume responsibility, as called upon, in teaching more junior trainees and medical students, within the scope of the training program

- To participate in improving the quality of education provided by the training program, in part by submitting at least annually written evaluations of the faculty, the program and the overall educational experience
• To adhere to established practices, procedures and policies of the Health System, the Health System’s Medical Staff, the Department and affiliated training sites
• To participate in Health System programs, councils or committees and other medical staff activities, as appropriate
• To abide by the Health System and program-specific Resident Duty Hours Policies and, as scheduled by the program director, accurately report his/her duty hours
• To comply with Health System requirements for annual mandatory training and TB testing.

• Prior to completion of the program, to satisfy the Health System’s and program requirements as a condition for issuance of a certificate of completion of the training program.

1. Explain the normal anatomic supports and support mechanisms of the vagina, rectum, bladder, urethra and uterus.
2. Discuss normal and abnormal lower urinary tract, colorectal and vaginal function.
3. Discuss the differential diagnosis of urinary and anal incontinence, including the pathophysiology and the specific risk factors contributing to the most prevalent types of incontinence.
4. Summarize the normal functions of the lower urinary tract during filling and voiding phases, and the mechanisms of urinary incontinence.
5. Obtain a specific urological history, describe and employ standard terminology related the problem investigated, as well as evaluate the severity of the symptoms and impact these symptoms have on the patient’s overall wellbeing.
6. Perform a direct physical evaluation, specifically a thorough pelvic evaluation utilizing appropriate diagnostic techniques to elicit probable causes for the incontinence and be able to characterize the major types of urinary incontinence.
7. Describe the indications for urodynamic testing, the various components, and be able to interpret the results.
8. Characterize various types of voiding disorders.
9. Discuss non-surgical therapeutic modalities to treat urinary incontinence.
10. Define the most common surgical procedures utilized to treat urinary incontinence and understand their indications, contraindications
11. Perform a specific pelvic evaluation utilizing appropriate diagnostic techniques to evaluate pelvic organ prolapse utilizing primarily the POP-Q system.
12. Differentiate between selected tests to characterize lower urinary tract disorders [residual urine, Q-tip testing, simple cystometry, Puff questionnaire, and Potassium Sensitivity test].
13. Describe the most common surgical procedures utilized to treat pelvic organ prolapse.
14. Obtain a specific history to evaluate fecal incontinence, perform a direct physical evaluation and select necessary diagnostic tests to evaluate the condition.
15. Describe the following conditions: vesicovaginal fistula, rectovaginal fistula, urethral diverticulum, urethritis, urethral syndrome, and interstitial cystitis.

The student will accomplish the objectives and goals of the rotation by the following:

1. Assigned readings (text material provided)
2. Specific literature search
3. Lectures and case discussions with Dr. Medina and Dr. Takacs (preoperative and urodynamic meetings- Holtz Center 7007)
4. Active participation in ward rounds (Holtz center 7A)
5. GYN? Clinic experience (ACC 4A)
6. Cystoscopy clinic (ACC 4A – Urodynamic Lab)
7. Urodynamic studies (ACC 4A – Urodynamic Lab)
8. Surgical experience (JMH)
9. Cedars Hospital / Jackson South (additional clinical experience – optional depending on schedule)

**Location:**
95% of the time will be spent in main campus at Jackson Memorial Hospital (Holtz Center 7007, Ward 7A, DTC operating rooms and ACC 4A) the other 5% mostly optional will be either at Cedars Hospital or Jackson South.

**Participating faculty:**
Dr. Medina and Dr. Takacs (offices in Holtz Center 7007, phone number (305) 585-5160, secretary – Mayra Cespedes (305) 585-7091, coordinator – Tameka Collins

**Prerequisite:**
Completion of the OB/GYN Core Clerkship. (Preferably a student with strong interest in OB/GYN or surgery)

**Expectations:**
1. Complete assigned readings
2. Complete assigned literature search and presentation
3. Attend scheduled lectures and meetings (present cases and actively participate in discussions)
4. Attend ward rounds (evaluate patients)
5. Attend clinics and evaluate patients
6. Attend scheduled surgical cases (observe and assist)
7. Function as a member of the urogynecology team (responsibilities)
8. Expected to meet the goals of the rotation by fulfilling the learning objectives
9. Attend Grand Rounds on Thursday mornings unless excused by Dr. Medina or Dr. Takacs

**Student evaluations and grading:**
Grading will be pass/fail based on:
- Attendance at all scheduled sessions
- Motivation and involvement in patient evaluation and management
- Case presentations
- Review of literature on GYN-GU topics

There will be no written examinations. Students will be assessed on their general understanding of the subject (from a specific list of topics) and ability to evaluate clinical cases.

Reviewed March 2010
OPHTHALMOLOGY
OPHTHALMOLOGY

COURSE CODE: MDR 860
CLERKSHIP DIRECTOR: Lori Ventura, M.D.
TELEPHONE: 305-326-6312 FAX 305-326-6417
EMAIL: lventura@med.miami.edu; irperez@med.miami.edu
CONTACT: Isabel R. Perez [ABLEH, D-880]
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Completion of all core clerkships
NUMBER OF STUDENTS: Minimum of 5; 10 maximum
AVAILABLE: 1A, 1B, 2A, 4A, 5B, 9B
INTERVIEWING TIME: Yes, 2 days max with prior arrangement
TYPE: Clinical

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, Pediatrics, 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, conjunctivitis and strabismus. Some exposure to more unusual cases and to ophthalmology as a subspecialty will be obtained in clinics. Didactic sessions with attending faculty, patient care with residents and fellows in the clinics and coordinated self teaching make up the majority of the elective. In addition, these are supplemented with Grand Rounds, Flourescein Conference, Ophthalmology, Neuro-Ophthalmology and Residents’ conferences every week at the Bascom Palmer Eye Institute.

A total of four weeks is offered for students considering Ophthalmology as a career goal. All students wishing more than two weeks must be in the top 10% of their class, must have approval of the course coordinator, and the extra two weeks may be arranged independently with a faculty Ophthalmologist.

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

Prerequisite:
Completion of all core clerkships.
The elective may be taken in the third year with special dispensation from the Clerkship Director and the Assistant Dean for Clinical Curriculum.

Expectations:
Students are required to observe surgical and laser surgery procedures and to spend time in the general ophthalmology, subspecialty, and emergency care clinics.

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 8:00 a.m. to the Anne Bates Leach Eye Hospital, 2nd floor CR. Bring direct ophthalmoscope.

Revised March 2010
OPHTHALMOLOGY AT VAMC

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 861</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 / FAX 305-324-3255</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Dr. Anat Galor</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:agalor@med.miami.edu">agalor@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>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes - 1 day per week of rotation</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

Goals/Objectives:
- To provide medical students with the opportunity to perform standard ophthalmology examinations under supervision and thereby to 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:
Email to the course coordinator

Course Design:
- Students will spend 50% of their time in the ophthalmology clinic (clinic 4) and 50% of their time observing ophthalmic surgery (OR room 3).

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.

Student Evaluation and Grading:
- Students will be evaluated (pass/fail) by their attendance and participation in the clinical setting.

Reviewed March 2010
ORTHOPAEDICS
ADULT ORTHOPEDIC TRAUMA ELECTIVE

| COURSE CODE:          | MDR 862
|----------------------|------------------|
| CLERKSHIP DIRECTOR:  | Gregory Zych, D.O.
| TELEPHONE:           | 305-585-1315 / FAX 305-324-7658
| EMAIL:               | orthoapp@med.miami.edu
| CONTACT:             | Viveka Spivey / Carmen Fuente [Rehab Bldg Rm. 303]
| 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, 2010)
| INTERVIEWING TIME:   | Yes - 2 Days and by permission only
| 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.

**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 where he will 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.

**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
NOTE: Scheduling from June thru December 2010 for both the Sub-I and elective is limited to students applying to Orthopaedics only.

Report at 6:45 a.m. to the first year (PGY2) Ortho Trauma Resident JMH beeper 2175

Revised March 2010
# ADULT ORTHOPEDIC TRAUMA SUB-I

**[TYPE B]**

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<thead>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Gregory Zych, D.O.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1315 / FAX 305-324-7658</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 [Rehab Bldg Rm. 303]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2 total between MDR 862 &amp; MDR 863</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year <em>(Only students applying to ORTHO approved from June-Dec, 2010)</em></td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes - 2 Days and by permission only</td>
</tr>
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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.*

**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 where he will 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.

**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
NOTE: Scheduling from June thru December 2010 for both the Sub-I and elective is limited to students applying to Orthopaedics only.

Report at 6:45 a.m. to the first year (PGY2) Ortho Trauma Resident JMH beeper 2175

Revised March 2010
HAND SURGERY

COURSE CODE:  MDR 866
CLERKSHIP DIRECTOR:  Patrick Owens, M.D.
TELEPHONE:  305-585-1315  /  FAX 305-324-7658
EMAIL:  orthoapp@med.miami.edu
CONTACT:  Viveka Spivey / Carmen Fuente [Rehab Bldg Rm. 303]
LENGTH OF ELECTIVE:  2 weeks
PREREQUISITE:  Must have completed 6 months of core clerkships including Surgery
NUMBER OF STUDENTS:  2
AVAILABLE:  All year  (Only students applying to ORTHO approved from June-Dec, 2010)
INTERVIEWING TIME:  Yes - 2 days by permission only
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.

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 primarily be rotating at Jackson Memorial Hospital.

Student evaluations and grading:
Students rotating through the Department of Orthopaedic 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
- Judgement
- 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

(Report at 6:45 a.m. to the first year ortho hand resident, JMH beeper 2182)

Revised March 2010
MUSCULOSKELETAL ONCOLOGY SERVICE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Sheila Adams, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1315 / FAX 305-324-7658</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 [Rehab Bldg Rm. 303]</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 STUDENT:</td>
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</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year (Only students applying to ORTHO approved from June-Dec, 2010)</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes - 2 days and by permission only</td>
</tr>
<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.

Overview/Course Design:
Students on the orthopedic oncology service are expected to become familiar with the principles of staging and diagnosing tumors of bone and soft tissue. 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 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 orthopaedic oncology case-based conference, a weekly multidisciplinary oncology conference, and a weekly pre-operative planning conference. There are a number of potential research projects, both clinical and laboratory, that are available to interested investigators. Drs. Adams and Temple are members of the Orthopaedic 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 primarily be rotating at University of Miami Hospital (UMH) and Jackson Memorial Hospital. 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 orthopaedic history and physical
- Ability to apply knowledge in clinical setting
- Ability to relate to patients
- Ability to relate to peers and staff
- Professionalism

Revised March 2010
ORTHOPEDICS SURGERY ADULT RECONSTRUCTION SERVICE

COURSE CODE:                      MDR 864
CLERKSHIP DIRECTOR:  Hari Parvataneni, M.D.
TELEPHONE/FAX:   305-585-1315   /    FAX:  305-324-7658
EMAIL:    orthoapp@med.miami.edu
CONTACT:    Viveka Spivey / Carmen Fuente [Rehab Bldg Rm. 303]
LENGTH OF ELECTIVE:    2 weeks
PREREQUISITE:    6 months of core clerkships including Surgery clerkship
NUMBER OF STUDENTS:  1
AVAILABLE: All year (Only students applying to ORTHO approved from June-Dec, 2010)
INTERVIEWING TIME:   Yes – 2 days by permission only
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.

Overview:
This rotation offers the student exposure to the management of arthritic and degenerative conditions afflicting the musculoskeletal system. Total joint replacements, both primary and revisions, are performed on the service. There will be exposure to the management of fractures of the hip. There will be extensive exposure to arthroplasty surgery as well as follow-up for these conditions seen in the outpatient clinics. The student will be exposed to a wide variety of reconstructive procedures and will be expected to become an active participant of the team. Opportunity for research and clinical studies are available if the particular student is interested.

Course Design:
The student will learn to take a history and examine patients with arthritic and degenerative conditions. Students will assist in their management both conservatively and operatively, participate in management rounds and conferences relating to the service and clinics. Students will be preassigned a weekly topic which they will be expected to present, with appropriate handouts, at the weekly didactic conference. They will also be required to present articles at our weekly journal club and cases at our perioperative conferences.

Goals:
After completing the rotation, students should be familiar with the basic pathophysiology, physical examination & diagnosis, radiologic diagnosis, treatment options and basic surgical principles of hip and knee arthritis and hip fractures.

Objectives:
By actively participating in outpatient clinics (twice weekly), daily rounds, surgery (twice weekly) and conferences (4 times weekly), the student will be exposed to adequate clinical and academic materials to achieve these goals. Conferences will consist of journal club, preoperative/postoperative conference and didactic lectures. Additionally, each student will receive a cd-rom of reading materials to supplement the clinical exposure.

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 primarily be rotating at University of Miami Hospital (UMH) and Jackson Memorial Hospital. Students must get processed at UMH prior to start of the rotation. Contact course coordinator.

**Participating faculty:**
The two supervising faculty members are Drs. Hari Parvataneni and Raymond Robinson, however, the students will also be supervised by the senior residents on the service.

**Expectations:**
Taking call is not expected, however, those students interested in orthopaedic surgery as a career are strongly recommended to take trauma call at Jackson when the ortho PGY2 on this service is on call.

On the first day of the rotation, students should **report at 6:45 a.m. to the PGY2 recon resident, beeper 305-483-7162**

**Student evaluations and grading:**
Students will be graded pass/fail and will be evaluated by one of the attendings or the chief resident on the service using the UMMSM evaluation form.

Evaluation: Students will be evaluated pass/fail by the attending or senior resident on service using the UMMSM evaluation? Evaluation will be based on the following:

- 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

Revised March 2010
SPINE SERVICE

<table>
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<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>305-585-1315 / FAX 305-324-7658</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 [Rehab Bldg Rm. 303]</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>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year (Only students applying to ORTHO approved from June-Dec, 2010)</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes - 2 days and by permission only</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.

**Overview/Course Design:**
This rotation provides exposure to traumatic and degenerative affections of the spine, including exposure to the management of spinal cord injury rehabilitation. 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:**
Students will primarily be rotating at Jackson Memorial Hospital.

**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 orthopaedic 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 March 2010
OTOLOGY (Clinical)

<table>
<thead>
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<th>COURSE CODE:</th>
<th>MDR 871</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Thomas Balkany, M.D. and Fred Telischi, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-8766 / FAX 305-326-7610</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:mruiz@med.miami.edu">mruiz@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Mayte Ruiz-Sexton</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Interview with the Course Director</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>INTERVIEWING TIME:</td>
<td>Yes - 2 days</td>
</tr>
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<td>TYPE:</td>
<td>Clinical</td>
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</table>

**Overview:**
Otology is the surgical sub-specialty of hearing, balance 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.

**Goals/Objectives:**
Students will be exposed to and participate in the medical and surgical care of patients with ear and facial nerve disorders.

**Location:** JMH

**Prerequisite:** None

Reviewed March 2010
OTOLARYNGOLOGY

COURSE CODE: MDR 873
CLERKSHIP DIRECTOR: Brian Jewett, M.D.
TELEPHONE: 305-585-8766 / FAX 305-326-7610
EMAIL: mruiz@med.miami.edu
CONTACT: Mayte Ruiz-Sexton
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: None
NUMBER OF STUDENTS: 2
AVAILABLE: All year
INTERVIEWING TIME: Yes - 1 days maximum
TYPE: Clinical

Overview:
Otolaryngology (ENT) is a surgical specialty involving evaluation and treatment of disorders related to the ears, nose, sinuses, face, upper aerodigestive tract, and neck.

Course Design:
During this rotation, the student will have the opportunity to participate in the clinical evaluation, related testing, and medical/surgical treatment of disorders in the head and neck region. Learning opportunities include participation in clinics, operating room, and didactic sessions.

Goals/Objectives:
Objectives: At the end of this rotation, the student should demonstrate competence in the following areas:

1. Basic Sciences: thorough understanding of the anatomy and physiology of the head and neck, related sensory and communicative organs, upper aerodigestive tract, and skin.
2. Clinical: thorough understanding of appropriate diagnostic work-up and management of patients with common ENT complaints as demonstrated through participation in the clinic. Student should also be able to perform a focused history and physical in the context of patient consultation, and be able to develop a differential diagnosis with appropriate management plan in coordination with junior and senior residents.
3. Technical: thorough understanding of basic surgical skills including hemostasis, surgical dissection and exposure, avoidance of complications, and pre-/postoperative care.

Location: JMH, CRB, BPEI, SCCC

Prerequisite: None

Student evaluations and grading:
Rotation performance will be assessed through evaluations from faculty, residents, and ancillary clinic staff.

Reviewed March 2010
### OTOLARYNGOLOGY (Subinternship) [TYPE B]

<table>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Brian Jewett, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-8766 / FAX 305-326-7610</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:mruiz@med.miami.edu">mruiz@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Mayte Ruiz-Sexton</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>Yes - 2 days maximum</td>
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<td>TYPE:</td>
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**Overview:**
Otolaryngology (ENT) is a surgical specialty involving evaluation and treatment of disorders related to the ears, nose, sinuses, face, upper aerodigestive tract, and neck.

**Course Design:**
During this rotation, the student will have the opportunity to participate in the clinical evaluation, related testing, and medical/surgical treatment of disorders in the head and neck region. Learning opportunities include participation in clinics, operating room, and didactic sessions.

**Goals/Objectives:**

**Objectives: At the end of this rotation, the student should demonstrate competence in the following areas:**

1. Basic Sciences: thorough understanding of the anatomy and physiology of the head and neck, related sensory and communicative organs, upper aerodigestive tract, and skin.
2. Clinical: thorough understanding of appropriate diagnostic work-up and management of patients with common ENT complaints as demonstrated through participation in the clinic.
3. Clinical: performance of a focused history and physical in the context of patient consultation, and be able to develop a differential diagnosis with appropriate management plan in coordination with junior and senior residents.
4. Clinical: understanding of the audiologic evaluation including hearing tests (pure-tone and speech audiometries, tympanometry, ABR and ENG testing) and become familiar with different sound amplification devices.
5. Clinical: performance of an otologic history and physical exam, including assessment of hearing and balance function.
6. Clinical: understanding of the indications and contraindications for common pediatric surgical procedures, including tonsillectomy, adenoidectomy, and tympanostomy tube placement. Students should also demonstrate a thorough understanding of the pre-operative workup of the pediatric patient by participating in the pediatric ENT clinic under the supervision of senior residents and faculty. Students should have an awareness of the unique challenges presented in the post-operative care of the pediatric patient.
7. Clinical: understanding of appropriate diagnostic work-up and management of patients with common rhinologic complaints related to hoarseness, chronic rhinosinusitis, allergies, nasal neoplasms, and obstructive sleep apnea by working in the general ENT clinic and participating in the medical and surgical management of these diseases.
8. Clinical: understanding of the evaluation of facial trauma patients with a targeted but complete physical exam, and develop a management plan appropriate radiographic imaging.

9. Clinical: understanding of the staging of head and neck cancer, with appropriate application to patients in the clinical and surgical settings. Students should demonstrate an awareness of the multidisciplinary care of the head and neck patient by participating in tumor board and other conferences.

10. Technical: thorough understanding of basic surgical skills including hemostasis, surgical dissection and exposure, avoidance of complications, sterile technique, handling of soft tissue, wound repair, and pre/postoperative care.

11. Technical: understanding of basic post operative care of the head and neck surgical patient including wound and drain management, tracheotomy care, and be able to recognize signs of complications such as fistula formation.

**Location:** JMH, CRB, BPEI, SCCC, UMH

**Prerequisite:** None

**Expectations:**
Fourth year students are expected to assume an active role in all clinical activities, assuming the role of a junior member of the housestaff.

**Student evaluations and grading:**
Rotation performance will be assessed through evaluations from faculty, residents, and ancillary clinic staff.

Reviewed March 2010
PATHOLOGY
PATHOLOGY ELECTIVE AT MT. SINA

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 878</th>
</tr>
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<tbody>
<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:cruzl@msmc.com">cruzl@msmc.com</a>; <a href="mailto:rpoppiti@msmc.com">rpoppiti@msmc.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Luisa Cruz</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</td>
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<tr>
<td>AVAILABLE:</td>
<td>All Year, except blocks 6B, 7AB, 8AB, 10B, 11AB</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes – 1 day per week</td>
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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

Location: Mt. Sinai Medical Center

Prerequisite: None

Expectations:
Students are required to have the following documents upon arrival:
- Immunizations
- PPD (within the last 6 months)
- Copy of Personal Insurance Card
- Copy of HIPPA and OSHA certificates

Please report at 9:00am to:

Mt. Sinai Medical Center
Office of Medical Education
De Hirsch Meyer Tower, Main Bldg. Suite #2065
4300 Alton Road
Miami Beach, Florida 33140

Reviewed March 2010
PATHOLOGY (Senior Elective)

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 879</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Carmen Gomez, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3734 / FAX 305-243-3944</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:yblanco3@med.miami.edu">yblanco3@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Yanira Blanco  [JMH, Holtz Ctr. #2068, R-5]</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>INTERVIEWING TIME:</td>
<td>No</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical and Anatomic Pathology</td>
</tr>
</tbody>
</table>

Overview:
The student will be expected to learn the role of the pathologists in patient care, using diagnostic and screening tests, to identify and interpret the changes that characterize different diseases in the cells, tissues, and fluids of the body. The elective in Pathology may be taken as a two or four-week rotation. Students should contact the department with their desired rotations prior to the beginning of the elective, as there will be assigned on a “first come, first serve” basis and space may be limited.

Course Design:
The students may select one week rotations in any of the following laboratory disciplines:

- Autopsy Pathology
- Clinical Chemistry
- Cytopathology
- Hematopathology
- Immunology
- Microbiology
- Neuropathology
- Surgical Pathology (within this discipline, there are several subspecialties that run as independent services)
  - Breast Pathology
  - Chest and mediastinum Pathology
  - Dermatopathology
  - Endocrine Pathology
  - Frozen section Pathology
  - GI Pathology
  - GU Pathology
  - GYN Pathology
  - Head and Neck Pathology
  - Pediatric Pathology
  - Renal Pathology
  - Soft tissue and bone Pathology
- Transfusion Medicine

Goals:
The student in this elective is expected to learn the skills and attitudes required in the discipline of Pathology as well as become familiar with the core competencies required of pathology residents in training.

**Objectives:**
- Understand the field of Pathology as a career in Medicine.
- Understand a pathologist as a physician who specializes in the diagnosis and management of human disease by laboratory methods.
- The importance of the pathologist in patient care, as consultant, researcher, and teacher.
- The needs to integrate clinical information with physiological, biochemical, and molecular laboratory studies, together with observations of tissue alterations.

**Location:**
JMH/Holtz Bldg. 2nd floor, Department of Pathology.

**Participating Faculty:**
Depending on the laboratory discipline that a student selects, there is an assigned faculty mentor and pathology resident who will be responsible for ensuring the student’s involvement in the daily activities of the laboratory.

**Prerequisite:**
None

**Expectations:**
The student must participate in the following:
- Daily morning conferences.
- Daily multiheaded microscope sessions.
- Weekly residents’ Journal Club and Anatomic/Clinical Pathology cases.
- Weekly multidisciplinary grand rounds.

**Student Evaluation and Grading:**
Each student is evaluated by the supervising faculty member in charge of their chosen rotation. The evaluation is based on a Pass/Fail system.

Revised March 2010
PEDIATRICS
ADOLESCENT MEDICINE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 880</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Onelia G. Lage, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-5880 / FAX 305-243-5956</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Oriali Coffigny</td>
</tr>
<tr>
<td></td>
<td>Mailman Center #1058A D-820</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Pediatrics</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2 (rare exceptions may be considered)</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes - 2 days</td>
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<tr>
<td>TYPE:</td>
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</table>

**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 treatment of the 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 INPATIENT UNIT**
The student will have opportunities to perform consultation examinations of adolescent patients, as well as participate in multidisciplinary care. The student will also participate in consultations at the inpatient addictions and psychiatric unit for adolescents.

**ADOLESCENT OUTPATIENT CLINICS**
The student will attend and actively participate in the General Adolescent Medicine Clinic, as well as the Adolescent Specialty Clinics (Gynecology, STD, Diabetes, Chronic Disease, HIV), weekly school-based clinic at a local senior high school, and weekly visits to the juvenile detention center. They 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 maturational processes
Goal 2 – Know HEADS mnemonic for psychosocial history and assessment
Goal 2 – Know precepts of confidentiality and conditions associated
Goal 2 – Know mature minor/emancipated minor concepts
Goal 3 – Know different aspects of school health services
Goal 4 – Know basic knowledge of adolescent health complaints

1. Increase knowledge about adolescent physical and psychosocial growth and development
2. Understand unique aspects of adolescent health care (eg. Psychosocial screening, confidentiality issues, etc.)
3. Increase awareness of different adolescent health care delivery models through active participation or discussions (eg. Academic clinics, school clinics, faith-based clinics, health department clinics, juvenile detention centers etc.)
4. Understand diagnosis and management of some common adolescent conditions (eg. Acne, STD’s menstrual disorders, chronic diseases etc.)
**Location:** JMH

**Prerequisite:** Completion of Pediatrics core clerkship

**Expectations:**
The student will attend daily noon conference and case discussions, as well as weekly Pediatric conferences (Grand Rounds/M&M conference). The student will also 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 required to present an adolescent topic to the team.

Students should stop by the Mailman Center for Child Development (MCCD), Room 1058A to pick up a schedule and reading packet on the Friday, prior to the rotation.

**Student evaluations and grading:**

**EVALUATION WILL CONSIST OF:**
1. 10 question pre and post test
2. Completion of reading materials
4. General Attendance and participation

Reviewed March 2010
CHILD PROTECTION TEAM

COURSE CODE: MDR 881
CLERKSHIP DIRECTOR: Walter F. Lambert, M.D.
TELEPHONE: 305-243-7550 / FAX 305-243-7548
CONTACT: Maryela Suarez
Professional Arts Building Rm. #212 D-820
LENGTH OF ELECTIVE: 2/4 weeks
PREREQUISITE: None
NUMBER OF STUDENTS: 2
AVAILABLE: All year
INTERVIEWING TIME: Yes - 2 days maximum and arranged prior to rotation
TYPE: Clinical

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: None

Reviewed March 2010
NEONATOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 883</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Ilene Sosenko, M.D. and Tilo Gerhardt, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-6408 / FAX 305-545-6581</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Fanny Calvo / Anna Downs [ET 5005 R-131]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2/4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Pediatrics</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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</table>

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 supplemental 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

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

Reviewed March 2010
PEDIATRIC AMBULATORY ELECTIVE

COURSE CODE: MDR 884
CLERKSHIP DIRECTOR: Nancy P. Fawcett, M.D.
TELEPHONE: 305-585-6364 / FAX 305-325-0293
CONTACT: Akram Tamer, M.D. [ET 6006 R-131]
E Mail: atamer@peds.med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Completion of all core clerkships
NUMBER OF STUDENTS: 1
AVAILABLE: All Year
INTERVIEWING TIME: Yes - 3 days maximum and by permission
TYPE: Clinical

Overview/Course Design:
Senior students interested in a broad experience in outpatient pediatrics will spend four weeks providing direct care of patients appointed to the Pediatric Comprehensive Care and the Subspecialty Clinics in the Ambulatory Care Center at Jackson Memorial Hospital.

Each day the student will obtain the history, perform a physical examination and participate in the medical care of pediatric patients who present with a wide variety of common clinical illnesses and classical diseases. Students will be providing comprehensive and preventative care for children of all ages. The student will be precepted on a one-to-one basis by fulltime pediatric teaching faculty assigned in the ambulatory areas.

Goals:
This experience is designed to permit the student to develop and test his/her clinical skills, utilize medical knowledge, and practice Evidence Based Medicine. The student will understand and appreciate the role of the primary physician and medical team in providing continuity of comprehensive care to pediatric patients.

Objectives:
1. Obtain thorough past and present patient history.
2. Complete full physical examination.
4. Utilize clinical reasoning to develop a differential diagnosis.
5. Review patient immunizations and plan for future vaccinations.
6. Determine appropriate therapeutic recommendations.
7. Order appropriate tests for diagnosis and/or screening.
8. Demonstrate pathophysiology knowledge.
9. Effectively communicate with the primary preceptor regarding the assessment of each patient.
10. Effectively and professionally communicate with the patient, his/her caregiver/parent, and medical staff.
11. Provide preventative healthcare in terms of child safety, dental care (fluoride varnish application), nutrition (assessment of growth and neurological development) and immunizations, as well as screenings of vision and hearing.
12. Gain proficiency in administering vaccinations.
13. Review patient need for specialty consultations.
14. Appreciate and understand the cultural, psychosocial and environmental processes that affect patient care.
15. Anticipate and organize discharge planning.
16. Review current literature to add to student’s medical knowledge and confirm appropriate therapeutic action.
17. Commit to professional and personal growth through self-directed learning and discussions/feedback with the preceptor.

**Location:** JMH ACC 5C

**Prerequisite:** Completion of all core clerkships

**Expectations:**
The student is expected to see pediatric patients daily Monday through Friday from 8:00 AM to 5:00 PM. In addition, the student is expected to attend two teaching conferences (Pediatric Staff Conference and Pediatric Grand Rounds) each week.

**Student evaluations and grading:**
Evaluations will be discussed with the student and a written report will be sent to Dr. Akram Tamer and the Dean’s Office. Students will be evaluated based on part, or all of the following:

- Patient evaluation skills
- Data gathering and problem solving
- Clinical knowledge
- Case presentations and write-ups
- Personal qualities and professional behavior
- Communication and interpersonal skills

Revised March 2010
PEDIATRIC CARDIOLOGY

COURSE CODE: MDR 885
CLERKSHIP DIRECTOR: Ming Lon Young, M.D.
TELEPHONE: 305-585-6683 / FAX 305-324-6012
CONTACT: Diane Clark [Holtz Ctr., 5033 R-76]
EMAIL: dmcmulle@med.miami.edu
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Pediatrics
NUMBER OF STUDENTS: 1
AVAILABLE: All Year
INTERVIEWING TIME: No
TYPE: Clinical

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 diagnosis is emphasized during participation in the out-patient clinics at the University of Miami and 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 cardiac echocardiograms are included the individual patient's evaluation.

Fundamentals of 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 and UMHC

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 March 2010
PEDIATRIC DERMATOLOGY

COURSE CODE:     MDR 886 (This course is also listed under Dermatology)
CLERKSHIP DIRECTOR:  Jan Izakovic, M.D.
TELEPHONE:  305-243-6735 / FAX 305-545-9153
EMAIL:  jizakovic@med.miami.edu
CONTACT:  Maria Enamorado @ 305-243-6735
LENGTH OF ELECTIVE:  2-4 weeks
PREREQUISITE:  None
NUMBER OF STUDENTS:  1
AVAILABLE:  All year
INTERVIEWING TIME:  Yes - 2 days maximum on 4 wk rotation
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.

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

Prerequisite:  NONE

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 March 2010
PEDIATRIC EMERGENCY ROOM

COURSE CODE: MDR 887
CLERKSHIP DIRECTOR: Dr. Valerie Thompson (pager 305-750-2822)
EMAIL: shogu@med.miami.edu
TELEPHONE: 305-585-6757 / FAX 305-324-6012
CONTACT: Stephanie Hogu (Jackson North Wing RM 109)
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITE: Pediatrics
NUMBER OF STUDENTS: 1
AVAILABLE: All year
INTERVIEWING TIME: Yes – Flexible
TYPE: Clinical

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

Prerequisite: Pediatrics core clerkship

Expectations:
The student is expected to participate eight hours a day and attend staff conference, grand rounds, and
ambulatory teaching conferences 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

Revised March 2010
PEDIATRIC ENDOCRINOLOGY

COURSE CODE: MDR 888
CLERKSHIP DIRECTOR: Janine Sanchez, M.D.
TELEPHONE: 305-243-2920  FAX 305-243-6309
EMAIL: jsanchez@med.miami.edu
CONTACT: Janine Sanchez (Mailman #3044A D-820)
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Completion of all core clerkships
NUMBER OF STUDENTS: 1
AVAILABLE: All year
INTERVIEWING TIME: Yes - 2 days maximum
TYPE: Clinical

Overview/Course Design:
This elective provides experience in Pediatric Endocrinology with emphasis on disorders of growth, juvenile diabetes mellitus, thyroid disease and other endocrine problems. There are five clinics per week and four teaching conferences per week. There is also involvement with care of patients at Jackson Memorial Hospital.

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

Location: JMH

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 March 2010
PEDIATRIC INFECTIOUS DISEASES AND IMMUNOLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 891</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Charles Mitchell, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-2700 / FAX 305-243-3024</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:cmitchel@med.miami.edu">cmitchel@med.miami.edu</a>; <a href="mailto:afalk@miami.edu">afalk@miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Alan Falk [Batchelor, Rm. #263 D4-4]</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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</table>

**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:** JMH

**Prerequisite:** Completion of core Pediatrics clerkship is encouraged but not required

**Expectations:**
Students will be expected to attend a variety of both pediatric and adult 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

Reviewed March 2010
PEDIATRIC INTENSIVE CARE UNIT

COURSE CODE: MDR 892
CLERKSHIP DIRECTOR: G. Patricia Cantwell, M.D.
TELEPHONE: 585-6051 - Fax #325-0293
CONTACT: Mory Barreto [ET 6006 R-131]
EMAIL: pcantwel@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Medicine, Surgery, and Pediatrics
NUMBER OF STUDENTS: 1
AVAILABLE: All year except block 7AB
INTERVIEWING TIME: Yes – 2 days
TYPE: Clinical

Overview/Course Design:
The PICU serves as a hub for the care of all critically sick and injured children. This affords the student a broad exposure to clinically relevant pathophysiological principles and multi-system disease. Basic principles of recognition and management of respiratory failure and shock are emphasized.

Goals/Objectives:
The ICU environment allows the student to become familiar with monitoring devices that are utilized in the care of critically sick patients. The student is exposed to the importance of integrating multidisciplinary specialties in providing compassionate critical care. The rotation also exposes the student to a number of ethical dilemmas in decision making.

Location: JMH

Prerequisite: Completion of core Medicine, Surgery, and Pediatrics clerkships

Expectations:
PICU rounds are conducted several times daily in addition to informal teaching sessions with residents, critical care fellows and attendings. As an active PICU team member, the student is expected to take night call with the PICU resident and be responsible for the presentation of patients on morning rounds.

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

There is an opportunity to participate in research projects in progress. Students have availed themselves the opportunity to be mentored by critical care faculty. Participation in research requires a longer rotation.

Reviewed March 2010
PEDIATRIC NEPHROLOGY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 894</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Gaston Zilleruelo, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-6726 / FAX 305-585-7025</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:gzilleruelo@med.miami.edu">gzilleruelo@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Gastón Zilleruelo, M.D. [JMH - UCC 247 M-714]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
<td>Pediatrics</td>
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<td>NUMBER OF STUDENTS:</td>
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Overview/Course Design:
This elective consists of exposure to in-patient and outpatient pediatric renal problems, participation in clinical and experimental discussion with House staff and Fellows, and observation of renal physiology experiments.

Goals/Objectives:
Students will be able to describe diagnostic approaches to pediatric renal problems by radiological, histological, electromicroscopic, and immunological techniques.

Current clinical studies include: immunological, metabolic, and physiologic changes in nephrotic syndrome poorly controlled or uncontrolled with steroids; recurrent hematuria; renal function of newborn and infant; calcium, phosphorus, vitamin D, and PTH metabolism in uremia. Chronic Renal Failure; growth; lipids; HIV nephropathy; effect of maternal cocaine on the fetal kidney, low birth weight Nephropathy, dialysis cardiomyopathy; and drug use in hypertension.

Location: JMH

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

Reviewed March 2010
PEDIATRIC PULMONARY SERVICE

<table>
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<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Annabelle Quizon, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6162 / FAX 305-243-6708</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:aquizon@med.miami.edu">aquizon@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Elaina Johnson <a href="mailto:ejohnson@med.miami.edu">ejohnson@med.miami.edu</a>  Phone: 305-243-3176; Fax: 305-243-1262 [1580 Batchelor Children’s Inst., 1st floor]</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
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<tr>
<td>PREREQUISITE:</td>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>None</td>
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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 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.
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 by participation in the Sleep Clinic.
13. Obtain exposure to patients with cystic fibrosis by participation in the Cystic Fibrosis Clinic.
14. Apply the concepts of evidence-based medicine in clinical practice.
15. 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 are held at the Batchelor Research Institute of the University of Miami and at the ACC-West of Jackson Memorial Hospital. In-patient rounds are conducted at the Holtz's Children's Hospital at the Jackson Memorial Hospital.

**Prerequisite:**
None.

**Expectations:**
- The student is an integral part of the team and works closely with the pulmonary fellow under the supervision of a pulmonary attending.
- The student is expected to practice professionalism, punctuality and reliability.
- The student will participate in the in-patient rounds and consults under the supervision of the in-patient attending.
- The student will participate in the out-patient clinics under the supervision of the out-patient attending(s).
- The student will attend and participate in didactic conferences and will be provided a schedule of such.
- The student may be asked to prepare a presentation on a topic of interest to be presented to the pulmonary staff.
- 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 March 2010
POISON CENTER/TOXICOLOGY ELECTIVE

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<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Richard S. Weisman, Pharm. D., ABAT</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5250 / FAX 305-545-9762</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 [Annex Institute, 3rd floor, R-131]</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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<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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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: JMH

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 March 2010
### WARD PEDIATRICS AT JMH

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<th>COURSE CODE:</th>
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<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Akram Tamer, M.D.  [ET 6006] R-131</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-6364 / Fax # 305-325-0293</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Debbie Newman</td>
</tr>
<tr>
<td>East Tower #6006 R-131</td>
<td></td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Atamer@peds.med.miami.edu">Atamer@peds.med.miami.edu</a> or <a href="mailto:Dnewman@med.miami.edu">Dnewman@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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#### 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 are two attendings on each 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:

JMH

#### Prerequisite:

Completion of pediatrics core clerkship

#### 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 March 2010
PHYSICAL MEDICINE AND REHABILITATION
PHYSICAL MEDICINE AND REHABILITATION

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<th>COURSE CODE:</th>
<th>MDR 900</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Seema Khurana, D.O. 305-585-1431</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-1431 / FAX 305-585-1340</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Coretha Davis (JMH Rehab Bldg, Basement, Room L105, R-D-461</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:cdavis@med.miami.edu">cdavis@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 Weeks</td>
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<tr>
<td>PREREQUISITE:</td>
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**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 physician:** Dr. Kresimir Banovac, Dr. Seema Khurana, Dr. Jose A Restrepo and Dr. Kevin Dalal

**Site:** Jackson Memorial Hospital Rehab-2 Annex Building
Students will participate in the inpatient rehabilitation care of persons with spinal cord injury and disease (SCI/D), and other orthopedic 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 in performing patient histories and physical examination, and follow-up patients. In addition to the core course objectives, they are expected to learn the following:
1. Performance of a neurological and functional examination on a patient with SCI/D.
3. Prediction of functional potential based on level and degree of spinal cord injury.
4. Medical management of neurogenic bowel and bladder dysfunction.
5. Recognition of acute medical complications associated with spinal cord injury.
6. Definition of concepts of impairment, disability, and handicap (World Health Organization) and application of these concepts clinically.

*Clinical Adult Consultation Service*
**Supervising Physicians:** Dr. Seema Khurana, Dr. Diana Cardenas, Dr. Kresimir Banovac, Dr. Tamar Ference, Dr. Kevin Dalal, Dr. Andrew Sherman, Dr. Jose A Restrepo, Dr. Jose Mena, Dr. Ronald Tolchin, Dr. Robert Irwin, Dr. David Kushner, and Dr. Erin Wolff.

**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:
1. Formulation of rehabilitation diagnoses and identification of patients who should be admitted to a comprehensive in-patient rehabilitation program.
2. Identification of other extended rehabilitation settings for a patient with rehabilitation needs post-discharge.
Clinical Adult Outpatient Service

**Supervising Physicians:** Dr. Andrew Sherman, Dr. Seema Khurana, Dr. Diana Cardenas, Dr. Kevin Dalal, Dr. Kresimir Banovac, Dr. Robert Irwin, Dr. Jose Mena, Dr. Jose A Restrepo, Dr. Ronald Tolchin, and Dr. Erin Wolff.

**Sites:** University of Miami Hospital and Clinics Spine Institute, Jackson Memorial Hospital Private Clinic and Staff Clinic

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 outpatient staff SCI Clinic, and rounds from related specialties such as Neurosurgery and Orthopedics. Opportunity will be provided to observe electrodiagnostic procedures and injections. In addition to the core course objectives, they are expected to learn the following:

1. Performance of a complete manual muscle test and range of motion testing
2. Performance of a focused evaluation of the spine
3. Physiatric evaluation and management of low back and neck pain
4. Proper prescription of therapy orders

Rehabilitation Research

**Supervising physician:** Dr. Kresimir Banovac, Dr. Diana Cardenas, Dr. Seema Khurana, and Dr. Elizabeth Felix.

**Sites:** The Miami VAHS Center of Excellence for functional recovery in Chronic SCI. 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.

A combination of different elective settings will be provided during each rotation to enhance a broad exposure to Rehabilitation Medicine. The student and clerkship coordinator, prior to the start of the elective rotation will design this.

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  ID Badge/ Coretha Davis
9:00-10:30am Interdisciplinary in-patient rounds JMH Rehab

**Tuesday**
7:00-8:00am Clinical Walk Rounds
Orto Spine Rounds
9:00- 4:00pm EMG Clinic/ UMHC- Dr. Andrew Sherman

**Wednesday**
8:00am-12:00pm Staff Spinal Cord Injury Clinic/ JMH
12:00 – 1:00pm Miami Project to Cure Paralysis Seminar Series – LPLC 7th Floor
1:00- 2:30pm Seating Clinic JMH 2nd Floor Gym

**Thursday**
7:00-8:00am  Orthopedics Grand Rounds / Mailman Center Auditorium.
7:00-9:00am  Neurosurgery Grand Rounds / Lois Pope LIFE Center, 7th Floor

Friday
7:00-8:00am  MRI Spine Rounds- DTC Room 251
8:00 am – 12:00 pm  Rehabilitation Medicine Didactic Lectures

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 and University of Miami Hospital and Clinics

Participating faculty:
Seema Khurana, DO, Medical Student Elective, Program Director, Assistant Professor; Diana D. Cardenas, MD, MHA, Professor and Chair; Kresimir Banovac, MD, PhD, Professor; Andrew Sherman, MD, MS, Associate Professor; Linnette Castillo, PsyD, Assistant Professor; Kevin Dalal, MD, Assistant Professor; Elizabeth Felix, PhD, Research Assistant Professor; Tamar Ference, M.D., Assistant Professor; Robert Irwin, M.D., Assistant Professor; Jose Mena, MD, Assistant Professor; Jose Andres Restrepo, MD, Assistant Professor; Ronald Tolchin, D.O., Voluntary Assistant Professor; Erin Wolff, MD, Assistant Professor

Prerequisite:  Completion of Internal Medicine and Surgery core clerkships

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 in the in-patient rehabilitation unit which will include obtaining a physical history and physical examination, writing progress notes, and attending interdisciplinary rounds.
4. Participation in the in-patient consultation service which will include obtaining a physical history and physical examination, and writing assessments, and recommendations.

Reading List:  Reading materials will be available during the rotation.

Reference Textbook:
Physical Medicine & Rehabilitation, third edition. Randall L. Braddock

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 March 2010
PSYCHIATRY
PSYCHIATRY (Child & Adolescent)

<table>
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<tr>
<th>COURSE CODE:</th>
<th>MDR 901</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Ana Campo, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3075 / FAX 305 243-9893</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 #2106</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
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<tr>
<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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<tr>
<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

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 March 2010
PSYCHIATRY (Consultation-Liaison Service)

<table>
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<td>CLERKSHIP DIRECTOR:</td>
<td>Ana Campo, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3075 / FAX 305 243-9893</td>
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<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 #2106</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<tr>
<td>PREREQUISITE:</td>
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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

**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 March 2010
## PSYCHIATRY (Geriatric)

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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Ana Campo, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3075 / FAX 305-243-9893</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 2106</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
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<tr>
<td>PREREQUISITE:</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

### 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 March 2010
PSYCHIATRY IN-PATIENT CLERKSHIP   [JMH]

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<td>Ana Campo, M.D.</td>
</tr>
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<tr>
<td>CONTACT:</td>
<td>Cary Fratacci RMSB #2106</td>
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<tr>
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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
- 1 dual diagnosis unit (treatment of acute substance abuse, detox and psychiatric disorders)

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

Location:
JMH

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 March 2010
PSYCHIATRIC EMERGENCY SERVICE  
(Crisis Intervention)

<table>
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<th>COURSE CODE:</th>
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<tr>
<td>CONTACT:</td>
<td>Cary Fratacci  RMSB #2106</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>
<td>2</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes – 1 day only</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</tbody>
</table>

Overview/Course Design:
The 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

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 March 2010
**PSYCHIATRY (Ambulatory Special Elective)**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 906</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Ana Campo, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3075 / FAX 305-243-9893</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 #2106</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<td>INTERVIEWING TIME:</td>
<td>Yes – 1 day</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 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

**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 March 2010
RADIOLOGY
# RADIOLOGY @ MT. SINAI

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Manuel Viamonte M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-674-2251 FAX 305-674-2946</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Italia Smith [Mt. Sinai/MRI Bldg 2nd fl.]</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:ismith@msmc.com">ismith@msmc.com</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2 students combined between MDR 908 and MDR 912 (except Blocks 5A, 6B, 7AB, 8A when only 1 student allowed)</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes - 2 days</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</tbody>
</table>

## Overview/Course Design:
The course consists of daily required didactic conferences and practical film interpretation sessions covering all areas of Radiology.

## Goals/Objectives:
- Expose the student to the different imaging modalities
- Learn the basic approach to the interpretation of the images
- Explore the correlation between the images and the diseases

## Location:
Mt. Sinai Medical Center

## Prerequisite:
Completion of all core clerkships

## Expectations:
The student will spend the mornings in a combination of general or specialized radiological, nuclear, computer tomography, or magnetic resonance. At one o'clock there will be a one-hour radiology conference; attendance is mandatory except for the Friday's physics lecture. The rest of the afternoon could be spent in the library reviewing available teaching materials 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.

Students are required to turn in their attendance record upon completion of their rotation.

Please report to the Office of Medical Education, at 9:00 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:

- Immunizations
- PPD (within the last 6 months)
- Copy of Personal Insurance card
- Copy of HIPPA and OSHA Certificates

The Security Department will need a picture I.D., your car’s tag number and a $10.00 deposit in order to issue you a badge (cash only, checks or credit cards are not accepted).
## Radiology I (Required)

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 909</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Humberto O. Martinez, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-5778 / FAX 305-585-5743</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:mmartinez11@med.miami.edu">mmartinez11@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Maria Martinez [JMH WW-279] R-130</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>20 (minimum of 5)</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>June thru November 2009 &amp; January thru April 2010</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Discouraged, no more than 2 days and by permission only</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</tbody>
</table>

### Overview:
Radiology I is required 4 week clerkship available to third and fourth year medical students, and must be successfully completed prior to graduation. It is a structured four week course at Jackson Memorial Medical Center. The aim of the program is to teach the student an approach to diagnostic imaging and how to effectively use our varied radiographic techniques and imaging modalities to diagnose disease.

### Course Design:
The course consists of daily morning image interpretation sessions covering all areas of Radiology and afternoon required didactic conferences. Attendance will be recorded at the end of these sessions. The students will take a pre-course exam on day one of the rotation and will be required to present a case with a proven radiologic diagnosis half way through the clerkship. A final exam will be given on the last day of the course.

### Goals:
- To achieve a basic knowledge of plain film 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 and attendings.
- Become familiar with imaging of common disease processes as specified in the Radiology Case Log provided for each body section.
- Become comfortable in discussing the appropriate radiographic findings and differential diagnoses of a disease process to other colleagues as required for the oral case presentation. This will serve as the student's mid-course evaluation.
- Be familiar with the most indicated imaging tools and imaging protocols available for specific disease presentations.
- Become more familiar with the role of the radiologist as a member of the health care team.

### Location:
Jackson Memorial Hospital, West Wing Building, 2nd floor, Room 279
Participating faculty:
UMMSM Faculty, Fellows, and Residents

Prerequisite:
None

Expectations:
Students need to be familiar with the supplemental information provided with the course syllabus. Students are required to attend all didactic conferences, participate in the daily image interpretation sessions, and are encouraged to take advantage of the additional materials available in our Radiology library, including books, teaching files, and audio-visual materials. Students are encouraged to use the highly recommended “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 choose the most efficient imaging tools to guide the diagnosis of their patients’ diseases.

Student evaluations and grading:
Because of the structured nature of the course, a maximum of two (2) days of absence is enforced. Interviewing during the rotation is discouraged, and any absences beyond the two days must be made up to avoid an incomplete in the rotation.

The final grade will be determined by the performance on the mid-course case presentation (45%), the performance on the final exam (45%), with the remaining 10% of the grade based on improvement in performance between the pre-test and final exam, attendance, participation, and interest in all the required sessions and lectures, at the discretion of the course director and coordinator.

Revised March 2010
RADIOLOGY II

COURSE CODE: MDR 910
CLERKSHIP DIRECTOR: Humberto O. Martinez, M.D.
TELEPHONE: 305-585-5778 / FAX 305-585-5743
EMAIL: mmartinez11@med.miami.edu
CONTACT: Maria Martinez [JMH WW-279] R-130
LENGTH OF ELECTIVE: 2 weeks
PREREQUISITE: Radiology I
NUMBER OF STUDENTS: 4
AVAILABLE: All year except Thanksgiving week and December
INTERVIEWING TIME: None
TYPE: Clinical

Overview:
Radiology II at Jackson Memorial Medical Center consists of a more extensive exposure to one or two subspecialty areas in clinical Diagnostic Radiology.

Course Design:
The student may select to spend one or two weeks in any subspecialty area to gain more in-depth knowledge of that subspecialty. The experience will vary somewhat depending on the area of Diagnostic Radiology which the student selects. They are not required to attend scheduled student lectures, but are encouraged to attend the daily 12:30 p.m. Radiology didactic conference and the subspecialty conferences of the sections they are rotating through.

Goals/Objectives:
The students who have demonstrated a special interest in one of the Radiology subspecialties should spend as much time as possible in the daily imaging interpretation sessions and attend as many subspecialty conferences as possible during the elective. 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!

Location:
Jackson Memorial Hospital, West Wing Building, 2nd floor, Room 279

Participating faculty:
UMMSM Faculty, Fellows, and Residents

Prerequisite:
Radiology I

Expectations:
Students will participate in daily image interpretation sessions, attend as many noon conferences as possible and should take advantage of the additional materials available in our Radiology Library including books, teaching files, and audio-visual materials. Gaining more in depth understanding the role of Diagnostic Radiology and its subspecialties and obtaining a good comfort level in ordering and interpreting basic imaging modalities should provide the student with the ability choose the most efficient imaging tools to guide the diagnosis of their patients’ diseases.
Student evaluations and grading:
The students will be under the supervision of the Radiology faculty, fellow and resident staff. They will be individually evaluated by the faculty member(s) they have worked most closely with during the one or two week period. 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.

Revised March 2010
NUCLEAR MEDICINE

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 911</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Shabbir Ezuddin, M.D.</td>
</tr>
<tr>
<td>CONTACT PERSON:</td>
<td>Dorea Lindo, Administrative Assistant</td>
</tr>
<tr>
<td>REPORT TO:</td>
<td>Chief Resident, Nuclear Medicine, JMH Central 2, Room C-248 @ 9:00 am</td>
</tr>
<tr>
<td>TELEPHONE/FAX:</td>
<td>Phone: (305) 585-7955 / Fax: (305) 547-2323</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:dlindo@med.miami.edu">dlindo@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Dorea Lindo</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 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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<td>INTERVIEWING TIME:</td>
<td>NONE</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Nuclear Medicine</td>
</tr>
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</table>

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 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. They also interpret the EKGs prior to evaluating the processed images in the reading room. Students will also observe many other nuclear medicine procedures, such as cisternograms, renal scintigraphy, thyroid scintigraphy and PET scans.

Course Design:
Grand Rounds and Journal Clubs, appropriately prescheduled, are offered once per week. 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, teaching sessions are offered daily during the reading periods.

Clinics: Thursdays are usually Thyroid Clinic days in which students along with residents evaluate patients previously treated with Radioactive Iodine for therapy.

Basic Science Teaching Course: During the month of October, a 4 week, 200 hours Basic Science Teaching Course is offered to all first year residents, which students, if they so desire, may attend (the course takes place over a period of 4 weeks). The course comprises morning, noon and afternoon 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 taught by the Nuclear Medicine faculty, Mr. Jose Perez (Radiation Safety Officer), Mr. Gordon Steff (Radiopharmacist), Dr. Paul Braunschweiger (Radiobiologist), and others.
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-248.

Participating faculty:
During their Nuclear Medicine rotation, all students will be under the direct supervision of Dr. George Sfakianakis, Professor of Radiology and Pediatrics, Director, Division of Nuclear Medicine. All attendings, including Dr. Aldo Serafini, Dr. Shabbir Ezuddin and Dr. Efrosyni Sfakianaki are responsible for the training of students. In addition, our residents, are also encouraged to participate in the training of students. Mike Georgiou, Ph.D. offers technical support for Nuclear Medicine procedures.

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, cardiac imaging, renal scintigraphy, bone scans and other nuclear medicine procedures. These will be evaluated by the Residency Program Director, Dr. Shabbir Ezuddin, at the end of their rotation on the forms provided by the Office of Student Affairs.

Reviewed March 2010
NUCLEAR MEDICINE & ULTRASOUND @ MT. SINAI

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 912</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>William Smoak, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-674-2810   FAX 305-674-2694</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:ismith@msmc.com">ismith@msmc.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Italia Smith</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Completion of all core clerkships</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2 students combined between MDR 908 and MDR 912 (except Blocks 5A, 6B, 7AB, 8A when only 1 student allowed)</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes - 2 days on 4 week rotation</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
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</table>

Overview:
Electives in both Nuclear Medicine and Ultrasound at Mt. Sinai Medical Center can be arranged throughout by Dr. William Smoak.

Course Design:
The student will participate in divisional activities including diagnostic and therapeutic nuclear medicine, non-invasive cardiovascular laboratory, and ultrasound under the direct Preceptorship of attending physicians.

Goals/Objectives:
Students will be exposed to and will participate in nuclear medicine and ultrasound cases.

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. They are required to attend all conferences and encourage to view all areas after 9:30 AM until conference time and to visit Nuclear Medicine in the afternoon. Students are required to turn in a paper on the topic of their choice at the end of the rotation.

Students must adhere to regular morning assignments and report to Dr. Smoak in Nuclear Medicine in the afternoon.

Please report to the Office of Medical Education, at 9:00 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:
- Immunizations
- PPD (within the last 6 months)
- Copy of Personal Insurance card
- Copy of HIPPA and OSHA Certificates
The Security Department will need a picture I.D., your car's tag number and a $10.00 deposit in order to issue you a badge (cash only, checks or credit cards are not accepted).
PEDIATRIC RADIOLOGY (JMH)

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 914</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Gaurav Saigal, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-585-7500 / FAX 305-585-5743</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Maria Martinez 305-585-5778</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:mmartinez11@med.miami.edu">mmartinez11@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Radiology I</td>
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<td>NUMBER OF STUDENTS:</td>
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<td>AVAILABLE:</td>
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<td>No</td>
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</table>

Overview:
This course is designed for students interested in Pediatrics and consists of intensive exposure to Pediatric Radiology under the direct preceptorship of two-three staff pediatric radiologists.

Course Design:
The student will attend the daily neonatal, in-patient and out-patient film reading sessions, observe the performance of fluoroscopy, attend Pediatric Cardiology and Pediatric Tumor Board conferences. There will also be some exposure to cross-sectional imaging including pediatric abdominal, pelvic and head ultrasound, as well as ultrasound of the neonatal hip.

Goals/Objectives:
Students will be exposed to and will participate in pediatric radiology cases.

Location:
Experiences occur at JMH.

Prerequisite:
Radiology I

Expectations:
The student is also encouraged to attend the daily 12:30 p.m. Radiology didactic conference. The daily reporting time is 8:00 a.m.

Reviewed March 2010
PEDIATRIC RADIOLOGY @ MIAMI CHILDREN’S HOSPITAL

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 913</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Donald Altman, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-669-5873 EXT. 8453 / FAX 305-669-6531</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:Danays.Fleitas@mch.com">Danays.Fleitas@mch.com</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Danays Fleitas (3100 SW 62 Ave, Miami)</td>
</tr>
<tr>
<td>LENGTH OF ELECTIVE:</td>
<td>2 or 4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>None</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>INTERVIEWING TIME:</td>
<td>Yes – 2 days</td>
</tr>
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<td>TYPE:</td>
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</table>

Overview:
The pediatric radiology rotation at Miami Children’s Hospital provides medical students with an introduction to diagnostic imaging of pediatric patients. As the only licensed specialty hospital exclusively for children in South Florida, it has gained an international reputation. There are numerous interesting cases that are referred to us from South America and the United States.

Course Design:
Although medical student training is primarily in general radiology, there are also opportunities to become involved with neonatal radiology, ultrasound, nuclear medicine, computed tomography, neuroradiology, and magnetic resonance imaging.

Goals/Objectives:
- Acquire a basic fund of medical knowledge in the field of pediatric radiology
- Develop a basic understanding about the clinical indication for radiological examinations
- Develop an appreciation of the importance of accurate clinical information in arriving at a valid radiological diagnosis
- Become familiar with the imaging modalities utilized in pediatric radiology

Location:
Experiences occur at Miami Children’s Hospital.

Participating faculty:
There are nine faculty members.

Prerequisite:
None

Expectations:
There are weekly conferences during which interesting cases are discussed. There are also numerous opportunities to become involved beyond the basic course requirements.

Revised March 2010
RADIATION ONCOLOGY
RADIATION ONCOLOGY

COURSE CODE: MDR 915
CLERKSHIP DIRECTOR: Cristiane Takita, M.D.
TELEPHONE: 305-243-4210 / FAX 305-243-4363
EMAIL: ljulia@med.miami.edu
CONTACT: Lourdes Julia [SCCC - suite 1500] D-31
LENGTH OF ELECTIVES: 4 weeks
PREREQUISITE: None
NUMBER OF STUDENTS: 2
AVAILABLE: All Year
INTERVIEWING TIME: No
TYPE: Clinical

Overview:
The objective of the elective on Radiation Oncology 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 respond 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 and UMHC/SCCC.

Prerequisite: NONE

Expectations:
The student is expected to integrate into all areas of activity within the department and will be expected to be able to perform a comprehensive oncologic history and physical examination and be able 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 based on ability to do a relevant history and physical related to oncology and willingness to involve themselves in the steps needed to get the patient into treatment. For example, simulation, treatment planning, self-motivation and reading when outside of the department are encouraged to increase their knowledge of radiation oncology.

Reviewed March 2010
SURGERY
BURN CENTER

COURSE CODE: MDR 917
CLERKSHIP DIRECTOR: Nicholas Namias, M.D.
TELEPHONE: 305-243-4225 - Fax #243-3392
CONTACT: Evelyn Gotera [SCCC #3524 3rd floor M-875]
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 (Dec. 7-Jan. 17)
INTERVIEWING TIME: Yes–2 days 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/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.

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.

Revised March 2010
# CARDBIOTHORACIC SURGERY

**COURSE CODE:** MDR 919

**CLERKSHIP DIRECTOR:** Anthony Panos, M.D.

**TELEPHONE:** 305-243-4225 - Fax #243-3392

**CONTACT:** Evelyn Gotera [SCCC #3524 3rd floor M-875]

**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 (Dec. 6 – Jan. 16)

**INTERVIEWING TIME:** Yes – 2 days with prior approval

**TYPE:** Clinical

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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 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 JMH and the VAMC.

**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 March 2010
**GENERAL SURGERY [E I]**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 920</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Fred Moffat, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-4225</td>
</tr>
<tr>
<td></td>
<td>FAX 305-243-3392</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera</td>
</tr>
<tr>
<td></td>
<td>[SCCC #3524 3rd floor M-875]</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 (Dec. 6 – Jan. 16)</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes - 2 days with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
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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 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 and SCCC.

**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 March 2010
GENERAL SURGERY [ E II ]

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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Joe Levi, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-4225  FAX 305-243-3392</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera  [SCCC #3524 3rd floor M-875]</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>
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<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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<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:**
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 and SCCC.

**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. Joe Levi, Dr. Danny Sleeman, 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:** EI team, JMH West Wing 10-7:00 a.m.

Revised March 2010
GENERAL SURGERY [E III] [TYPE B]

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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Laurence Sands, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-4225 FAX 305-243-3392</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera [SCCC #3524 3rd floor M-875]</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 (Dec. 6 – Jan. 16)</td>
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<td>INTERVIEWING TIME:</td>
<td>Yes – 2 days with prior approval</td>
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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:
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, UMH and UMHC/SCCC.

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 March 2010
GENERAL SURGERY [E IV] [TYPE B]

COURSE CODE: MDR 943
CLERKSHIP DIRECTOR: Jose Martinez, M.D.
TELEPHONE: 305-243-4225  FAX 305-243-3392
CONTACT: Evelyn Gotera  [SCCC #3524 3rd floor M-875]
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 Dec 6 – Jan 16
INTERVIEWING TIME: Yes – 2 days 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 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 JMH and UMHC/SCCC.

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:** UMHC 4017 - Lilly (administrator) at 8:00 AM.

Revised March 2010
GENERAL SURGERY (VAMC) [TYPE B]

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Seth Spector, M.D.</td>
</tr>
<tr>
<td>TELEPHONE/FAX:</td>
<td>305-243-4225 / FAX: 305-243-3392</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 [SCCC 3rd floor, #3524 M-875]</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>
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<td>BLOCK SCHEDULE:</td>
<td>All year-except block 7AB (Dec 6 – Jan 16)</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>3 days with prior approval</td>
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<tr>
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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:
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.

Prerequisite:
Must have completed all the core clerkships. Students must be fingerprinted and contact Minerva Castellano at Minerva.Castellano@va.gov 1 week prior to start date for computer access.

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 March 2010
# ORAL AND MAXILLOFACIAL SURGERY

<table>
<thead>
<tr>
<th><strong>COURSE CODE:</strong></th>
<th>MDR 926</th>
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<tbody>
<tr>
<td><strong>CLERKSHIP DIRECTOR:</strong></td>
<td>Jesus Gomez, DDS</td>
</tr>
<tr>
<td><strong>TELEPHONE:</strong></td>
<td>305-585-5326 / FAX 305-326-8328</td>
</tr>
<tr>
<td><strong>EMAIL:</strong></td>
<td><a href="mailto:GCharlto@jhsmiami.org">GCharlto@jhsmiami.org</a></td>
</tr>
<tr>
<td><strong>CONTACT:</strong></td>
<td>Grace Charlton [JMH ACC East Bldg 2nd Floor Room 234]</td>
</tr>
<tr>
<td><strong>LENGTH OF ELECTIVE:</strong></td>
<td>2/4 weeks</td>
</tr>
<tr>
<td><strong>PREREQUISITE:</strong></td>
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<td><strong>NUMBER OF STUDENTS:</strong></td>
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<tr>
<td><strong>AVAILABLE:</strong></td>
<td>All year Except 1AB and 2A (June 21 thru August 15)</td>
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<td><strong>INTERVIEWING TIME:</strong></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 and University of Miami Hospital

**Participating Faculty:**
Dr's. Jesus Gomez, Michael Peleg, Yoh Sawatari and Robert Marx, Division Chief.

**Prerequisite:**
None

**Expectations:**
The medical student is expected to be in attendance every day of the two to four week rotation. If the student must be absent for some reason during his/her rotation on our service he/she must get permission from Dr. Jesus Gomez and must make up the missed days unless excused by Dr. Gomez. The student is expected to attend all 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: Fund of Knowledge, Professionalism, Participation, Attendance, Promptness, and Interaction with Peers

**REPORT TO:** Please contact Grace Charlton (305-585-5326) (ACC East Bldg, 2nd floor, Room 234) prior to rotation.

Revised March 2010
PEDIATRIC SURGERY

COURSE CODE: MDR 927
CLERKSHIP DIRECTOR: Holly Neville, M.D.
TELEPHONE: 305-243-4225  FAX 305-243-3392
CONTACT: Evelyn Gotera  [SCCC #3524 3rd floor M-875]
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 (Dec. 6 – Jan. 16)
INTERVIEWING TIME: Yes - 2 days 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 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.

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 March 2010
PLASTIC SURGERY

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 928</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>John Oeltjen, M.D. &amp; Seth Thaller, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-4225 / FAX 305-243-3392</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera [SCCC #3524 3rd floor M-875]</td>
</tr>
<tr>
<td></td>
<td>Teresa Shipman 305-585-5285</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:egotera@med.miami.edu">egotera@med.miami.edu</a></td>
</tr>
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<td>LENGTH OF ELECTIVE:</td>
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<td>PREREQUISITE:</td>
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<td>NUMBER OF STUDENTS:</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; and also participate in the on-call schedule with the residents. 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 and UMH.

**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:** Plastic Surgery office-East Tower 3019-9:00 A.M. to contact the chief resident at JMH.

Revised March 2010
SURGICAL INTENSIVE CARE UNIT

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 929</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Carl Schulman, MD, MSPH</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-4225 / FAX 305-243-3392</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera [SCCC #3524 3rd floor M-875]</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>Internal Medicine &amp; Surgery</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year, except block 7AB (Dec. 6 – Jan. 16)</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes – 2 days with prior approval</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Clinical</td>
</tr>
</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/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.

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, South Wing) at 7 a.m. on the first day of your rotation and introduce yourself to Mary Wyckoff, the nurse practitioner, before rounds to obtain your orientation packet.

Revised March 2010
TAYLOR BREAST HEALTH CENTER

COURSE CODE: MDR 945
CLERKSHIP DIRECTOR: Eli Avisar, M.D.
TELEPHONE/FAX: 305-243-4225 / FAX 305-243-3392
EMAIL: egotera@med.miami.edu
CONTACT/ADDRESS: Evelyn Gotera/SCCC, 3rd floor #3524 (M-875)
LENGTH OF ELECTIVE: 2 or 4 weeks
PREREQUISITE: Internal Medicine & Surgery
NUMBER OF STUDENTS: 2
AVAILABLE: All year, except block 7AB (Dec. 6 – Jan. 16)
INTERVIEWING TIME: Yes, 2 days 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 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.

Prerequisite:
Must have completed core clerkships in Internal Medicine and Surgery

Participating faculty:
Eli Avisar, M.D., Steven Rodgers, M.D., Pat Romilly, M.D., Christine Takita, M.D., Judith Hurley, M.D., Pedro Velez, M.D., Mecker Moller, 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

Revised March 2010
TRANSPLANT SURGERY

COURSE CODE: MDR 930
CLERKSHIP DIRECTOR: George W. Burke, III M.D.
TELEPHONE: 305-243-4225 / Fax #305-243-3392
CONTACT: Evelyn Gotera (SCCC 3rd floor #3524 M-875)
EMAIL: egotera@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Internal Medicine & Surgery
NUMBER OF STUDENTS: 3
AVAILABLE: All year, except block 7AB (Dec. 6 – Jan. 16)
INTERVIEWING TIME: 2 days 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/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.

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 March 2010
TRAUMA ELECTIVE

COURSE CODE: MDR 931
CLERKSHIP DIRECTOR: Carl Schulman, MD, MSPH
TELEPHONE: 305-243-4225 / FAX 305-243-3392
CONTACT: Evelyn Gotera [SCCC 3rd floor #3524 M-875]
EMAIL: egotera@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Internal Medicine & Surgery
NUMBER OF STUDENTS: 1
AVAILABLE: All year, except block 7AB (Dec. 6 – Jan. 16)
INTERVIEWING TIME: Yes – 2 days 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

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-121 at 8:00 a.m. for morning rounds and contact Dr. Carl Schulman.

Revised March 2010
TRAUMA INTENSIVE CARE UNIT

COURSE CODE:      MDR 932  
CLERKSHIP DIRECTOR:      Carl Schulman, MD, MSPH  
TELEPHONE:      305-243-4225 / FAX 305-243-3392  
CONTACT:      Evelyn Gotera [SCCC #3524 3rd floor M-875]  
EMAIL:      egotera@med.miami.edu  
LENGTH OF ELECTIVE:  4 weeks  
PREREQUISITE:      Internal Medicine & Surgery  
NUMBER OF STUDENTS:  2  
AVAILABLE:      All year-except block 7AB (Dec 6 – Jan 16)  
INTERVIEWING TIME:  Yes – 2 days 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/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.

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.

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-Trauma Intensive Care Unit-7:00 a.m. and ask for Doug Houghton, ARNP, or the fellow on call.

Revised March 2010
**VASCULAR SURGERY**

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<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Omaida Velazquez, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-4225 / Fax #305-243-3392</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Evelyn Gotera (SCCC 3rd floor #3524 M-875)</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>Internal Medicine &amp; Surgery</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, except block 7AB (Dec. 6 – Jan.16)</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes – 2 days with prior approval</td>
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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:**
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 partake in this experience at JMH, VAMC and UMH 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 March 2010
UROLOGY
# UROLOGY (Female)

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
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</thead>
<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Angelo Gousse, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3670 / FAX 305-243-2919</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>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
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<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes as necessary with permission</td>
</tr>
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<td>Clinical</td>
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</table>

**Overview:**
Female urology is a surgical subspecialty within Urology dealing with urologic problems in women. During this elective, the senior clerk will have the opportunity to participate in the evaluation and the medical and surgical treatment of female voiding dysfunction.

**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 at Jackson.

**Prerequisite:**
Must have completed core clerkships in Internal Medicine and Surgery

**Student evaluations and grading:**
Dr. Gousse and the housestaff assigned to the Female Urology rotation 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.

Reviewed March 2010
UROLOGY (Out Patient)

<table>
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<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Vincent Bird, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3670 / FAX 305-243-2919</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>
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<tr>
<td>NUMBER OF STUDENTS:</td>
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<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes as necessary with permission</td>
</tr>
<tr>
<td>TYPE:</td>
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</tr>
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</table>

Overview:
This elective is offered to those students who are particularly interested in Urology as a career choice. It is designed so that the student will participate as a team member on each service he/she rotates on and will accept responsibilities and perform duties commensurate with his/her ability.

Course Design:
Students will learn to do a complete examination of the male genitourinary system. They will attend the outpatient clinics at both the VAMC and Jackson where they will become familiar with office based procedures (cytoscopy, 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 and the VAMC.

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 March 2010
UROLOGY (Subinternship)

COURSE CODE: MDR 937
CLERKSHIP DIRECTOR: Mark S. Soloway, M.D.
TELEPHONE: 305-243-3670 / FAX 305-243-2919
CONTACT: Jackie Meneses (Dominion Tower #501 M-814)
EMAIL: jmeneses@med.miami.edu
LENGTH OF ELECTIVE: 4 weeks
PREREQUISITE: Completion of all core clerkships
NUMBER OF STUDENTS: 2
AVAILABLE: All Year
INTERVIEWING TIME: Yes as necessary with permission
TYPE: Clinical

Overview:
This elective is offered to those students who are particularly interested in Urology as a career choice. It is designed so that the student will participate as a team member on each service he/she rotates on and will accept responsibilities and perform duties commensurate with his/her ability.

Course Design:
Students will participate in regular daily rounds, and assist in the operating room, outpatient clinic, and will attend teaching conferences.

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, the VAMC and at UMH.

Prerequisite:
Must have completed core clerkships in Internal Medicine and Surgery

Expectations:
In addition to participation on daily rounds and assisting in the operating room and outpatient clinics, each student will be expected to give a short didactic talk (15-20 minutes) on his/her choice of urology topic. Because Urology is an early match, it is most beneficial if the student completes the rotation before November of his/her 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.)

Must check-in with Jackie Meneses one week prior to the beginning of the rotation.

Reviewed March 2010
UROLOGY (Elective)

<table>
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<tr>
<th>COURSE CODE:</th>
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<tbody>
<tr>
<td>CLERKSHIP DIRECTOR:</td>
<td>Vincent Bird, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3670 / FAX 305-243-2919</td>
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<tr>
<td>CONTACT:</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>AVAILABLE:</td>
<td>All year</td>
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<td>INTERVIEWING TIME:</td>
<td>Yes as necessary with permission</td>
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<td>TYPE:</td>
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</table>

Overview:
As much as 30% of all visits of elderly men to the primary care physician can relate to symptoms and disorder of the genitourinary tract. Physician should at least be conversant on these common ailments (i.e., BPH, Prostate cancer, Incontinence, Impotence, Stones, or Hematuria).

Course Design:
In this elective the student will have both outpatient and some operating room experience.

Goals/Objectives:
Students will learn how to recognize, diagnose and treat the most common illnesses of the genitourinary tract in both males and females.

Prerequisite:
Must have completed core clerkships in Internal Medicine and Surgery

Student evaluations and grading:
The housestaff and the attendings will supervise the student. Students 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 March 2010
UROGYNECOLOGY – FEMALE MEDICINE & RECONSTRUCTIVE SURGERY

| COURSE CODE:     | MDR 955                        |
| CLERKSHIP DIRECTOR: | Carlos Medina, M.D.          |
| TELEPHONE/FAX:    | (305) 585-5160                |
| EMAIL:           | cmdedina@med.miami.edu and ptakacs@med.miami.edu |
| CONTACT:         | Dr. Medina and Dr. Takacs     |
| PREREQUISITE:    | OB/GYN                        |
| LENGTH OF ELECTIVE: | 2 weeks or 4 weeks           |
| AVAILABLE:       | All year                      |
| NUMBER OF STUDENTS: | 1                             |
| INTERVIEWING TIME: | Yes – 2 days for 2 week rotation or 3 days for 4 week rotation |
| TYPE:            | Clinical, and research, if desired |

Overview:
The objective of this course is to improve the students' knowledge and skills in evaluating and managing women with pelvic organ prolapse (POP) and urinary incontinence. The student will develop an understanding of pelvic anatomy, become familiar with surgical principles and develop proficiency in evaluating and recognizing the various types of POP, urinary incontinence and voiding disorders. Student participating in the 4-week course will also become familiar with the surgical management of POP and urinary incontinence, and have greater exposure to other common types of pelvic floor dysfunction such as; fecal incontinence, constipation, urinary tract infections, bladder and pelvic pain, urethral diverticulum, and sexual dysfunction.

Course Design:
This course may be taken as a two or four week rotation (preferably four weeks) in the University of Miami Division of Female Pelvic Medicine and Reconstructive Surgery (Urogynecology). The rotation will be mostly at Jackson Memorial Hospital and University of Miami Hospital; however, additional time may be spent Jackson South Hospital (optional). The student will become familiar with the clinical setting and learn to evaluate patients with POP, urinary incontinence, fecal incontinence, voiding dysfunction, pelvic pain and sexual dysfunction. The student is expected to attend urogynecology clinic and evaluate patients under the supervision of the chief resident, urogynecology fellow and attending physician. The student will become familiar with the non-surgical and surgical treatments of these conditions and will learn to counsel patients regarding choice of treatment, preoperative evaluations and postoperative course. The student will have hands-on experience with basic office procedures, urodynamic studies and pessary fitting. The student is expected to scrub and assist in surgical cases (students in a four week rotation will be instructed in basic surgical techniques that will include opening and closing the abdomen and knot tying).

There will be several scheduled lectures and discussions with Dr. Medina and Dr. Takacs on pelvic anatomy, pathophysiology of POP and urinary incontinence, urodynamic testing and overall management of pelvic floor dysfunction. Students in both the 2 and 4 week rotation will be required to do a literature search on a selected topic and present the topic at the end of the rotation. During this period of time the student will also have the opportunity to be involved in research.
### Schedule

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
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<th>Thursday</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Urogynecology Clinic</td>
<td></td>
<td></td>
<td>1pm-5pm ACC 4A</td>
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</tr>
<tr>
<td>Preoperative Clinic</td>
<td>9 am-12 pm ACC 4A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cystoscopy Clinic</td>
<td>1pm-4pm 2nd and 4th Tue of month, ACC 4A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urodynamic Laboratory</td>
<td>Optional Once during rotation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Room</td>
<td>7:30am-5pm, DTC</td>
<td>1pm-5pm, 1st and 3rd Tue</td>
<td>7:00am-5pm, DTC</td>
<td>7:00am-5pm, DTC</td>
<td></td>
</tr>
<tr>
<td>Lectures, case presentations, preoperative meetings</td>
<td></td>
<td></td>
<td>10am – 12noon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVT clinical experience</td>
<td></td>
<td></td>
<td></td>
<td>9am-3pm, Cedars or Jackson South</td>
<td></td>
</tr>
<tr>
<td>Ward rounds</td>
<td>None</td>
<td>7:30am-8am</td>
<td>7:30am-8am</td>
<td>8:30am</td>
<td>8:00am if at Cedars</td>
</tr>
<tr>
<td>Reading/Research time</td>
<td></td>
<td></td>
<td></td>
<td>8am-10am</td>
<td></td>
</tr>
</tbody>
</table>

### Objectives/Goals:

- Describe the surgical anatomy of the pelvic floor including genital, urinary, and colorectal elements to provide patient care, under appropriate supervision, as assigned by the training program director or his/her designee, consistent with the educational goals of the program and the highest standards of patient care ("patient care" includes responsibility for associated documentation in the medical record, which should be completed in a timely fashion, and attendance at patient care rounds as assigned)
- To make appropriate use of the available supervisory and support systems, seeking advice and input from the attending staff physician/s when and as appropriate, and in accordance with the Resident Supervision and Teaching Standards of the Health System;
- To participate fully in the educational and scholarly activities of the training program as specified by the training program director, including attendance at didactic conferences and other responsibilities which may include a research project, completion of examinations, maintenance of procedure logs or other items
- To develop a personal program of learning to foster continued professional growth, with guidance from the teaching staff
- To assume responsibility, as called upon, in teaching more junior trainees and medical students, within the scope of the training program
- To participate in improving the quality of education provided by the training program, in part by submitting at least annually written evaluations of the faculty, the program and the overall educational experience
The student will accomplish the objectives and goals of the rotation by the following:

10. Assigned readings (text material provided)
11. Specific literature search
12. Lectures and case discussions with Dr. Medina and Dr. Takacs (preoperative and urodynamic meetings- Holtz Center 7007)
13. Active participation in ward rounds (Holtz center 7A)
14. GYN? Clinic experience (ACC 4A)
15. Cystoscopy clinic (ACC 4A – Urodynamic Lab)
16. Urodynamic studies (ACC 4A – Urodynamic Lab)
17. Surgical experience (JMH)
18. Cedars Hospital / Jackson South (additional clinical experience – optional depending on schedule)

**Location:**
95% of the time will be spent in main campus at Jackson Memorial Hospital (Holtz Center 7007, Ward 7A, DTC operating rooms and ACC 4A) the other 5% mostly optional will be either at Cedars Hospital or Jackson South.

**Participating faculty:**
Dr. Medina and Dr. Takacs (offices in Holtz Center 7007, phone number (305) 585-5160, secretary – Mayra Cespedes (305) 585-7091, coordinator – Tameka Collins

**Prerequisite:**
Completion of the OB/GYN Core Clerkship. (Preferably a student with strong interest in OB/GYN or surgery)

**Expectations:**
10. Complete assigned readings
11. Complete assigned literature search and presentation
12. Attend scheduled lectures and meetings (present cases and actively participate in discussions)
13. Attend ward rounds (evaluate patients)
14. Attend clinics and evaluate patients
15. Attend scheduled surgical cases (observe and assist)
16. Function as a member of the urogynecology team (responsibilities)
17. Expected to meet the goals of the rotation by fulfilling the learning objectives
18. Attend Grand Rounds on Thursday mornings unless excused by Dr. Medina or Dr. Takacs

**Student evaluations and grading:**
Grading will be pass/fail based on:
- Attendance at all scheduled sessions
- Motivation and involvement in patient evaluation and management
- Case presentations
- Review of literature on GYN-GU topics

There will be no written examinations. Students will be assessed on their general understanding of the subject (from a specific list of topics) and ability to evaluate clinical cases.

Reviewed March 2010
EXTERNSHIPS
EXTERNSHIP

COURSE CODE: MDR 815
CLERKSHIP DIRECTOR:
TELEPHONE/FAX:
EMAIL:
CONTACT:
LENGTH OF ELECTIVE: 2-12 weeks
PREREQUISITE: Completion of all core clerkships
NUMBER OF STUDENTS:
AVAILABLE:
INTERVIEWING TIME:
TYPE:

EXTERNSHIP POLICY / PROCEDURE: A maximum of 12 weeks may be spent in elective time away from the University Of Miami Miller School Of Medicine. 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 Medical Student Administration. 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 externships at schools who use VSAS and schools that do not follows below.

For schools that use the Visiting Student Application Service (VSAS):
1. Identify and apply to externships via the online VSAS system: http://www.aamc.org/programs/vsas/start.htm.
2. Upload requested documents into VSAS (health and immunization forms / photo / CV / application). Pay close attention to the documents that each host school requests as requirements vary by institution.
3. If the host school requests a letter from UM verifying that a criminal background check or drug screening has been performed, you must submit to the Coordinator for Student Services RMSB #2011 a copy of a criminal background report and / or results of drug screening. If you need assistance with obtaining these services, please contact the Office of Student Affairs.
4. If you are accepted to a VSAS host school, you do not need to turn in an acceptance letter as these are managed through VSAS.
5. Prior to leaving, you must submit to the Coordinator for Student Services a completed Contact Information Sheet, which is available through the Office of Student Affairs or online at: http://www.mededu.miami.edu/MedEd/link_pages/importantStudentDocs/. One Contact Information Sheet must be submitted for each externship.

For schools that do not use VSAS:
1. Identify externship opportunities via the online Extramural Electives Compendium: http://services.aamc.org/eec/students/ or through the host institution website.
2. Request information and applications directly from the institution of interest by mail or telephone.
3. Contact the Office of Student Affairs RMSB #2099 for assistance with obtaining required documents (enrollment verification / liability coverage / health insurance / HIPAA and OSHA certification / support letters / transcripts).
4. Students must obtain and submit to the Coordinator for Student Services RMSB #2011 updated copies of their immunization records and proof of health insurance when these are requested. For information regarding immunizations and Health Records, please contact the Assistant Dean for Student Services in Room 2155 or 305-243-7978.

5. If the host school requests a letter from UM verifying that a criminal background check or drug screening has been performed, you must submit to the Coordinator for Student Services RMSB #2011 a copy of a criminal background report and / or results of drug screening. If you need assistance with obtaining these services, please contact the Office of Student Affairs.

6. All students approved for an externship must submit a copy of their Acceptance Letter and a Contact Information sheet for each externship. The Contact Information sheet is available in the Office of Student Affairs or online at http://www.mededu.miami.edu/MedEd/link_pages/importantStudentDocs/.

FAILURE TO COMPLY WITH THESE PROCEDURES WILL RESULT IN NO CREDIT FOR THE EXTERNSHIP.

Documents available from the Office of Student Affairs #2099 include the following:

1. Letter of good standing, which includes proof of liability coverage and compliance with HIPAA and OSHA training
2. Official transcript
3. Verification of mask fit testing
4. Letter verifying criminal background check and/or drug screening
5. Letter of recommendation
6. Contact Information Sheet (also available at http://www.mededu.miami.edu/MedEd/link_pages/importantStudentDocs/)

All documents must be submitted to the Coordinator for Student Services, RMSB #2011 prior to one’s departure.

For further information in regards to externships and international electives, please see the UMMSM Student Rights Responsibilities Handbook.

A grading/evaluation form will be sent to the host institution once the Office of Student Affairs receives the acceptance letter. The Coordinator for Student Services must be notified immediately if any changes/cancellations regarding an externship occur. Externship(s) will not appear on the senior schedule until all the above documents have been submitted.

FAILURE TO COMPLY WITH THIS PROCEDURE WILL RESULT IN NO CREDIT FOR THE EXTERNSHIP.
EMERGENCY MEDICINE WAIVER

The following lists the guidelines and requirements for requesting a waiver of our 4 week Emergency Medicine Clerkship at JMH.
Guidelines and Requirements for Requesting a Waiver of our 4 week Emergency Medicine Clerkship
- Drs. Kathleen Schrank and Larry Zaret (as of March 31, 2009)

1. This applies ONLY to medical students who are committed to application to Emergency Medicine Residency Programs and careers in Emergency Medicine.

2. Since JMH does not yet have an Emergency Medicine Residency Program, each EM applicant must consider their rotation planning and residency application carefully to determine whether they prefer to complete our EM rotation plus 1 or 2 externships in EM, versus requesting a waiver of our EM rotation in order to spend more time at other programs that do have EM residencies. Since the student plans to complete an EM residency (where there will be extensive time spent in the ED), it is not recommended that more than 2 four-week EM rotations be done, but rather that senior elective time be spent in other specialties for breadth of experience; however, the school allows credit toward graduation for more than 2 EM rotations should the student wish to do so.

3. It is highly recommended that each student discuss plans with advisors (from UMMSM, from UM/JMH Emergency Medicine faculty, and/or from academic EM faculty at other programs). It is also useful to request a Virtual Advisor in EM through the Society for Academic Emergency Medicine (www.saem.org), which pairs students from schools without EM residency programs with faculty volunteers from EM programs.

4. A current list of U.S. residency programs in Emergency Medicine is maintained on the SAEM website (www.saem.org), which also has externship information for students.

5. If a student decides to complete 2 four-week EM rotations at other institutions that offer EM residency programs, then the UM/JMH EM rotation can be waived by Dr. Larry Zaret or Dr. Kathleen Schrank, who will notify the school of approval. Successful completion of 2 four-week EM externships at sites with EM residency programs PLUS certification in Advanced Cardiac Life Support (UM Gordon CRME course or its equivalent) PRIOR to graduation will be considered as fulfilling the MDR 812 requirement.

6. The student is responsible for scheduling and completing an ACLS course. This may be available at the UM Gordon CRME at no charge if their courses have room (please arrange directly with GCRME via 305-243-6491 or via website; don't wait until the last minute). If not, then the student may have to pay fees to take the course elsewhere.

7. The student is responsible for assuring that grades from those other 2 EM programs are sent to UMMSM, and that a copy of his/her current ACLS Certification card is submitted to Dr. Schrank and Vinessa Edwards (fax 305-585-0000). Also, please notify Dr. Schrank by email (kschrank@med.miami.edu) with the names of the 2 EM externships that you completed.
The following represents a menu of various research opportunities available at the UMMSM. This is not an all inclusive list.

Guidelines for obtaining academic credit for research are found on the subsequent pages.
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 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 participation 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. 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. 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.

Research Requirements for Research Credit and Research Distinction

<table>
<thead>
<tr>
<th>Requirements for Research</th>
<th>Credit</th>
<th>Distinction</th>
</tr>
</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>
<td>√</td>
<td>√</td>
</tr>
<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 meeting</td>
<td></td>
<td>√</td>
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</tbody>
</table>

ALL DOCUMENTS SHOULD BE SUBMITTED TO THE OFFICE OF MEDICAL CURRICULUM (Julie Johnson)
CELL BIOLOGY RESEARCH

**COURSE CODE:** MDR 916

**DIRECTOR:** Gregory E. Conner

**TELEPHONE/FAX:** 305-243-6926 / FAX 305-545-7166

**EMAIL:** gconner@miami.edu

**CONTACT:** Gregory Conner, Ph.D. RMSB # 7061A

**LENGTH OF RESEARCH:** To be arranged

**PREREQUISITE:** Permission of instructor

**NUMBER OF STUDENTS:** Variable

**AVAILABLE:** All year

**INTERVIEWING TIME:** Permission of instructor (variable)

**TYPE:** Research

**Overview:**
Bench research in a cell biology laboratory

**Course Design:**
No formal didactic sessions. Hands on research training.

**Goals/Objectives:**
Mastery of some current methods and approaches to cell biology basic research
Daily research activity in the laboratory

**Location:**
Various labs

**Participating faculty:**
Cell Biology and Anatomy faculty

**Prerequisite:**
Permission of instructor; Interest in understanding how basic medical research is conducted

**Expectations:**
Student is expected to be in the laboratory and working with a faculty member or other senior research scientist each day except at times conflicting with other required curricula activities.

**Student evaluations:**
The student is expected to master the technical skills required for the particular experiments being conducted, to understand the conceptual basis underlying the techniques used, and the relative contribution of the experiments to the long term goal of the research project being conducted in the laboratory. This will require reading of both relevant textbook sections and primary literature as assigned by the instructor.

Reviewed March 2010
FAMILY MEDICINE: PRACTICE BASED RESEARCH

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 916</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECTOR:</td>
<td>John G. Ryan, M.D., Ph.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-2953 / FAX 305-243-6871</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:asanto@med.miami.edu">asanto@med.miami.edu</a></td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Andrea Santo (HPG 420)</td>
</tr>
<tr>
<td>LENGTH OF RESEARCH:</td>
<td>4 weeks</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Interview with Dr. Ryan</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>2</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>All year</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes – 3 days</td>
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<tr>
<td>TYPE:</td>
<td>Research</td>
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</table>

**Overview:**
This will be an investigational, practical experience during which students will participate in an ongoing primary care research project within the context of a Practice-Based Research Network.

**Course Design:**
Projects will address quality of care, appropriateness of care and/or effectiveness of care related to specific disease entities or clinical problems. Potential study data will consist of a combination of clinical data and data collected directly from patients for research purposes. Specific activities will depend upon the current stages of each project at the time of students’ involvement; however, students will contribute to one or more of the following activities, all of which are integral to successfully completing a research protocol: protocol development and rationale, application for institutional review and approval, staff training, data collection and entry, or data analysis and interpretation.

**Participating Faculty:**
The Course Director, John G. Ryan, MD, PhD, Assistant Research Professor and Director, Division of Primary Care and Health Services Research, Department of Family Medicine and Community Health; and the Principal Investigator of the project will supervise the student. Principal Investigators will be faculty of the Department of Family Medicine and Community Health or community-based primary care clinicians collaborating with the department through the Practice-Based Research Network.

**Prerequisite:**
The course director, Dr. Ryan, will interview each candidate for this program to discuss current projects that are available for training experiences. The Principal Investigator of the active project may also interview the student.

Revised March 2010
PHARMACOLOGY (Molecular) RESEARCH OPPORTUNITIES

<table>
<thead>
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<th>COURSE CODE:</th>
<th>MDR 916</th>
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<tbody>
<tr>
<td>DIRECTOR:</td>
<td>Nanette H. Bishopric, M.D.</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-6775 Fax # 305-243-6456</td>
</tr>
<tr>
<td>CONTACT:</td>
<td>Olga Paredes, 305-243-7067 Sara Pizano, Grad Program Coordinator 305-243-6643 RMSB #6079</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:n.bishopric@miami.edu">n.bishopric@miami.edu</a> <a href="mailto:spizano@med.miami.edu">spizano@med.miami.edu</a></td>
</tr>
<tr>
<td>LENGTH OF RESEARCH:</td>
<td>4 weeks [special permission for more than 4 weeks]</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Interview</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1 per faculty member</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>To be arranged</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes - 5 days</td>
</tr>
<tr>
<td>TYPE:</td>
<td>Research</td>
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</tbody>
</table>

1. MOLECULAR REGULATION OF CARDIAC DEVELOPMENT, GROWTH & REGENERATION (1 student per lab)

During this rotation the student will collaborate with investigators working in the areas of cardiac myocyte growth, programmed death and renewal by resident cardiac stem/progenitor cells. Depending on interest and prior lab experience, students will be encouraged to work on individual research projects. Consistent and regular commitment of at least 6 hours daily is required, at times to be scheduled with supervising faculty. The student will present a summary of results and interpretations at the end of the 4-week rotation.

2. PHARMACOGENETICS OF HEART DISEASE (1 student per lab)

This rotation includes developing and working on an individual research project in the molecular biology and/or genetics of cardiovascular disease and drug response. Students should be willing to devote at least 6 hours daily during the 4 week-period to, researching literature, discussing innovative ideas and findings with the faculty, postdoctoral fellows and research associates, participate in daily specified times to work in the laboratory, and be under the supervision of faculty and fellows. Students will be expected to attend and participate in the Cardiovascular Genetic Lab meetings; and a presentation of work done and findings will be expected at the close of the 4-week period in the UM/MHRI Cardiovascular Genetics Research Laboratory meeting.

3. EPIGENETICS OF BREAST CANCER (1 student per lab)

This rotation includes developing and working on an individual research project focusing on gene expression patterning in the development of breast cancer. Students should be willing to devote at least 6 hours daily during the 4 week-period to, researching literature, discussing innovative ideas and findings with the faculty, postdoctoral fellows and research associates, participate in daily specified times to work in the laboratory, and be under the supervision of faculty and fellows. Students will be expected to attend and participate in weekly lab meetings as well as selected presentations in the Breast Cancer Program. A presentation of work done and findings will be expected at the close of the 4-week period.
**UROLOGY (Research)**

<table>
<thead>
<tr>
<th>COURSE CODE:</th>
<th>MDR 916</th>
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</thead>
<tbody>
<tr>
<td>DIRECTOR:</td>
<td>Vinata Lokeshwar, PhD</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>305-243-3670 / FAX 305-243-2919</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 RESEARCH:</td>
<td>By Arrangement</td>
</tr>
<tr>
<td>PREREQUISITE:</td>
<td>Approval by Dr. Lokeshwar</td>
</tr>
<tr>
<td>NUMBER OF STUDENTS:</td>
<td>1</td>
</tr>
<tr>
<td>AVAILABLE:</td>
<td>By Arrangement</td>
</tr>
<tr>
<td>INTERVIEWING TIME:</td>
<td>Yes, as necessary with permission</td>
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<td>TYPE:</td>
<td>Clinical</td>
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</tbody>
</table>

This elective is offered to those students who have a serious interest in Urology as a career choice. The entire faculty is available as advisors. The interested student may pick an individual topic and discuss it with Dr. Lokeshwar who would then assign the student an appropriate advisor. Alternatively, the student can be assigned to one of the ongoing studies in either of the two Urologic Oncology Laboratories or at the Miami Project. Current topics under investigation within the department include studies in bladder cancer, prostate cancer, female urology (interstitial cystitis) and fertility problems in spinal cord injured patients.

The student will be expected to present a summary of his/her research experience at the research conference.