**ANESTHESIOLOGY**

**MEL 7320Z**  Externship in Anesthesiology
**MEL 7760**  Anesthesiology Elective

**MEL 7320Z  Externship in Anesthesiology**

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<tr>
<th>Length:</th>
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<tr>
<td>4 weeks</td>
<td>Full Time</td>
<td>44 per week</td>
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Availability: No Limit at USF-MS

**MEL 7760  Anesthesiology Elective**

Dr. Malcolm Klein

**Objective**

The primary objective of this course is to introduce the student to contemporary anesthesiology practice with emphasis on respiratory physiology, cardiovascular physiology, and perioperative management of the surgical patient. Preoperative evaluation and perioperative optimization of the patient's co-morbid medical conditions before anesthesia and surgery will be stressed.

Students will make preoperative rounds with the anesthesiology staff on patients scheduled for surgery. They will assist in any preoperative study or examinations required and participate in the decisions as to pre-anesthetic medication and anesthetic agents to be administered. In the operating room they will work directly with the anesthesiologist, and participate as far as possible in the administration of the anesthetic agents. This will include instruction in tracheal intubation, use of anesthetic and monitoring equipment, the pharmacology of the various agents used for anesthesia, and the problems involved in following the patient during their period of anesthesia. Students will also participate in regional block anesthesia and pain clinics as opportunity presents. They will follow the patient throughout their post-anesthetic recovery. Students on the service will also make postoperative observations/rounds after the patient is returned to the floor. This course offers the student an unparalleled opportunity to understand the acute respiratory and cardiovascular physiology of anesthetized surgical patients, and to become actively involved in the patients' perioperative care. Direct, hands-on participation in common anesthetic and medical procedures will be emphasized.

**Evaluation**

Students will be evaluated by written, oral, and/or practical methods.

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<tr>
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<tr>
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Availability: 2 at MCC; 2 at T-VAH

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
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<tr>
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<th>Course Title</th>
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<th>Months</th>
<th>Availability</th>
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<tbody>
<tr>
<td>MEL 7320L</td>
<td>Externship in Dermatology</td>
<td>4 weeks</td>
<td>Full Time</td>
<td>44</td>
<td>1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 x 9 x 10 x 11 x</td>
<td>No Limit at USF-MS</td>
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<tr>
<td>MEL 7321</td>
<td>Clinical Dermatology</td>
<td>4 weeks</td>
<td>Full Time</td>
<td>44</td>
<td>1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o</td>
<td>5 at USF-MC</td>
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**MEL 7320L Externship in Dermatology**

Length: 4 weeks  
Time(s): Full Time  
Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 x 9 x 10 x 11 x

Availability: No Limit at USF-MS

**MEL 7321 Clinical Dermatology**

Dr. Lien and Faculty

Upon completion of this elective, the student will be able to conduct a full dermatologic examination and will be able to recognize and offer reasonable management for common dermatologic disorders, including those primary in the integument and those associated with systemic disease. Students will rotate throughout the elective at the USF Medical Clinics and the Davis Island satellite office, Tampa Veterans Hospital, H. Lee Moffitt Cancer Center, and other ancillary clinics. The student will attend various weekly conferences: Introduction to Dermatology, Morphology, Grand Rounds and others.

Evaluations will be derived from the assessment by the faculty and residents of the progress and performance of the student in the clinical setting.

Periods 2, 3 and 4 are reserved for students applying to dermatology residency programs.

Length: 4 weeks  
Time(s): Full Time  
Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 5 at USF-MC

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
MEL 7324    Elective in Dermatopathology

Drs. Messina and Glass

This course is designed for students interested in expanding their knowledge of dermatopathology mostly, but not limited to, those pursuing a career in dermatology. Students will receive didactic and case-based instruction in dermatopathology using daily microscope, sign-out with attending faculty, and attending biweekly dermatopathology teaching conference. Students interested in dermatology may also participate in up to three afternoon dermatology clinics weekly. Students may have the opportunity to participate in research in the form of co-authoring a case report, meeting abstract, or assisting with a portion of a larger departmental research project with a resident or faculty member, if one is available during the rotation.

Length: 4 weeks          Time(s): Full Time           Hours: 40-44 per week

Months: 1 o 2 o 3 o 4 o 5 x 6 x 7 x 8 x 9 x 10 x 11 x

Availability: 2 at USF-MS

MEL 9999L    Independent Study in Dermatology & Cutaneous Surgery

Faculty

The course is designed to provide students interested in Dermatology as a career an opportunity to carry out an in-depth self study of a selected topic, with the goal of being co-author of a publication in a peer-reviewed journal. The course of study will be determined by the faculty member and student. Prior to scheduling the course, students must meet with their faculty mentor to determine the course of study. Independent reading and research is required, and assessment will be based on successful completion of a written paper or project.

This elective is NOT available to visiting students.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 x 10 o 11 o

Availability: No Limit at USF-MS

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Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

Hours: The approximate hours per week the student will be involved with this elective.

Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
**FAMILY MEDICINE**

**MEL 7255**  Family Medicine Residency Elective
**MEL 7258**  Elective in Rural Medicine (AHEC)
**MEL 7259**  Emergency Medicine Elective
**MEL 7267**  International Family Medicine Elective
**MEL 7320F**  Externship in Family Medicine
**MEL 8251**  Acting Internship Family Medicine
**MEL 8254**  Elective in Sports Medicine
**MEL 8263**  Public Sector Medicine (PSMP)
**MEL 8264**  Family Medicine Elective - USF Med Clinics
**MEL 8265**  Family Medicine Preceptorship
**MEL 8272**  Morton Plant Mease Women’s Health Elective
**MEL 8273**  Morton Plant Mease Family Medicine Flexible Elective
**MEL 9999F**  Independent Study in Family Medicine

**MEL 7255  Family Medicine Residency Elective**

Faculty and Staff at Affiliated Residency Programs

This elective for senior students may be served at any of the affiliated Family Medicine Residencies (Bayfront Medical Center, St. Petersburg; Florida Hospital, Orlando; Halifax Medical Center, Daytona Beach; Tallahassee Memorial HealthCare, Inc., Tallahassee; St. Vincent's Medical Center, Jacksonville; or Morton Plant Mease Health Care, Clearwater) and may include outpatient, inpatient, and nursing home care, or other activities.

**Objectives**

1. Introduce the student to the relationship of Family Medicine to the medical community
2. Demonstrate the relationship of ambulatory care to hospital care and the effective utilization of other specialty consultations
3. Improve the student’s skills and clinical judgment by a defined and supervised patient care experience
4. Demonstrate the organizational structure of a family practice residency including office management, medical records, patient education, and preventive medicine
5. Demonstrate the various responsibilities and activities of the Family Medicine Resident

**Evaluation**

The Family Medicine faculty will prepare a formal evaluation based on the following:

1. Fund of medical knowledge
2. Quality of assessment and presentation
3. Clinical judgment as indicated by the rationale of diagnostic and management plans
4. Attitude and rapport with patients and families
5. Subjective elements of interpersonal relationships, motivation, and ability

Students must check with the Department of Family Medicine before scheduling this elective through the Registrar's Office. Students are then required to contact the residency site for final approval and any arrangements that need to be made. Contact information can be obtained through the Family Medicine Education Coordinator at 974-2445.

**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
Length: 4 weeks  
Time(s): Full Time  
Hours: 44 per week

Availability:
2 at BFMC  
1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
2 at FH  
1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 x 10 x 11 x
1 at HH  
1 x 2 x 3 o 4 o 5 o 6 o 7 o 8 x 9 x 10 x 11 x
1 at TMH  
1 x 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
2 at SVMC  
1 x 2 x 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
2 at MPMHC  
1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

MEL 7258  Elective in Rural or Underserved Medicine (AHEC)

Faculty and Staff at Premier Community HealthCare Group (Dade City), Suncoast Community Health Care Centers (Ruskin, Dover, Plant City), Tampa Community Health Centers, Community Health Center of Pinellas, DeSoto Memorial Hospital (Arcadia), or Citrus County Health Department (Lecanto)

This elective rotation is designed to introduce the senior student to the unique characteristics of medical practice in a rural or underserved community. Students will be supervised by clinical family physician faculty and will gain a better understanding of providing care to a medically underserved population and the tremendous health needs that exist. Depending on the site selected, Gulfcoast North AHEC or Gulfcoast South AHEC may offer housing and/or a mileage stipend to students.

Goals and Objectives
1. Compare and contrast the health needs and problems encountered in rural or underserved practice to those encountered in prior urban practice rotations
2. Identify the unique opportunities and challenges to medical practice and life in a rural or underserved community
3. Introduce/sensitize the student to cross-cultural issues in health care
4. Understand the mechanisms and indications for consultation and referral in rural or underserved practice settings
5. Evaluate the business management of rural or underserved practice, including availability of organized funding for patient care, managed care, etc.

Organization of Elective
1. Arrangements for a specific time commitment will be made through the Department of Family Medicine in conjunction with Gulfcoast North AHEC or Gulfcoast South AHEC.
2. The student will accompany the clinic physician Monday through Friday at the designated clinic site, will see patients, and will perform procedures assigned by the preceptor under his/her supervision.
3. At certain locations opportunities are available for additional practice activities within the hospital, emergency department, and in the community.

Evaluation
The assigned faculty preceptor will provide an individual evaluation addressing the student's adaptability and understanding as well as knowledge, judgment, and rapport.
At certain sites this elective is available to USF students only. The Department of Family Medicine and Gulfcoast North AHEC or Gulfcoast South AHEC will make the final arrangements. Availability at all clinic sites is per the preceptor’s approval.

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at SCHC; 1 at DMH; 1 at CCHD; 1 at PCHG; 1 at TCHC; 1 at CHCP

**MEL 7259 Emergency Medicine Elective**

Emergency Room Faculty at Bayfront Medical Center

Teaching will be done on a one-on-one basis. Students will be assigned to emergency room shifts in such a way that they experience emergency activities during the day, night, and weekends. Preceptors will be emergency room physicians also trained in primary care and family practice. If desired, students may accompany EMTs in ambulances.

In the emergency room, the student will initially assess each patient and propose treatment plans. The student may elect to follow the admitted ER patients throughout their hospital stay. Under the direct preceptor supervision, the student may perform simple procedures. These may include suturing, insertion of the catheters, IVs, injections, and others as appropriate.

**Objectives**

1. Develop competence in rapidly assessing ER patients (triage)
2. Learn the initial management of common problems and critical patients
3. Learn effective CPR
4. Recognize complications of medical care and drug side effects
5. Sensitize the student to the emotional impact of major trauma
6. Teach the student how to deal with family members during an emergency medical crisis
7. Inspire in the student empathy, compassion, good judgment, and common sense
8. Perform simple procedures under direct preceptor supervision, as noted above
9. Stimulate the student's interest in primary care and family medicine

**Evaluation**

1. Fund of medical knowledge
2. Ability to apply this knowledge, clinical judgment, and common sense
3. Enthusiasm, tenacity, professionalism, and idealism
4. Student case log and case presentations
5. Student's reading about selected emergency patients (selected by student)

Preceptor evaluations: **For Bayfront Medical**: contact the Coordinator at (727) 893-6959.
Length: 4 weeks          Time(s): Full Time          Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at BFMC

This elective is NOT available to visiting students.

**MEL 7267  International Family Medicine Elective**
Dr. Eduardo Gonzalez

There are a wide variety of opportunities available for students with an interest in international health care. This elective is designed to provide support for USF students to get international experience from different sources.

Experiences may include:
1. Foreign travel and provision of medical services
2. Academic study (readings and lectures) on the health problems of a particular area
3. Preparation and/or presentation of a report on the student's experience
4. The international development of the specialty of Family Medicine
5. Other clinical issues (including the potential of time spent in USF Family Medicine Clinics)

Course Requirements: Any interested student MUST meet with Dr. Gonzalez to plan the elective. Ideally, this should be done prior to the start of the academic year but MUST OCCUR AT LEAST 6 MONTHS PRIOR TO THE START OF THE ELECTIVE. Periods 10 and 11 may be scheduled with the prior approval of the Associate Dean for Student Affairs no later than the final deadline to make schedule changes in January.

Objectives
1. Identify the general and specific health care needs of a particular foreign country
2. Identify the role of family physicians in international health care
3. Gain additional clinical skills in the provision of primary health care

Evaluation
The student's evaluation will be individualized based on the format of his/her particular elective. The specific evaluation criteria will be decided in consultation with Dr. Gonzalez prior to scheduling the elective.

Emergency medical insurance is required for all electives abroad.

Length: 4 weeks          Time(s): Full Time          Hours: 45-50 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 x 11 x

Availability: 4 at USF-MS

**MEL 7320F  Family Medicine Externship**

This externship is designed for students who wish to do a rotation out of state or at a site that is not affiliated with USF. Students must first determine the location of the externship. An externship application must be completed and signed by the Department Director. This application can be obtained through the Registrar's Office. For further information contact the Department of Family Medicine Education Coordinator at (813) 974-2445.
Length: 4 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 x 11 x

Availability: No Limit at USF-MS

**MEL 8251  Acting Internship Family Medicine**
Faculty and Staff at Bayfront Medical Center and Morton Plant Mease Health Care

**Objectives**
1. Integrate the student into the hospital teaching service such that the student functions at the level of an intern, managing their own patients under the supervision of a senior resident.
2. Strengthen the student’s ability to develop an initial assessment and plan for patients requiring hospitalization, to succinctly present the admission to the team, and to effectively manage the patient’s medical problems throughout the hospital admission.
3. Educate the student regarding common medical problems requiring hospital admission, indications for common in-patient procedures, discharge planning, and legal/ethical/cost considerations.

**Responsibilities**
The student is expected to function as a Family Medicine intern under the direct supervision of the senior resident. This includes pre-rounding on their patients, writing SOAP notes, attending morning report and teaching rounds, writing orders, following up on labs/consults/imaging, and doing discharge planning. Overnight call is to be determined by the site of externship.

**Scheduling**
To determine availability of elective space at Morton Plant Family Medicine Residency, contact Lee Blomberg at (727) 467-2517. Housing is available on a first-come, first-serve basis.

To reserve a space in this course at Bayfront Family Medicine Residency, students must contact the Coordinator at the Bayfront Family Health Center at (727) 893-6959.

Final arrangements concerning the course location/preceptor will be made by the Department of Family Medicine after the student is scheduled for the elective.

Length: 4 weeks  Time: Full Time  Hours: 50 per week

Availability: 1 at BFMC; 1 at MPMHC

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
MEL 8254  Elective in Sports Medicine
Dr. Michele Pescasio and Family Medicine and Orthopaedic Faculty

Objective
Provide students an opportunity to learn sports medicine from a primary care/family medicine and orthopaedic standpoint

Senior students will have the opportunity to work in the sports medicine clinic in the USF Medical and Orthopaedic Clinics. They will also work with orthopedic surgeons in the community who are actively involved in sports medicine and the care of athletes. Students will learn the basics of the examination and assessment of musculoskeletal injuries in athletes as well as non-orthopedic medical problems of the athlete. There will be an opportunity to work with athletic trainers, physical therapists and chiropractors and learn the basics of musculoskeletal radiology. Students will also have the opportunity to participate in game coverage for USF athletic events as well as other professional teams in the Tampa Bay area. Students will also be expected to present a project in the area of sports medicine.

Interested students must contact the Education Coordinator from the Department of Family Medicine at (813) 974-2445 or by E-mail at lgiordan@health.usf.edu prior to enrolling.

Prerequisite:  BCC 8116 Skin and Bones Medicine Clerkship

Length: 4 weeks             Time(s): Full Time             Hours: 40-50/week
Months: 1 x 2 x 3 x 4 x 5 x 6 o 7 x 8 x 9 x 10 x 11 x
Last day to drop/add is end of Period 3

Availability: 4 at USF-MC

MEL 8263  Public Sector Medicine (PSMP)
Dr. Laurie Woodard and Family Medicine Faculty

Objective:
Provide a learning experience for students who have a demonstrated interest in the health care of the underserved and other community health issues.

Description/Evaluation
Students will attend all PSMP clinics and post conferences at Judeo Christian Health Clinic and Brandon Outreach Clinic. When more junior students are present, the elective students will assume peer teaching roles. Students are also encouraged to attend similar free clinic sessions at other community sites pending approval of the course director. Other activities include: participation in the monthly Health Disparities Scholarly Concentration Journal club; and a written report of a topic or project related to public medicine. Students will be encouraged to develop projects worthy of publication or presentation at a scholarly meeting.
Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at USF-MS

MEL 8264  Family Medicine Elective - USF Med Clinics
Dr. Eduardo Gonzalez and Family Medicine Faculty

The aim of this elective is to reintroduce students to primary care in a Family Medicine clinic. Students will be assigned to the USF Family Medicine clinic where they will be responsible for evaluating patients under the guidance of a faculty member. Emphasis will be on the patient as a person, and the application of knowledge of the effects of disease, lifestyle, family setting, and personality on the development and management of the patient's problems. Experience will be gained in the management of the wide range of problems present in family medicine. Students may also be assigned to work at JCHC and BORC in some rotations and precepting first and/or second year students.

Objectives

1. Identify and manage problems which present commonly in family medicine, emphasizing the importance of continuing care and follow-up
2. Identify the biological, psychological, and social factors that are relevant in the etiology of patients' problems and integrate these factors in a treatment plan
3. Improve problem-solving skills
4. Study the role of other health professionals in a patient's care (consultants, social workers, nurse practitioners, physical therapists, etc.) and the relationship between them and the family physician
5. Improve skills in patient education and communication

Evaluation will be based on competence, consideration of patients, and practical approach to problems.

Final arrangements concerning course location/preceptor will be made by the Department of Family Medicine after the student receives his/her elective choice.

Contact: Education Coordinator – (813) 974-2445

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at USF-MC

MEL 8265  Family Medicine Preceptorship
Community Clinical Faculty

During this elective students will accompany faculty members who are in private clinical practice. This experience will be primarily in the office but will include involvement in the care of the preceptor's patients in hospitals, nursing homes, and at home. Emphasis will be on the patient as a person and the application of knowledge of the effects of disease, lifestyle, family setting, and personality on the development and management of the patient's problems. Experience will be gained in the management of the wide range of problems that are present in family practice.

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
Objectives

1. Identify and manage problems which present commonly in family practice, emphasizing the importance of continuing care and follow up
2. Identify the biological, psychological, and social factors that are relevant to the etiology of patients’ problems and integrate these factors in a treatment plan
3. Improve problem-solving skills
4. Study the role of other health professionals in the patient’s health care (consultants, social workers, nurse practitioners, physical therapists, etc.) and the relationship between them and the family physician

Evaluation will be on the basis of competence, consideration, and practical approach to problems, and a written report.

In order to determine availability, students are required to select and receive permission from a community preceptor prior to registering for this elective. Final arrangements concerning course location/preceptor will be made by the Department of Family Medicine after the student receives his/her elective choice.

Length: 4 weeks  Time(s): Full Time  Hours: 44-50 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 per period

**MEL 8272  Morton Plant Mease Women’s Health Elective**

Faculty and staff at Morton Plant Mease Family Medicine Residency

Objectives

1. Familiarize the student with the practice of gender-specific medicine, women’s preventive health, and obstetrics and gynecology in a Women’s Center of Excellence
2. Strengthen the student’s ability to take a thorough obstetric/gynecologic and women’s preventive health history and perform routine preventive gynecologic and perinatal exams
3. Expose the student to common gynecologic/obstetric procedures such as colposcopy, endometrial biopsy, IUD placement/removal, ultrasound, c-section, fetal scalp electrode placement, etc.

Responsibilities

Take an active role in the assessment and management of patients in the hospital and office setting.

Evaluation

1. Fund of medical knowledge
2. Quality of assessments, plans, and presentations
3. Clinical decision-making skills
4. Attitude, motivation, and rapport with patients and team members

Scheduling:

To determine availability of elective space, contact Lee Blomberg at (727) 467-2517. Housing is available on a first-come, first-serve basis.
**Objective**

1. To encourage the student to design and complete his or her own ideal elective within the realm of Family Medicine. This may include but is not limited to: office procedures, Family Medicine out-patient, FM in-patient acting internship, women's health, pediatrics, geriatrics, nursing home, research, Ob/Gyn, acute care, etc.
2. To provide the student with a $100 scholarship to cover expenses as well as to provide housing when available.
3. To introduce the student to the breadth of Family Medicine.
4. Specific objectives to be determined based on elective scheduled.

**Responsibilities**

The student is expected to design their elective in advance with Family Medicine faculty and to take an active role in the assessment and management of patients. For design assistance please contact Lee Blomberg at (727) 467-2517.

**Evaluation**

1. Fund of medical knowledge.
2. Quality of assessments, plans, and presentations.
3. Clinical decision-making skills.
4. Attitude, motivation, and rapport with patients and team members.

**Scheduling**

To determine availability of elective space, contact Lee Blomberg at (727) 467-2517. Housing is available on a first-come, first-served basis.

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**MEL 8273  Morton Plant Mease Family Medicine Flexible Elective**

Faculty and staff at the USF/Morton Plant Mease Family Medicine Residency.

**Objectives**

1. To encourage the student to design and complete his or her own ideal elective within the realm of Family Medicine. This may include but is not limited to: office procedures, Family Medicine out-patient, FM in-patient acting internship, women’s health, pediatrics, geriatrics, nursing home, research, Ob/Gyn, acute care, etc.
2. To provide the student with a $100 scholarship to cover expenses as well as to provide housing when available.
3. To introduce the student to the breadth of Family Medicine.
4. Specific objectives to be determined based on elective scheduled.

**Responsibilities**

The student is expected to design their elective in advance with Family Medicine faculty and to take an active role in the assessment and management of patients. For design assistance please contact Lee Blomberg at (727) 467-2517.

**Evaluation**

1. Fund of medical knowledge.
2. Quality of assessments, plans, and presentations.
3. Clinical decision-making skills.
4. Attitude, motivation, and rapport with patients and team members.

**Scheduling**

To determine availability of elective space, contact Lee Blomberg at (727) 467-2517. Housing is available on a first-come, first-served basis.

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**Length:** 4 weeks  
**Time:** Full Time  
**Hours:** 50 per week

**Availability:** 1 at MPMHC

**Months:** 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

**Length:** 4 weeks  
**Time:** Full Time  
**Hours:** 40 per week

**Availability:** 3 at MPMHC

**Months:** 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, u = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
Prior to scheduling this course, students must meet with their preceptor in order to identify and define their independent study. After determining a course of study, students must complete an independent study application, obtaining signatures from both their faculty preceptor and the Education Coordinator, who can be reached at (813) 974-2445. This paperwork should be completed at least 2 months prior to the elective.

Length: 4 weeks  Time(s): Full Time  Hours: variable
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: No limit at USF-MS
## INTERNAL MEDICINE

### DIVISIONS

#### Allergy and Immunology
- MEL 8315: Clinical Allergy/Immunology
- MEL 8376: Respiratory Disease Research

#### Cardiovascular Disease
- MEL 7303: Consultative Cardiology
- MEL 8351: Harvey Elective in Cardiology

#### Emergency Medicine
- MEL 7320Q: Externship in Emergency Medicine
- MEL 8347: Adult Emergency Medicine
- MEL 8368: Emergency Medicine Outside the Hospital
- MEL 9999Q: Independent Study in Emergency Medicine

#### Endocrinology and Metabolism
- MEL 7305: Clinical Endocrinology and Metabolism
- MEL 8350: Clinical Endocrinology and Metabolism - Bay Pines

#### Digestive Diseases and Nutrition
- MEL 7306: Gastroenterology Elective
- MEL 8318: Esophageal and Swallowing Disorders
- MEL 8390: Hepatology Elective

#### General Internal Medicine
- MEL 7121: Hospital Medicine and Patient Safety Elective
- MEL 7320-M: Externship in Medicine
- MEL 8332: Elective in Rural Medicine (AHEC)
- MEL 8334: Acting Medicine Internship
- MEL 8335: General Internal Medicine Consult Service
- MEL 8342: Acting Medicine Internship - ORHS
- MEL 8349: Medicine Acting Internship - Bay Pines
- MEL 8360: Primary Care in a Group Practice
- MEL 8953: Integrative Clinical Skills
- MEL 9940: Honors Acting Internship Program in Internal Medicine
- MEL 9999-M: Independent Study in Medicine

#### Hematology and Medical Oncology
- MEL 8308: Ambulatory Hematology-Oncology
- MEL 8309: Inpatient Hematology
- MEL 8345: Inpatient Medical Oncology
- MEL 8366: Adult Bone Marrow Transplantation

*Continued on next page*
### Infectious Diseases and International Medicine

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<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>MEL 7310</td>
<td>Infectious Diseases and Tropical Medicine</td>
</tr>
<tr>
<td>MEL 7314</td>
<td>Tropical Medicine and Public Health Abroad</td>
</tr>
<tr>
<td>MEL 8357</td>
<td>Infections in Transplant Medicine</td>
</tr>
<tr>
<td>MEL 8361</td>
<td>Clinical Management of Sexually Transmitted Diseases</td>
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<tr>
<td>MEL 8362</td>
<td>Infections in Cancer and Bone Marrow Transplant Patients</td>
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<tr>
<td>MEL 8363</td>
<td>Infections in the Intensive Care Unit</td>
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<tr>
<td>MEL 8364</td>
<td>Clinical Epidemiology of Infectious Diseases</td>
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<tr>
<td>MEL 8365</td>
<td>Outpatient Care of the HIV-Infected Patient</td>
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<tr>
<td>MEL 8371</td>
<td>Selected Topics of Infectious Disease</td>
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### Medical Ethics and Humanities and Palliative Medicine

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<tr>
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<tbody>
<tr>
<td>MEL 8330</td>
<td>Social Problems in Medicine</td>
</tr>
<tr>
<td>MEL 8900</td>
<td>Medical Humanities and Human Values</td>
</tr>
<tr>
<td>MEL 8901</td>
<td>Selected Topics Such as Aging, Global Concerns, and Disabilities</td>
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<tr>
<td>MEL 8902</td>
<td>Medicine and the Arts: NYC Voices and Visions</td>
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### Nephrology and Hypertension

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<tr>
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<tbody>
<tr>
<td>MEL 7313</td>
<td>Clinical Nephrology</td>
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### Pulmonary, Critical Care, and Sleep Medicine

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<tr>
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<tr>
<td>MEL 8340</td>
<td>Pulmonary Disease</td>
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<tr>
<td>MEL 8354</td>
<td>Pulmonary and Critical Care Medicine - Bay Pines</td>
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### Rheumatology

<table>
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<tr>
<th>Course Code</th>
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<tr>
<td>MEL 8339</td>
<td>Rheumatology Clinical Elective</td>
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<tr>
<td>MEL 8377</td>
<td>Rheumatology Clinical Research Elective</td>
</tr>
</tbody>
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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
**Division of Allergy and Immunology**

**MEL 8315  Clinical Allergy/Immunology**  
Dr. Lockey and Allergy/Immunology Faculty

Allergic and immunologic problems affect up to 20% of adults and children in the United States, therefore, students rotating in Allergy and Immunology are exposed to a variety of common problems important to physicians regardless of their specialty interests. Both children and adults are seen in the clinics. The objective of the Allergy/Immunology experience is to familiarize the student with the pathogenesis, diagnosis, and treatment of various allergic and immunologic diseases. The student will examine patients with common medical diseases such as allergic rhinoconjunctivitis, chronic rhinitis, acute and chronic sinusitis, various forms of asthma, otitis media with effusion, hypersensitivity pneumonitis, atopic eczema, contact dermatitis, urticaria and/or angioedema, drug allergy, insect hypersensitivity, and food allergy. The student will also examine patients with immunodeficiency diseases (including HIV infection), eosinophilia, eosinophilic syndromes, and various other immunologic problems.

The student will be involved in in-patient and out-patient care at the VA Hospital, Tampa General Hospital, H. Lee Moffitt Cancer Center, All Children's Hospital, USF Adult and Pediatric Allergy/Immunology and Immunodeficiency Clinics and private physicians' offices and will attend several weekly conferences on basic immunology and clinical allergy and immunology given by residents, fellows and faculty from USF College of Medicine.

**Evaluation**

Evaluations will be completed by the faculty members who assess the level of clinical competence attained.

**Length:** 4 weeks  
**Time(s):** Full Time  
**Hours:** 44 per week

**Months:** 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

**Availability:** 2 at T-VAH; 1 at CCF

**MEL 8376  Respiratory Disease Research**  
Drs. Mohapatra, Bentley, Jena, Kong, and Zhang

Allergic and immunologic problems affect up to 20% of adults and children in the United States, therefore students rotating in Allergy and Immunology are exposed to a variety of common problems important to physicians regardless of their specialty interests. Both children and adults are seen in the clinics. The objectives of the respiratory disease research experience at the Joy McCann Culverhouse Airway Disease Center are to familiarize the student with some of the contemporary research methods relating to pathogenesis, diagnosis, and treatment of various allergic and immunologic diseases. The student will participate in hands-on research in relation to common medical diseases such as allergic rhinoconjunctivitis, chronic rhinitis, acute and chronic sinusitis, various forms of asthma, otitis media with effusion, hypersensitivity pneumonitis, atopic eczema, contact dermatitis, urticaria and/or angioedema, drug allergy, insect hypersensitivity, food allergy, and respiratory infections. The student will learn some of the common methods used for diagnosis of human diseases.

The student will attend several weekly conferences on basic immunology and clinical allergy and immunology given by residents, fellows and faculty from USF College of Medicine. The student will present a synopsis of his/her work in the last week of his training.

**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.  
**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.  
**Hours:** The approximate hours per week the student will be involved with this elective.  
**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.  
**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
Evaluation

The faculty members and staff associated with the training program will assess the level of competence and will complete evaluations.

Length: 4 weeks        Time(s): Full Time      Hours: 44 per week

Availability: 1 at TVAH

Months: 1 o  2 o  3 o  4 o  5 o  6 o  7 o  8 o  9 o  10 o  11 o

Division of Cardiovascular Disease

MEL 7303  Consultative Cardiology
Dr. Curtis and Faculty

This elective offers an opportunity to develop skills in the evaluation of patients referred for cardiology consultation at the VA and Tampa General Hospital. The students will participate in the evaluation of patients referred for cardiology consultation and will assist with the integration of the general medical data base with data gathered by both noninvasive (electrocardiography, ambulatory electrocardiography, stress testing) and invasive hemodynamic techniques, where indicated. This course allows the student to interpret a large number of electrocardiograms under the supervision of the attending staff. Staff attending review will provide individual instruction. Attendance at various other weekly Cardiology Division teaching conferences is required.

Evaluation

The faculty will make performance evaluations from data derived from clinical discussions and didactic presentations by the student.

Length: 4 weeks        Time(s): Full Time      Hours: 44 per week

Availability: 2 at T-VAH; 2 at TGH

MEL 8351  Harvey Elective in Cardiology
Dr. Fred Sloan and Dawn M. Schocken, MPH

The major objective of this elective will be to teach the student to perform comprehensive cardiac assessment, emphasizing the physical examination. The course will utilize Harvey (the teaching manikin) and actual patients. This elective will be primarily a self-study course (utilizing Harvey) with a weekly lecture from a cardiologist to review the materials and a weekly quiz to assess the student’s progress in their self-study program. Time will also be devoted to acquiring fundamentals of ECG interpretation and exposure to utilization of exercise testing, echocardiography and cardiac catheterization. Attendance at cardiology teaching conferences is optional.

Course objectives will be assessed by the documentation of individual’s practice on the manikin as well as the three quizzes and a comprehensive written and practical examination at its conclusion.
Length: 4 weeks  
Time(s): Full Time  
Hours: 44 per week

Months: 1 x 2 x 3 x 4 x 5 o 6 x 7 o 8 x 9 o 10 x 11 x

Availability: 5 at USF-MS

**Division of Emergency Medicine**

**MEL 7320-Q  Externship in Emergency Medicine**

This elective in Emergency Medicine provides the student with further training in an “off campus” setting in the form of an approved extramural elective. This application must be approved and signed by Dr. Kevin O’Brien as the designee of the Department of Internal Medicine.

Length: 4 weeks  
Time(s): Full Time  
Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 x 9 x 10 x 11 x

Availability: No Limit at EXT

**MEL 8347  Adult Emergency Medicine**

Drs. James Gillen

This elective integrates clinical skills and evidence-based medicine through didactic lectures, observation, performance of clinical procedures, hands-on clinical experiences, and direct interaction with faculty, individual patients, and families. Students will manage the patient using the "team approach," which involves EMTs, nurses, physicians, and students. They are expected to evaluate patients, address their presenting complaints, initiate workups, and provide definitive therapies.

This rotation will enrich students' knowledge, help them develop history-taking ability, physical skill assessment, and diagnostic and management skills, as well as help them develop a caring, compassionate, and empathetic attitude in dealing with patients and their families.

The student's grade is based on daily evaluations, quality case presentations, attendance at emergency medicine conferences, and an end of rotation examination.

The USF Emergency Medicine program also offers an Emergency Medicine elective in India. The student will work under the direct supervision of a mentoring faculty member. Various clinical sites from inner city to rural hospitals are available including:

Medical College and SSG Hospital in Vadodara, Gujarat
All India Institute of Medical Sciences, New Dehli
Railway Emergency Medicine and LTMC Trauma Center, Mumbai
50-bed charity hospital serving 100,000 villagers in Gujarat

Emergency medical insurance is required for all electives abroad. Contact Dr. James Gillen at (813) 627-5931
prior to scheduling this elective in India.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 6 at TGH; by special arrangement at EXT

**MEL 9999Q  Independent Study in Emergency Medicine**

Drs. James Gillen

The purpose of this elective is to provide students the flexibility of pursuing creative scholarly projects/research under the direct supervision of a mentoring faculty member. It is expected that clear goals and objectives will be established in advance of requesting approval from the department to register.

In order to register for this elective, an Independent Study Application MUST have signatures of BOTH the elective faculty preceptor and Director of Students Program, Department of Internal Medicine. This form can be obtained from the Registrar’s office.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: No limit at USF-MS

**MEL 8368  Emergency Medicine Outside the Hospital**

Dr. Carrubba

The purpose of this elective is to give the student a broad exposure to the scope of pre-hospital emergency medical services.

Objectives

1. Gain an understanding of pre-hospital patient care by rotation with the Tampa Fire Rescue Department and Aeromed at Tampa General Hospital
2. Learn to manage common toxicological problems by rotation in the Florida Poison Control Center at Tampa General Hospital
3. Be exposed to EMS Administration by accompanying the medical director of Tampa Fire and Aeromed during administrative duties
4. Gain an understanding of resource allocation and pre-arrival instruction initiatives by rotation at Signal One Fire and Rescue Dispatch

Time spent in these various areas will depend on the interests and experience of the student participating. A maximum of two students will be accommodated in each rotational block.
**Division of Endocrinology and Metabolism**

**MEL 7305  Clinical Endocrinology and Metabolism**
Dr. Morrison and Faculty

Upon the completion of this elective, the student should understand how to manage patients who have a variety of endocrinologic and metabolic diseases. Students will see in-house consultations at the VA, Tampa General, and H. Lee Moffitt hospitals; attend daily work rounds; endocrine teaching rounds; weekly endocrine conferences; and outpatient endocrine-metabolic clinics at the VA Hospital, Tampa General Hospital, and USF Medical Clinics. The student will directly participate in the performance of detailed endocrine tests to better understand their application and interpretation. The student will participate in seminar discussions of clinically important subjects. Informal meetings between students and senior staff members will be conducted on a regular basis to assure that the student fully understands the pathogenesis, diagnosis and treatment of endocrine-metabolic disorders (pituitary, thyroid, parathyroid, adrenal, gonadal, diabetic, etc.).

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 2 at TGH

**MEL 8350  Clinical Endocrinology and Metabolism: Bay Pines**
Dr. Robert Brickner and Faculty

Upon the completion of this elective, the student should understand how to manage patients who have a variety of endocrinologic and metabolic diseases. Students will see all in-house endocrine problems at the Bay Pines Veterans Administration Hospital and attend daily working rounds, endocrine teaching rounds, endocrine conferences and clinics. The student will directly participate in the performance of detailed endocrine tests (insulin tolerance test for hypopituitarism, calcium infusion tests, metapyrone tests, ACTH stimulation tests, etc.) so that he/she will understand their application and interpretation. He/She will participate in seminar discussions of clinically important subjects. Informal meetings between students and senior staff members will be conducted on a regular basis so that the student fully understands the pathogenesis, diagnosis and treatment of endocrine-metabolic disorders (pituitary, thyroid, parathyroid, adrenal, gonadal, diabetes, etc.).

Evaluation
Faculty will evaluate students based on clinical discussions and didactic sessions.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 2 at BP-VAH

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
MEL 7306  Gastroenterology Elective
Dr. Brady and Faculty

Upon successful completion of this elective, the student may expect to achieve an acceptable level of competence in the management of disorders of the gastrointestinal tract and liver. This will be achieved by the interpretation of symptoms and physical findings, utilization of appropriate laboratory and other diagnostic studies, knowledge of the basic therapeutic approaches, and interpretation of the gastrointestinal radiographs and other imaging techniques. There will be a combination of direct patient contact and personal instruction. Observation of a variety of procedures including diagnostic and therapeutic upper GI panendoscopy, capsule endoscopy, (colonoscopy, polypectomy, diagnostic and therapeutic ERCP, flexible sigmoidoscopy, esophageal dilation and manometry studies will be afforded. Hands-on experience in capsule endoscopy is available. Attendance at ward and teaching rounds, outpatient clinics and teaching conferences will provide a further source of learning. Emphasis will be placed on pathophysiology, clinical manifestations, diagnosis and therapy. Emphasis will also be placed on the techniques of clinical nutrition. Students can participate in a short research project during the rotation or may elect to begin participation in a long term research project. Students can elect assignment to Tampa General Hospital, the Veterans Administration Hospital, or the USF Medical Clinics. Students will participate in a regularly scheduled conferences and clinics.

Evaluation
The faculty will base their performance evaluations upon clinical discussions and didactic presentations by the student.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 2 at TGH; 1 at T-VAH; 2 at USF-MC

MEL 8318  Esophageal and Swallowing Disorders
Drs. David Estores and H. Worth Boyce

The prospective student should contact Dr. D. Estores (destores@health.usf.edu) at least 2 months before the start of the rotation.

This course will familiarize and engage the senior medical student in the evaluation and management of complex patients referred to a tertiary care center. The student will be involved in the different aspects of patient care including: history taking and physical examination; diagnostic approach and planning for therapy; observation and participation in oropharyngeal, voice and esophageal function testing and basic interpretation of the studies. The senior medical student will be given ample time for observing specialized procedures (including endoscopy) and ample opportunity to longitudinally follow patients they have initially seen for evaluation. They will work closely with the nurses, patient care coordinators, speech pathologist, and physician members of the team.
Objectives

1. Review and apply basic scientific principles, pathophysiology, clinical laboratory methods, radiology examinations and cognitive skills as they relate to the diagnosis and treatment of esophageal and swallowing disorders

2. Familiarize the senior medical student with certain procedures most commonly performed during the evaluation and therapy for these disorders (general indications for the procedure, major risks, observation of actual endoscopy being performed) which include: Fiberoptic Endoscopic Evaluation of Swallowing (FEES), Dynamic Video Esophagram (DVE), videostroboscopy, barium esophagram with meal challenges, upper endoscopy or esophagastroduodenoscopy (EGD), esophageal manometry, combined manometry-fluoroscopy (manofluoroscopy), and 24 ambulatory esophageal pH studies
   a. Understand the general indications for the procedure
   b. Risks of the procedure
   c. Observation of the actual procedure being performed
   d. Discussion of the basic interpretation of the procedures
   e. Discussion of the impact of test results on the therapeutic plan

3. Reinforce a critical approach to the medical literature

4. Expose the senior medical student to evaluation and management of a wide variety of esophageal and swallowing disorders including basic evaluation and treatment of oropharyngeal dysfunction

5. Familiarize the medical student with a multi-disciplinary approach to evaluation and management of complex esophageal and swallowing disorders (“center” model)

Learning outcomes

At the end of the rotation the senior medical student is expected to:

1. Become familiar with the diagnostic approach and treatment options for dysphagia, voice disorders, gastroesophageal reflux and noncardiac chest pain

2. Follow several patients from initial evaluation until they have received therapy or completed the diagnostic work-up

3. Become familiar with certain procedures commonly performed during evaluation and therapy for esophageal swallowing disorders and voice disorders

4. Become familiar with a “center” approach to complex medical problems and understand the interaction between the different members of the team

Evaluation

1. The medical student will receive a written evaluation at the end of the month. This will be reviewed with the student by the faculty evaluator.

2. A written self-assessment examination may be administered to the medical student at the start and at the end of the rotation.

3. Two written patient history and physical assessments performed by the medical student will be reviewed.

4. Faculty performance will be evaluated by the medical student (anonymously submitted to the center director).

5. Credit will be given for exceptional performance.

Length: 4 weeks          Time(s): Full Time           Hours: 40 per week

Months: 1 x 2 x 3 o 4 o 5 o 6 o 7 x 8 o 9 o 10 o 11 o

Availability: 2 at USF-MC

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

Hours: The approximate hours per week the student will be involved with this elective.

Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
MEL 8390    Hepatology Elective
Dr. William Boyd and Faculty

Upon successful completion of this elective, the student may expect to achieve an acceptable level of competence in the management of common and uncommon disorders of the liver, and the management of patients with end stage liver disease. In addition, there will be exposure to the management of liver transplant patients. This will be achieved by the interpretation of symptoms and physical findings, utilization of appropriate laboratory and radiological investigations, and review of pathologic material. Patients are seen at the James A. Haley VA.

Students will participate at scheduled conferences, and may optionally be asked to present at a conference. The opportunity for a short research project will also be available.

Length: 4 weeks       Time(s): Full Time       Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at T-VAH

Division of General Internal Medicine

MEL 7121    Hospital Medicine and Patient Safety Elective
Dr. Alexander Reiss

This rotation at the VA Hospital is designed to further the fourth year medical student's education in internal medicine and examine the topics of patient safety and preventable medical errors. During the month, the student will provide hospitalist care for a limited number of inpatients admitted to the general medical wards under the direct mentorship of VA medicine attendings, simulating the role of private hospitalist physicians. There is no call or weekend work. Integrated into the clinical duties is a curriculum focused on medical errors and patient safety. It includes didactic sessions, practical exercises in identifying engineering hazards, and safety workshops. In 1999, The Institute of Medicine published To Err Is Human: Building a Safer Health System asserting a sobering statistic: tens of thousands of patients die each year in the U.S. from medical errors. Since that landmark publication, the concepts of medical errors and patient safety have surged into the spotlight of the media, the public, and policymakers. This rotation creates a new framework for students/physicians to consider patient safety and prevention of medical errors while advancing the internal medicine skills of the student, preparing them for internship.

Objectives
1. Further the student's education of internal medicine
2. Expose the student to the concepts of patient safety and preventable medical errors
3. Introduce the student to hospitalist medicine
4. Explore the "systems" approach to medical errors
5. Understand human factor engineering in the medical environment
6. Participate in root cause analysis process

Learning outcomes
1. Gain understanding of Hospitalist medicine concepts

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
2. Understand human factor engineering and cite specific patient care examples  
3. Manage patients in the capacity of an acting intern during business hours, answering pages, writing orders and notes, and admitting and discharging them  
4. Participate in root cause analyses if opportunity is available  
5. Attend learning conferences with the housestaff  
6. Present a morning report or noon conference on patient safety  
7. Understand the "system" approach to medical errors and contrast that with the "blame" system

Evaluation
Supervising attending evaluations, completion of skills modules, quiz scores, presentation evaluations, etc.

This elective is not available to visiting students.

Length: 4 weeks          Time(s): Full Time           Hours: 40 per week  
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o  
Availability: 2 at T-VAH

MEL 7320M    Externship in Medicine

This externship in Internal Medicine provides the student with further training in an “off campus” setting in the form of an approved extramural elective. This application must be approved and signed by Dr. Kevin O’Brien as the designee of the Department of Internal Medicine.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week  
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 x 9 x 10 x 11 x  
Availability: No Limit at EXT

MEL 8332    Elective in Rural Medicine (AHEC)

Faculty and Staff at Health Resource Alliance (Pasco), Suncoast Community Health Centers (Hillsborough), DeSoto Memorial Hospital (Arcadia), or other rural sites

This elective is designed to introduce senior students to the practice of medicine in a rural community. Under the supervision of clinical faculty, students will have the opportunity to practice in a private office or in a community/migrant health center. Students will also round with the preceptor in the hospital. This elective will provide students with a better understanding of rural medicine and the tremendous health needs of underserved rural and migrant populations. Housing will be provided for students at DeSoto Memorial Hospital. Gulfcoast South AHEC will provide students with a fixed travel reimbursement.

Objectives
1. Compare and contrast the health needs and problems encountered in rural practice to those encountered in prior urban rotations  
2. Identify the unique opportunities and challenges to medical practice and life in a rural area  
3. Introduce/sensitize the student to cross-cultural issues in health care

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.  
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.  
Hours: The approximate hours per week the student will be involved with this elective.  
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.  
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
4. Understand mechanisms and indications for consultation and referral in rural practice
5. Evaluate the business management of rural practice including availability of organized funding for patient care, managed care, etc.

Evaluation
The clinical faculty will evaluate the progress and performance of the student in the clinical setting(s).

This elective must be scheduled through Dr. Selleck from the AHEC office. Final arrangements for the elective must be made through the Dr. Selleck in conjunction with Gulfcoast North or Gulfcoast South AHEC.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 per site

**MEL 8334   Acting Medicine Internship**
General Internal Medicine Faculty

The student will function as acting or "early" intern on a general ward team at either Tampa General Hospital or Tampa VA Hospital. He/She will be given the full range of clinical duties and responsibilities usually assigned to a first year house officer. The senior house officer and the attending will closely supervise these clinical responsibilities. The level of responsibility is distinctly above that of the third year clerkship rotation. The elective will afford the participating student an in-depth inpatient experience in total patient management so that he/she may confidently assume such care in the first postgraduate year regardless of the career choice.

Attendance will be required at Morning Conference, in-hospital teaching conferences, and Grand Rounds. The student will perform history and physical examinations, write all progress notes, and all orders for therapeutic and diagnostic intervention with counter-signature. Night call will be taken on the schedule assigned to the team.

Length: 4 weeks          Time(s): Full Time           Hours: 64 per week
Months: 1 o 2 o 3 x 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 5 at TGH; 5 at TVAH; 1 at MCC

**MEL 8335   General Internal Medicine Consult Service**
General Internal Medicine Faculty

This course offers the opportunity to participate in the major practice activities of the general internist. The student will be a member of the general internal medicine consultation team at one of the hospitals. The consultation team evaluates and treats medical problems of patients on other services and participates in the perioperative care of surgical patients.

The student will also participate in the USF Medical Clinics practice of faculty preceptor. Finally, a literature search and written review of a topic relevant to internal medicine will be encouraged.

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
Length: 4 to 8 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at TVAH; 1 at TGH

**MEL 8342  Acting Medicine Internship: ORHS**

ORHS and Faculty

The student will function as an acting or early intern on a general ward team. He/She will be given the full range of clinical duties and responsibilities usually assigned to a first year house officer. The rotation, however, will be under the close supervision of the senior house officer, the attending, chief resident, and the chief of service. The level of responsibility is distinctly above that of the third year clerkship rotation. The elective will afford the participating student an in-depth inpatient experience in total patient management so that he/she may confidently assume such care in the first postgraduate year regardless of the career choice.

Attendance will be required at the in-hospital teaching conferences and rounds. The student will perform history and physical examinations, write all progress notes, and all orders for therapeutic and diagnostic intervention with counter-signature. Night call will be taken on the schedule assigned to the team.

**This elective must be scheduled through the Registrar's Office.** Final arrangements concerning the course location/preceptor will be made by the Office of Medical Education, Orlando Regional Healthcare System, 86 West Underwood Street, Orlando, FL 32806-2093, (407) 841-5243 after the student receives his/her elective choice.

Length: 4 weeks  Time(s): Full Time  Hours: 64 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at ORHS

**MEL 8349  Medicine Acting Internship: Bay Pines**

Dr. Alvin Haynes and Internal Medicine Faculty

The student will function as acting or "early" intern on a general ward team at the Bay Pines Veterans Administration Hospital. He/she will be given the full range of clinical duties and responsibilities usually assigned to a first year house officer. The rotation will be under the close supervision of the chief of service and full time faculty. The level of responsibility is distinctly above that of the third year clerkship rotation. The elective will afford the participating student an in-depth inpatient experience in total patient management so that he/she may confidently assume such care in the first postgraduate year regardless of the career choice. Attendance will be required at Morning Conference, in-hospital teaching conferences, and Grand Rounds. The student will perform history and physical examinations, write all progress notes, and all orders for therapeutic and diagnostic intervention with counter-signature. Night call until 10:00 p.m. will be every 4th day.
Length: 4 weeks    Time(s): Full Time    Hours: 48 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 4 at BP-VAH

**MEL 8360  Primary Care in a Group Practice**
Dr. Walter Brander

This rotation is designed to provide a unique practice experience in a full-service, freestanding ambulatory care clinic. The Fort Myers VA Outpatient Clinic, 130 miles removed from a VA Hospital, provides a milieu similar to multi-specialty group practice in the private sector. The patient population presents a wide variety of acute and chronic illnesses and is comparable to that seen in private practice by a primary care physician. In a tutorial relationship with experienced clinicians, the student will perform brief histories and physical examinations and participate in planning diagnostic studies and in making therapeutic decisions. Students will also interact with the staff as they follow patients with scheduled appointments. Sigmoidoscopy will be taught to all.

Clinic hours are 8:00 A.M. through 4:30 P.M., Monday through Friday. The Clinic is 15 miles northeast of Sanibel Island and Ft. Myers Beach.

For more information, please contact Fran Peterman at 239-939-3939 (ext 6310) or 2070 Carrell Rd., Fort Myers, FL 33901.

Length: 4 weeks    Time(s): Full Time    Hours: 40 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at FMVAH

**MEL 8953  Integrative Clinical Skills**
Drs. Mai, Flannery, Edwards, and Humphrey

This elective offers the fourth year medical student a review of pertinent skills for a smoother transition to internship. The course will predominantly consist of case based conferences which will be a review such topics as writing orders, common overnight call issues, common procedures, reading EKG, CXR, and ABGs, electrolyte abnormalities, ACLS protocol, the role of the resident as an educator and evaluator, tips for improving patient and family communication, review of advance directives and the utilization of other resources. Students will be required to shadow the cross cover resident during the work week twice during the month. Attendance to various internal medicine conferences (morning report and noon conference) is optional.

Objectives

1. Diagnose and treat common overnight call issues
2. Practice and learn common bedside medical procedures
3. Improve teaching skills to be a better educator
4. Improve communication skills specifically delivering bad news
5. Familiarize yourself with ancillary medical services in the hospital/community and how these services can improve patient care
6. Learn skills to improve balancing the rigors of residency with personal/social endeavors

**Learning Outcomes**

At the end of the month, students should feel more comfortable with the skills that will make their transition to residency smoother and to maximize the learning environment in residency.

**Evaluation**

Students will be evaluated on attendance, participation in case based conferences, involvement in cross cover calls, and an end of the month presentation.

<table>
<thead>
<tr>
<th>Length: 4 weeks</th>
<th>Time(s): Full Time</th>
<th>Hours: 40 per week</th>
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<tr>
<td>Months: 1 x 2 x 3 x 4 x 5 x 6 x 7 x 8 x 9 x 10 x 11 o</td>
<td>Availability: 12 at TGH</td>
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**MEL 9940 Honors Acting Internship Program in Internal Medicine**

Dr. Kevin O'Brien and Attending Faculty

**Objectives**

The Honors Program curriculum includes three basic components:

1. Direct patient care responsibilities (AI at TGH or VA)
2. A creative scholarly project
3. Participation in an afternoon Honors AI report on Friday during the rotation

<table>
<thead>
<tr>
<th>Length: 4 weeks</th>
<th>Time(s): Full Time</th>
<th>Hours: 44 per week</th>
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<tr>
<td>Months: 1 x 2 x 3 o 4 x 5 x 6 x 7 x 8 x 9 x 10 x 11 x</td>
<td>Availability: 10</td>
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**MEL 9999M Independent Study in Medicine**

General Internal Medicine Faculty

The purpose of this elective is to provide students the flexibility of pursuing creative scholarly projects/research under the direct supervision of a mentoring faculty member. It is expected that clear goals and objectives will be established in advance of requesting approval from the department to register.

In order to register for this elective, an Independent Study Application MUST have signatures of BOTH the elective faculty preceptor and Director of Students Program, Department of Internal Medicine. This form can be obtained from the Registrar’s office.

<table>
<thead>
<tr>
<th>Length: 4 weeks</th>
<th>Time(s): Full Time</th>
<th>Hours: variable</th>
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<tr>
<td>Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o</td>
<td>Availability: No Limit at USF-MS</td>
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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
Division of Hematology and Medical Oncology

MEL 8308  Ambulatory Hematology-Oncology
Dr. Zuckerman and Faculty

The objective of this elective is to provide the student with a basic understanding of the principles of medical management evaluation and management of hematologic and cancer-related problems in the outpatient setting. Students will participate with hematology/oncology fellows and faculty members in the care of patients seen at the H. L. Moffitt Cancer Center James A. Haley VA Medical Center, Tampa General Hospital and/or University of South Florida. There will be scheduled conference activities in which the student will participate. The student will see approximately 10 -12 established and 3-5 new patients per week. The student will be required to present and discuss, in depth, patient evaluation and management issues. The student will be evaluated on the basis of the adequacy of patient evaluation and case presentations.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at MCC

MEL 8309  Inpatient Hematology
Dr. Zuckerman and Faculty

The objective of this elective is to attain a solid understanding of the pathophysiology, clinical manifestations, diagnostic studies and management of malignant hematological disorders, hematologic complications of malignant diseases, and hematologic consequences of cancer chemotherapy. The student will serve as an acting intern on the inpatient hematology service and will have extensive contact with the attendings of the division who will provide the basic tutorial supervision in the Hematology Conferences. The students will be required to participate in teaching and patient care rounds, special patient care conferences, and scheduled hematology/oncology-related teaching conferences. The students will also be introduced and exposed to the specialized research projects occurring in the division as well as to the special laboratory evaluation procedures used in hematology. The students will be expected to prepare a literature review on a specified topic for presentation. The faculty will complete performance evaluations based on the clinical discussions and didactic presentations by the student and on the performance of the student in patient care-related activities.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at MCC

MEL 8345  Inpatient Medical Oncology
Dr. Zuckerman and Faculty

Upon the completion of this elective, the student should understand the principles of diagnosis and management of a segment of patients with malignant disease who require hospitalization, including diagnostic studies, management of all stages of malignant diseases, diagnosis and management of complication of cancer and

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
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Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
cancer chemotherapy, palliative care of cancer patients, and end-of-life care. The student will serve as an acting intern on the Medical Oncology Inpatient Service at the H. Lee Moffitt Cancer Center. The student will participate with residents and fellows in the primary care of cancer patients. Participation in daily teaching and work rounds, cancer patient care conferences, and other scheduled teaching conference is required. The student will be expected to prepare a literature review on a specified topic for presentation. In addition, the student's performance in patient management will be evaluated in writing by the involved faculty, fellows, and residents.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at MCC

MEL 8366  Adult Bone Marrow Transplantation
Dr. Vincent Anasetti and Faculty

Goals
At the completion of this elective the student should:

1. Have an understanding of the process of bone marrow transplantation and the associated immunobiology of immune recovery after ablative therapy and stem cell infusion
2. Identify the different types of transplantation (syngeneic, allogeneic, and autologous) and the diseases in which each type of transplantation may play a role in therapy
3. Identify common problems related to marrow transplantation such as cytopenias; infectious complications; nutrition and electrolyte imbalance; renal, cardiac, and pulmonary insufficiencies; graft vs. host disease; as well as outline current medical means to support patients until marrow and immune recovery

Methods
The student will assist hematology/oncology fellows in the primary care of patients undergoing high dose ablative therapy and bone marrow transplantation while receiving treatment in the Bone Marrow Transplant Unit at the H. Lee Moffitt Cancer Center and Research Institute. The student will be expected to attend daily teaching and work rounds, as well as teaching and research conferences. The student's ability to perform and present thorough histories and physical exams will be evaluated. The student's verbal and written patient progress reports will also be evaluated daily at morning rounds. Faculty will monitor student progress and give ongoing feedback throughout the elective. No written examination will be given although an evaluation of the student's performance will be available at the end of each rotation.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at MCC
MEL 7310    Infectious Diseases and International Medicine
Dr. Sinnott and Faculty

Objectives
1. Provide fundamental information concerning techniques employed in diagnosing infectious diseases
2. Obtain an appreciation for the natural history of infectious disease so as to better understand whether therapy is affecting the course of disease in a given patient
3. Comprehend the process of selection of appropriate anti-microbial therapy

Methods
The clinical rotations conducted at Tampa General Hospital, Tampa VA Hospital, and H. Lee Moffitt Cancer Center are structured to permit students to function, with guidance by advanced subspecialty residents and attending physicians, as consultants in infectious disease. In addition to participation in bedside consultative evaluation of patients and the presentation of findings on daily teaching rounds, students are required to employ standard textbooks, contemporary literature and laboratory data in an organized fashion to arrive at "best fit" diagnoses. Progress of patients will be assessed and recorded daily. Fellows and attendings will provide regular didactic teaching, and students will participate in the teaching activity by preparing and presenting a comprehensive review of an important clinical topic in infectious diseases for a Division Conference. The student's progress during the elective will be monitored during daily teaching rounds by the attending faculty.

Evaluation
Midway through the elective a formal evaluation process results in generation of written comments that are communicated to the student so that he/she can appreciate how his/her performance has been to that point. Daily, critical review of presentation of patient data will be incorporated in teaching rounds to provide guidance for the student to strengthen skills in those areas.

Length: 4 to 8 weeks    Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 3 at TGH; 2 at T-VAH; 2 at MCC; 1 at CCF

MEL 7314    Tropical Medicine and Public Health Abroad
Drs. John Greene and John Sinnott

This course offers an opportunity to practice health care in a foreign country with emphasis on tropical infectious diseases and epidemiology. An urban and rural hospital/clinic at a major medical school in Africa (Zimbabwe), India, or South America will be the location of the rotation. The student will learn to care for patients with acute and chronic parasitic and tropical bacterial and fungal infections as well as diseases common to all peoples. Interaction with the local clinicians will include joint lectures, direct supervised patient care, and observation of healthy and unhealthy behavior of the indigenous population. A USF faculty member with interest and expertise in tropical medicine or public health will provide the leadership and instruction for the group. At the end of the rotation, each participant will present a relevant topic concerning the diagnosis, treatment, or prevention of tropical diseases, or the epidemiology and control of major diseases of public health importance, and submit the report for publication.

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
Emergency medical insurance is required for all electives abroad.

Length: 4 weeks       Time(s): Full Time       Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 x

Availability: 2 at USF-MS

**MEL 8357   Infections in Transplant Medicine**  
**Drs. Montero, Wills, Somboonwit and Casanas**

The goal of this course is the understanding of the pathophysiology diagnosis and treatment of infections and rejection in the transplant patient. Although Infectious Disease supervises the elective it will utilize teaching resources of other services. Thus, students interested in surgery would participate actively in cardiac surgery transplant activities while those interested in cardiology would have a chance to interact with cardiac transplant activities, and those interested in renal transplantation would interact with the renal transplant team on a structured format. All students on the transplant rotation will make rounds on a daily basis as well as attend cardiac and liver transplantation conferences. Direct patient care is optional.

Length: 4 weeks       Time(s): Full Time       Hours: 44+ per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 4 at TGH

**MEL 8361   Clinical Management of Sexually Transmitted Diseases**  
**Dr. Toney**

This course is designed to enhance the student's knowledge and clinical management of diseases that may be transmitted by sexual routes. During the rotation, didactic teaching as well as clinical practicum experience will be provided. The didactic portion will include discussions of the whole spectrum of sexually transmitted diseases and their therapies. The student will participate in supervised patient care during the clinical practicum portion of the course. Practicum experience will consist of the participant developing and exercising his/her ability to interact appropriately with patients, obtain a thorough STD history, perform an appropriate physical examination on both male and female patients, collect and interpret lab specimens, choose appropriate therapy, employ appropriate patient management, and educate and refer appropriately. The laboratory practicum provides participants experience on the correct procedures for performing specimen preparation and stat laboratory tests used to help in the diagnosis of some STDs.

Performance will be evaluated based on participation in the didactic and practicum portions as well as an independent study project (to be designed by the course director and the student).

Length: 4 weeks       Time(s): Full Time       Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at VAH
MEL 8362  Infections in Cancer and Bone Marrow Transplant Patients
Dr. John Greene

An infectious disease approach to managing neutropenic patients, bone marrow transplant patients and patients with solid organ or hematologic cancers will be presented. The student will develop skills in managing patients with selected bacterial, fungal, and mycobacterial infections unique to this immuno-compromised population while working intimately with the microbiology lab. Appropriate use of antimicrobial agents including knowledge of therapeutic vs. toxic regimens will be emphasized. Also included will be critical care management of bone marrow transplant patients and other seriously ill cancer patients.

Midway through the elective a formal evaluation process results in the generation of written comments that are communicated to the student so that he/she can appreciate how his/her performance has been to that point. Daily, critical review of presentation of patient data will be incorporated into teaching rounds to provide guidance for the student to strengthen skills in those areas.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 2 at MCC

MEL 8363  Infections in the Intensive Care Unit
Drs. Montero, Wills, Somboonwit, and Casanas

The goal of the course is to learn to recognize, treat, and prevent infectious complications in the critically ill patient. The student will participate in the initial consultative evaluation and will follow-up patients in the various ICU's at Tampa General Hospital. This will include trauma, postoperative, medically ill, and burn patients. The student will attend weekly lectures and participate in daily critical care rounds. A practical approach to antibiotic choices and effective use of diagnostic studies will be stressed.

Evaluation
The attending physicians will evaluate the student on a daily basis.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 2 at TGH

MEL 8371  Selected Topics of Infectious Disease
Dr. Sinnott and Faculty

Students may arrange for independent clinical research on topics relevant to a variety of infectious diseases. The supervising faculty member must approve, in conjunction with the student, the objective(s), activity involved, and study evaluation for the student's rotation period.

Relevant topics include, but are not limited to: infections in the elderly, infections in primary care, antibiotic pharmacology and usage, HIV and related disorders, antimicrobial resistance, economics and infectious

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
diseases, infections and the diabetic patient, or parasitology.

Students will rotate through both the Tampa VA Hospital and the USF Medical Clinic.

Length: 4 weeks       Time(s): Full Time       Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 3 at USF-MS

MEL 8364  Clinical Epidemiology of Infectious Diseases
Dr. Montero

Objectives
1. Provide fundamental information regarding the epidemiology of infectious diseases
2. Gain an appreciation for the practice of epidemiology in the hospital setting in order to understand basic infection control measures
3. Initiate the student in the understanding of infection control issues in the hospital setting

Methods
This clinical rotation is conducted at Tampa General Hospital and is structured so that the student will function as a consultant, both in epidemiology and infectious diseases. Additionally, he/she will participate in bedside consultative evaluation of patients, infection control meetings, and investigation of contagious diseases outbreaks. The progress of the student during the rotation will be monitored during daily teaching rounds by the attendings.

Length: 4 to 8 weeks       Time(s): Full Time       Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at TGH

MEL 8365  Outpatient Care of the HIV-Infected Patient
Drs. Holt and Somboonwit, Montero, Casanas, and Wills

This elective will provide the student with a broad overview of the care of HIV-infected patients in an outpatient setting. The student will attend HIV clinic at the Hillsborough County Health Department daily and will participate directly in the evaluation of clinic patients. The student will formulate a plan of care for patients and present the plan to the attending physician. The problems encountered in clinic will be used to illustrate the principles of outpatient HIV care. In addition, the student will attend weekly lectures in which common opportunistic infections and HIV therapeutics will be discussed. The student will also have the option of spending some afternoons rounding on clinic patients who have been hospitalized at Tampa General Hospital, and may observe the HIV Clinical Research Division.

Evaluation
The student's evaluation will be based on daily contributions during clinic and participation in weekly lectures.
Division of Medical Ethics and Humanities and Palliative Medicine

MEL 8330  Social Problems in Medicine
Dr. Lois Nixon

The course involves an examination of cultural factors in the analysis of social problems in medicine as expressed in film, art, and literature. Focus is on the poor, racial minorities, women, homosexuals, the elderly, etc. Essentially the course focuses on nuances and complexities of the human condition. If attendance is a problem, students should not register for this course.

Topics that might be studied include:

1. Disability
2. Sociocultural barriers: language barriers, prejudice, cultural differences, gender issues and concerns
3. Policy issues for the physician: our national medical priorities (specialization vs. primary care, preventive vs. tertiary), abortion, sex education, health care reform, managed care, etc. Where appropriate, field experience will be arranged.
4. Aging
5. Emerging voices: other perceptions, other stories

Each student will be assigned to do specific reading assignments and several written responses to the fiction. In addition, elective groups will explore the course theme further by visiting special classes on main campus, going to see related exhibits at museums, and attending films (commercial or VCR). The course is interdisciplinary and requires completion of all assignments and thoughtful discussion.

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 o  2 o  3 o  4 o  5 o  6 o  7 o  8 o  9 o  10 o 11 o

Availability: 1 at HCHD

MEL 8900  Medical Humanities and Human Values
Dr. Lois Nixon

Students may arrange for independent study on topics relevant to human values in medicine. The faculty member who will supervise the study must approve a plan for such study. The plan will indicate the objectives of the study, the activities to be undertaken in pursuit of the objectives, and the means of evaluating the study.

Relevant topics include religion in medicine, medical ethics, legal aspects of medical ethics, clinical ethics research, communication in medicine, medicine and literature, the history and/or philosophy of science, medicine and social problems, creative writing, the impact of culture on medicine and health, and cross culture experience.

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 x  2 x  3 x  4 x  5 x  6 x  7 x  8 x  9 x  10 x 11 o

Availability: No limit at USF-MS
Faculty will assist students in locating appropriate faculty members to supervise their independent study.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 x  2 x  3 x  4 x  5 x  6 x  7 x  8 x  9 x  10 x  11 o

Availability: No limit at USF-MS

**MEL 8901  Selected Topics Such as Aging, Global Concerns, and Disabilities**

Dr. Lois Nixon

The object of this elective is to provide in-depth consideration of portrayals of aging and end-of-life issues using humanities tools. While students explore these issues in the medical text and in clinical experiences, this course provides very different perspectives that are intended to complement those experiences. Students choosing this course should expect to read four or more novels or plays, become familiar with several poems ranging from Alfred Tennyson to May Sarton and Donald Hall, view at least 4 full length films, and gather from the arts specific works dealing with the course topic.

Faculty from the College of Fine Arts will provide seminar leadership and students will be required to present assigned interpretations and critiques of works to fellow participants.

Length: 4 Weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 x  2 x  3 x  4 x  5 x  6 x  7 x  8 x  9 x  10 x  11 o

Location: USF and South Tampa

For those enrolled in the **Masters Program in Bioethics and Medical Humanities**, the course will contain both on-line and traditional contact hour formats. The course is scheduled to allow for co-participation by Med IV and Masters students. The on-line class extends over a 3-month period while the Med IV class adheres to the traditional one-month format. Students in the MBMH program must meet with Dr. Nixon in December to seek approval and work out a suitable schedule.

**MEL 8902  Medicine and the Arts: NYC Voices and Visions**

Dr. L. Nixon

Students must commit to this course by emailing kbrown2@health.usf.edu no later than October 1st.

This month-long course is designed to introduce students to a broad examination of visions and voices occurring in various forms of the arts. Unlike most basic science classes, courses, and medical school tests, materials selected for this course emphasize the telling of a story from non-scientific, non-objective perspectives. Artists and writers have always been the record keepers of their society; separately and collectively they present unknowable, imprecise, and slippery aspects of humanity that can not be defined easily or measured with certainty.

Just as Steinbeck’s classic novel, *Grapes of Wrath*, generated a broader awareness to the plight of migrants and poverty and the recent play, *Wit*, portrayed subjective insights to dying in a hospital setting, the assignments in
this course employ a humanistic lens to reveal aspects of issues confronting individuals and/or groups in contemporary society. Students will have first-hand experiences with theatre, music, historical markers, available writers, art film selections, as well as docent-led museum visits and special lectures. Alzheimer’s disease, aging concerns, depression, and gender perspectives are among the topics addressed in our assignments and seminars.

**Upon completion, students will be able to understand and articulate the following:**

1. Recognize and identify specific representations from the arts that extend and illuminate ranges of illness and suffering.
2. Evaluate the reasons for the production of specific works for today’s audience as well as the effect it is likely to produce. Consider how these works complement the medical text or reveal that which is illusive. How might paintings by Hopper, for example, describe individual and social elements affecting patients and their families or circumstances, and what does a play such as *Rent* or *Night Mother* contribute to our understanding of human condition.
3. Understand how catastrophic events (911) are responded to and interpreted by writers and artists
4. Consider the historical place of Bellevue Hospital in medical history. Meet with the Bellevue Literary Review Editor.
5. Experience a full day of programming by faculty at the NYU Medical School. Hands-on experience provided for the NYU Literature/Medicine DataBase.

**Optional one night excursion to Philadelphia**

*Note: Med IV Students and MBMH students will be admitted to this course.*

Three weeks of course time occurs at USF, one week occurs in NYC. Students are responsible for all NYC expenses and travel arrangements.

**Length:** 4 weeks  
**Time(s):** Full Time  
**Hours:** 44 per week

**Months:** 1 x 2 x 3 x 4 x 5 x 6 x 7 x 8 o 9 x 10 x 11 x

**Availability:** 6-20 at USFMS

*Division of Nephrology and Hypertension*

**MEL 7313  Clinical Nephrology**

*Dr. Durr and Faculty*

The objective of this elective is to expose the fourth year medical student to the broad general principles of Clinical Nephrology. In essence, the student will be an acting intern who will, in collaboration with the renal house staff and clinical fellows, participate in the care of patients with a variety of renal and hypertensive problems. Adequate exposure to renal patients is achieved through inpatient consultations in the affiliated institutions and outpatient consultations and follow-up in the renal clinics and dialysis centers. The performance of the history and physical examination, formulation of plans for diagnosis and management, and the writing of orders for care of the patient will be the responsibility of the student who will function under supervision of the Nephrology attendings and fellows. The student will be exposed to the practice of medicine on a broad interdisciplinary service that involves dietitians, social workers, clinical nurse specialists, as well as the attending staff.
Length: 4 to 8 weeks   Time(s): Full Time   Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at T-VAH; 1 at TGH

**Division of Pulmonary, Critical Care, and Sleep Medicine**

**MEL 8340  Pulmonary Disease**
Dr. Solomon and Faculty

**Objectives**
The student at the completion of the elective should:

1. Be able to perform a history and physical examination as it relates to pulmonary disease
2. Know how to order and interpret basic laboratory tests such as chest X-rays, CT scans, arterial blood gases, and pulmonary function tests
3. Have an understanding of the common pulmonary disorders, including their diagnosis and treatment
4. Have a working knowledge of pulmonary physiology, especially as it relates to respiratory failure and the use of respiratory therapy (ventilators, oxygen, etc.)
5. Have a familiarity with a number of emergent conditions seen in the Medical Intensive Care Unit (Moffitt; not at T-VAH or TGH for this course)

**Methods**
The student will receive training at one of our clinical institutions by evaluating patients, rounding with the consultation team, and participation in conferences. A didactic lecture series may also be given.

**Evaluation**
The student will be evaluated on a daily and ongoing basis by the consult attending.

At TGH: The student will work as part of the pulmonary consult team. There is a separate MICU team at TGH so critical care medicine will not be a component of the TGH experience for this course.

At Moffitt: The experience combines pulmonary consultation and critical care.
At T-VAH: The student will work as part of the pulmonary consult team. There is a separate MICU team staffed by students participating in the senior clerkship. This site is therefore unavailable for a critical care rotation.
At Bay Pines: Students will be assigned to the Bay Pines VA Medical Center

Length: 4 weeks   Time(s): Full Time   Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at T-VAH; 2 at TGH; 1 at MCC; 1 at BPVAH
Dr. Anderson and Faculty

Objectives

The student at the completion of the elective should:

1. Have an understanding of common pulmonary disorders (including chronic obstructive pulmonary disease, respiratory failure, lung cancer, and pneumonia) and their diagnosis and treatment. Diagnostic modalities emphasized will include imaging (chest X-ray and CT), fiberoptic bronchoscopy, thoracentesis and pleural biopsy, Swan-Ganz catheterization, and pulmonary function testing
2. Have a working knowledge of pulmonary physiology and pathophysiology, especially as it relates to respiratory failure, and the use of respiratory therapy modalities including mechanical ventilation
3. Have a familiarity with a number of non-pulmonary emergent conditions seen in the Medical Intensive Care Unit, their evaluation, and treatment

Methods

The student will receive training on the Pulmonary and Critical Care Service at Bay Pines VA Medical Center. The student will be responsible for the evaluation of individual patients on the pulmonary service (Ward and ICU) and on the consultation service under the supervision of the full-time faculty. The student will participate in daily teaching rounds. The student will acquire clinical skills through actively assisting in various diagnostic procedures and interpretation of pulmonary function testing including exercise and sleep. The student will have direct daily contact with the faculty and will receive didactic instruction in the pathophysiology, diagnosis, and treatment of pulmonary disease. Time for participation in research projects ongoing on the pulmonary service or projects of the student's design may be available.

Evaluation

The attending physician will evaluate the student on a daily and ongoing basis. No examination will be given.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at BP-VAH

Division of Rheumatology

MEL 8339    Rheumatology Clinical Elective

Drs. Joanne Valeriano-Marcet, John Carter, Ashley Sterrett, Louis Ricca, and Helen Bateman

Rheumatic diseases are complex multi-system diseases. All subspecialties and general internists need to be familiar with the clinical aspects of these diseases. Musculoskeletal complaints, including arthritis, low back pain, sprains, and strains, are the most common reasons for patients to consult their physicians. Our clinics have an excellent balance of both common and rare musculoskeletal rheumatic diseases.

Objectives

1. Be able to obtain history and perform the physical examination appropriate for rheumatic disease patients
2. Be able to order and interpret pertinent X-rays and laboratory studies

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

Hours: The approximate hours per week the student will be involved with this elective.

Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
3. Gain an understanding of the pathogenesis, differential diagnosis, and treatment of musculoskeletal conditions

Methods
The trainee will see patients at the VA and USF Clinics Medical Clinics and on the consultative services of Tampa General Hospital, Tampa VA Hospital or H. Lee Moffitt Cancer Center. Trainees will also participate in specialty conferences during their elective rotation. Upon completion of this elective, the trainee should understand the principles of diagnosis and management of patients who have rheumatic diseases.

Evaluation
The trainee will work closely with the attending rheumatologist who will provide the assessment.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 2 at USF-MS; 1 at CCF

MEL 8377   Rheumatology Research Elective
Drs. John Carter, Joanne Valeriano-Marcet, Louis Ricca, Helen Bateman, and Ashley Sterrett

This elective will offer the student a chance to participate in rheumatology related clinical research. The Division of Rheumatology has an active Division of Clinical Research. The areas of research include rheumatoid arthritis, reactive arthritis, psoriatic arthritis, gout, and osteoporosis. The clinical trials involve industry sponsored, multi-center trial as well as investigator-initiated studies. **Additionally we have ongoing projects evaluating medical education and teaching.** Rheumatology’s Division of Clinical Research includes two full-time faculty.

In this era of evidenced-based medicine, it is vital that the clinician be able to analyze the literature with a critical eye. By participating in clinical research, the student will build a foundation that will allow him/her to better interpret the medical literature. There is no more effective teaching tool in analyzing medical literature than if you have performed similar work yourself.

It is very difficult to perform any meaningful research in 4 weeks. It is impossible to conceptualize a medical hypothesis and carry it through to its end in such a short time span. To that end, students will assist with ongoing projects. This elective also contains a rheumatology clinical elective (MEL 8339) component. By combining the two 4-week electives, the student will have a chance to intermingle their rheumatology clinical experience with rheumatology clinical research. This will also allow a longer time frame to carry out their clinical research.

Evaluation
Dr. Carter or the appropriate principal investigator will complete course evaluations at the end of the 8-week period.

Length: 8 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability 2 at USFMS and TVAH combined
MOLECULAR MEDICINE

BMS 7260  Research in Molecular Medicine
BMS 7262  Molecular Basis of Metabolic Regulation
BMS 7303  Clinical Microbiology and Immunology
BMS 7304  Review of Immune and Infectious Diseases
MEL 9999I  Independent Study in Molecular Medicine

BMS 7260  Research in Molecular Medicine

Faculty

The student will undertake a specific research project in collaboration with one of the faculty and will participate in research conferences and seminars. Current research areas include studies of the molecular basis for various disease states, such as cardiovascular disease, infectious disease, neurodegenerative disease; molecular virology; host-parasite interactions; molecular immunology; metabolic regulation; and molecular and cellular biology.

Objective

The objective of this course is to introduce the student to modern methods and concepts of biomedical research.

Evaluation

Evaluation of the student will be based on the mastery of a set of research techniques, the utilization of these to investigate a research problem and the collection, evaluation, and interpretation of these experimental findings.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 4 at USF-MS

BMS 7262  Molecular Basis of Metabolic Regulation

Faculty

Emphasis will be on mammalian systems and alterations of metabolic control in diseases states. The course will consist of conferences based on current literature. Topics include: mechanism of hormone action, transcriptional control, translational control, protein modification, and allosteric regulation.

Objective

The objective of the course is to acquaint the student with current concepts regarding the control of metabolism at the molecular level.

Evaluation

Evaluation of the student will be based on the quality of the literature research of assigned topics, and the organization of the formal seminar.

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
BMS 7303  Clinical Microbiology and Immunology
Drs. Klein, Sandin, Widen, Burdash, and Lopez-Cepero

Introduction: This course will focus on an experiential approach to issues in clinical microbiology and immunology of relevance to the practicing physician. Laboratory issues will be covered that impact on the clinician in terms rapid diagnosis, assessment of patient progress, and determination of treatment efficacy for diseases including those of infectious as well as immunological etiology. The role of the physician and the clinical laboratory in terms of addressing the impact of agents of bioterrorism in terms of individual patients and public health will also be addressed. Assessment of understanding will be done by active participation as well as by written reports.

Objectives

1. Provide opportunities for the student to go to immunology laboratories to learn about and participate in techniques involved with:
   - Organ transplantation
   - Determination of genetic risk factors for cancer
   - Early diagnosis of cancer
   - Assessment of efficacy of cancer chemotherapy

2. Provide opportunities for the student to go to bacteriology and virology laboratories to learn about and participate in techniques involved with:
   - Diagnosis of bacterial disease, fungal, and viral infections
   - Determination of treatment options for management of bacterial, fungal and viral infections
   - Assessment of efficacy of treatment during management of bacterial, fungal, and viral infections

3. Read and present literature on the interaction of the physician with the clinical laboratory in terms of diagnosis, treatment, and public health

Evaluation

1. Participation in the laboratory and small groups
2. Preparation of a written paper related to the course

This elective MUST be supplemented with another half time elective.

Availability: 12 at USF-MS

BMS 7303  Clinical Microbiology and Immunology
Drs. Klein, Sandin, Widen, Burdash, and Lopez-Cepero

Introduction: This course will focus on an experiential approach to issues in clinical microbiology and immunology of relevance to the practicing physician. Laboratory issues will be covered that impact on the clinician in terms rapid diagnosis, assessment of patient progress, and determination of treatment efficacy for diseases including those of infectious as well as immunological etiology. The role of the physician and the clinical laboratory in terms of addressing the impact of agents of bioterrorism in terms of individual patients and public health will also be addressed. Assessment of understanding will be done by active participation as well as by written reports.

Objectives

1. Provide opportunities for the student to go to immunology laboratories to learn about and participate in techniques involved with:
   - Organ transplantation
   - Determination of genetic risk factors for cancer
   - Early diagnosis of cancer
   - Assessment of efficacy of cancer chemotherapy

2. Provide opportunities for the student to go to bacteriology and virology laboratories to learn about and participate in techniques involved with:
   - Diagnosis of bacterial disease, fungal, and viral infections
   - Determination of treatment options for management of bacterial, fungal and viral infections
   - Assessment of efficacy of treatment during management of bacterial, fungal, and viral infections

3. Read and present literature on the interaction of the physician with the clinical laboratory in terms of diagnosis, treatment, and public health

Evaluation

1. Participation in the laboratory and small groups
2. Preparation of a written paper related to the course

This elective MUST be supplemented with another half time elective.

Availability: 3 at USF-MS

Length: 4 weeks  Time(s): Half Time  Hours: 20 per week

Months: 1 o 2 o 3 x 4 x 5 x 6 x 7 x 8 x 9 x 10 x 11 o

Availability: 3 at USF-MS

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

Hours: The approximate hours per week the student will be involved with this elective.

Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
Introduction: This course will focus on a review of the major immune and infectious diseases that may be encountered by the general physician. Equal time will be spent on immune and infectious diseases, and the interactions of immune responses on infectious processes will also be a focus. The course will cover the basis of these diseases, mechanisms of pathogenesis, and treatment. Infections classified as related to bioterrorism will also be addressed. Daily learning experiences will consist of a combination of lectures, discussions and laboratory experiences. Assessment of understanding will be done by active participation as well as by written reports.

Objectives
1. Review the principal basis of immunological diseases including autoimmunity, cancer, hypersensitivity, and transplantation
2. Review the mechanisms of pathogenesis of infectious diseases including those of viral, bacterial, and fungal origins
3. Convey the importance of recognition and identification of infectious agents related to bioterrorism
4. Understand the interaction of immunity and pathogenesis of infectious disease
5. Understand confounding factors of immune and infectious diseases including the role of aging, drugs of abuse, and stress
6. Provide a forum for active discussions related to review and critique of current literature related to immunity and infectious diseases
7. Provide laboratory experiences to clarify and supplement understanding of immunology and infectious diseases

Evaluation
1. Participation quality in small groups
2. Presentation of current literature in a journal club style
3. Preparation of a written paper on a topic related to the course
4. Delivery of an oral presentation related to the written paper

This elective MUST be supplemented with another half time elective.

Length: 4 weeks Time(s) Half Time Hours 20 per week

Months: 1 o 2 o 3 x 4 x 5 x 6 x 7 x 8 x 9 x 10 x 11 o

Availability: 3 at USF-MS
MEL 9999I  Independent Study in Molecular Medicine
Faculty

The overall objective of Independent Study in Molecular Medicine is to provide a student with a fundamental understanding of biological and genetic principles basic to pathophysiological processes; to gain understanding of the molecular mechanisms that underlie the cellular aberrations in a clinical disorder; and to understand, synthesize, and incorporate the fundamental principles learned as they apply to medical research. The student will gain from this course a broad and thorough understanding of the principles that underlie a major clinical condition that perturbs the functioning of normal cells, tissues and organs and that may influence development. The knowledge gained from this course is intended to aid the student in developing clinically relevant research questions, and to understand the process by which basic research translates to the design of specific molecular tools for disease diagnosis, treatment, prognosis, and prevention. A student may choose a course of study in any one of the following areas: Metabolic disorders, Immunologic and Infection disorders, Neurologic disorders, Cancer, or Organ System based disorders.

Length: 4 weeks      Time(s): Full Time      Hours: variable

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: No Limit at USF-MS
MOLECULAR PHARMACOLOGY and PHYSIOLOGY

PHARMACOLOGY AND MOLECULAR THERAPEUTICS

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<tr>
<th>Course Code</th>
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<td>Research in Pharmacology</td>
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<td>MEL 9999D</td>
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PHYSIOLOGY

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<td>BMS 7560</td>
<td>Research in Physiology</td>
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<td>MEL 9999H</td>
<td>Independent Study in Physiology</td>
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BMS 7464  Research in Pharmacology

Faculty

Objective
The primary objective of this course is to introduce the student to the research environment. The focus is directed to current research techniques, including methods of data acquisition and analysis, and critical reading of the literature pertinent to the research problem. The student will work as part of the research team on one of the projects currently underway in the department as determined by the student's interest and the concurrence of the faculty. Enrollment, dates, and duration of the course are by arrangement.

Approval, dates, and duration of course must be arranged with a faculty mentor prior to registering.

Evaluation
Evaluation will be based on a short paper or oral exam to be determined by arrangement with the instructor.

Length: 4 to 12 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: No Limit at USF-MS

MEL 9999D  Independent Study in Pharmacology and Therapeutics

Faculty

This elective is used to schedule individualized, in-depth studies of a specified area of Pharmacology.

Approval of a faculty mentor must be obtained prior to registering for this course.

Evaluation
A written examination and/or paper is required.

Length: The length of time a student will be in the elective; 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/Registrar/new/course_key.htm.
**BMS 7560  Research in Physiology**

Faculty

**Objective**

The primary objective of this course is to introduce the student to the research environment. The student will learn current research techniques and the methods of data collection and reduction. The student will be expected to take an active part in the problem solving aspects of research including in depth reading of the literature pertinent to the research project and participation in conferences and seminars. The student will work as part of the research team on one of the projects current in the department.

Approval, dates, and duration of course must be arranged with a faculty mentor prior to registering.

**Evaluation**

A written report will be required.

**MEL 9999H  Independent Study in Physiology**

Faculty

**Objective**

This elective is used to schedule individualized, in-depth studies of a specified area of Physiology. Approval of a faculty mentor must be obtained prior to registering for this course.

**Evaluation**

A written examination is required.
**NEUROLOGY**

**MEL 7320N  Externship in Neurology**

Length: 4 weeks  
Time(s): Full Time  
Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 x 9 x 10 x 11 x

Availability: No Limit at EXT

**MEL 8359  Intro to Physical Med and Rehabilitation**

Dr. Scott and Faculty

This elective will provide the medical student with a broad and comprehensive educational experience in Physical Medicine and Rehabilitation. There will be instruction in the evaluation and rehabilitation of a wide range of medical disability conditions including musculoskeletal problems, head injuries, spinal cord injuries, strokes, amputees, chronic pain, geriatrics, and cardiac rehabilitation. In addition, students will be exposed to physical, occupational, speech, audiology, vocational, recreational, and kinesiological therapies. There will be instruction in functional assessments of all types of physical disabilities and in the diagnostic use of electromyography for muscle and neurological disorders. Overall, the educational experience will offer a practical approach to those patients with disabilities. This will benefit all medical students regardless of their primary area of interest. Visitation at other rehabilitation centers is available.

**Evaluation**

Educational objectives, a learning booklet, and expected learning outcomes with a bibliography will be provided. Evaluation will be based on attendance and demonstration that the educational objectives have been met. An honors grade requires the student to do a case presentation at a weekly conference.

Students will rotate through the Tampa VA Hospital

Length: 4 weeks  
Time(s): Full Time  
Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at T-VAH

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
MEL 8671 Senior Elective in Inpatient General Neurology
Drs. Rossitza Chichkova and Eugeniu Muntean

Fourth-year medical students spend a four-week elective in the Tampa General Hospital and/or the James A. Haley Veteran Affairs Hospital. The elective is under the supervision of a Neurology attending. Students become an integral part of a team that cares of patients with various neurological diseases. There are opportunities for participating in research projects.

Pre-requisite
Completion of core, third year Neurology (BCC 7154) and Internal Medicine (BCC 7144) rotations.

Objectives
1. Master skills in obtaining neurological history and examination
2. Actively participate in discussing differential diagnosis
3. Learn to create a comprehensive management plan
4. Become familiar with Neurology beyond the core requirements
5. Gain more independence in dealing with neurological patients
6. Develop readiness for transition into residency
7. Learn to perform lumbar punctures
8. Learn basics of EEG and EMG/NCS

Learning Outcomes
Students will see the patients at the James A Haley VA Hospital and Tampa General Hospital. Upon completion of this elective, students should understand the principles of diagnosis and management of general neurological disorders.

Evaluation
Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations completed by all residents and faculty who work with them.

Length: 4 weeks Time(s): Full Time Hours: 40 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at TGH; 1 at T-VAH

MEL 8672 Senior Elective in Neurocritical Care
Drs. Reza Behrouz and David Decker

Students must contact Dr. Behrouz at (813) 259-8577 to set up the elective. Interested visiting students should contact Dr. Behrouz only AFTER their application has been approved by the Registrar’s Office.

Fourth-year medical students may spend a four-week elective in the Tampa General Hospital Neurosciences Intensive Care Unit (Neuro-ICU). The elective is designed as a preceptorship under the supervision of a Neurocritical Care attending. Students will become an integral part of a team that specializes in the care of critically-ill neurological patients. Skills will be stressed in clinical and neurological examination, invasive and noninvasive neurological monitoring, and emerging neurological therapeutics. Opportunity exists to learn technical skills related to critical care of patients with post-intervention ischemic stroke, intracerebral and

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
subarachnoid hemorrhage, cerebral edema and elevated intracranial pressure, status epilepticus and neuromuscular crises (Guillain-Barre syndrome and myasthenia gravis). Opportunity in participating in research projects is available.

Pre-requisite
Completion of core, third year Neurology (BCC 7154) and Internal Medicine (BCC 7144) rotations. If the student’s medical school does not offer a core Neurology rotation, completion of a Neurology elective prior to application for the Neurocritical Care elective is required.

Students are strongly recommended to complete a critical care medicine (MICU, CCU or Critical Care Anesthesiology) elective or selective rotation prior to start of their Neurocritical Care Elective

Objectives
1. Become familiar with evaluation and management of critically-ill neurological patients
2. Become familiar with neurological complications in the ICU
3. Become familiar with medical complications in the neurological patient
4. Become familiar with various methods of critical care neuro-monitoring
5. Provide opportunity to perform common intensive care procedures

Learning Outcomes
Students will see patients at Tampa General Hospital in the neurointensive care unit. Students will also participate in weekly multi-disciplinary rounds. Upon completion of this elective, students should be able to understand the principles of diagnosis and management of critically-ill patients with neurologic disease.

Evaluation
Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations completed by all residents and faculty who work with them.

Length: 4 weeks     Time(s): Full Time           Hours: 40 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at TGH

MEL 8673 Senior Elective in Epilepsy
Drs. Selim Benbadis, Ali Bozorg, A. Tom Frontera, and S. Parrish Winesett

Fourth-year medical students may spend a four-week elective in the Tampa General Hospital Comprehensive Epilepsy Program, USF clinics at Morsani and the South Tower as well as time at the James A Haley VA Hospital Epilepsy Center of Excellence. The elective is designed as a preceptorship under the supervision of an epilepsy attending. The student will become an integral part of a team that specializes in the care of patients with refractory epilepsy. The students will learn how to obtain a thorough epilepsy history and understand the spectrum of epilepsy syndromes. The students will also round with the attendings (and fellows when applicable) on the patients in the video-EEG monitoring unit daily. They will also have the opportunity to understand the basics of electroencephalography. Lastly, they will have several opportunities throughout the month to participate in Wada testing, which is used for language and memory lateralization. Attendance at weekly epilepsy surgery conference is mandatory. Interested students may also spend a few days at the pediatric epilepsy clinic and video-EEG monitoring unit at All Children’s Hospital based on availability.
Pre-requisite
Completion of core, third year Neurology (BCC 7154) and Internal Medicine (BCC 7144) rotations. If the student’s medical school does not offer a core Neurology rotation, completion of a Neurology elective prior to application for the Epilepsy elective is required.

Objectives
1. Students should understand the differential diagnosis of epilepsy
2. Students should understand the difference between the different types of seizures and epilepsy syndromes and their implications
3. Students should know the basics of video-EEG monitoring including its role and limitations
4. Students will become familiar with identifying refractory epilepsy patients and will familiarize themselves with the non-medical treatments of epilepsy
5. Students will learn the presurgical approach to patients with refractory focal epilepsies

Learning Outcomes
Students will see the patients at TGH and the Morsani Center. Upon completion of this elective, students should understand the principles of diagnosis and management of patients who have epilepsy.

Evaluation
Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations completed by all residents and faculty who work with them.

Length: 4 weeks     Time(s): Full Time           Hours: 40 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 2 at TGH

MEL 8674 Senior Elective in Headache and Pain Medicine
Drs. Maria-Carmen Wilson, A. Carvel Gipson, and Headache and Pain Fellows

Fourth-year medical students may spend a four-week elective participating in the Headache and Pain Clinics at Tampa General Hospital (Rehabilitation Bldg), Tampa General Hospital Headache and Pain Medicine Consultation Service, USF South Tampa Medical Clinics and the USF Morsani Clinics. The elective is designed as a preceptorship under the supervision of Neurologists and Headache and Pain Specialists. The student will become an integral part of a team that specializes in the Headache and Pain Medicine. Skills will be stressed in the ability to obtain a comprehensive medical and neurological history as well as a detailed examination. The student will observe a variety of interventional procedures such as botulinum toxin injections, trigger point injections and peripheral nerve blockade. The student will have the opportunity to learn acute treatment of a variety of headaches by attending the Headache Infusion Suite. Finally, the student will get acquainted with the interdisciplinary therapeutic Headache and Pain Medicine Team including but not limited to Neuromuscular Rehabilitation/Biofeedback, Physical Therapy, Occupational Therapy, Psychological Intervention. Opportunity in participating in research projects is available. Participation in Didactic Lectures and Journal Clubs is mandatory.

Pre-requisite
Completion of core, third year Neurology (BCC 7154) and Internal Medicine (BCC 7144) rotations.

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
Objectives

1. Manage the chronicity of headaches and the development of migraines
2. Obtain a comprehensive medical and neurological history as well as a detailed examination
3. Differentiate a variety of elements implicated in headache management
4. Understand the role of neurotoxins, trigger point injections, and peripheral nerve blockade in the management of migraines and other headaches
5. Understand the role of Neuromuscular Re-education/Biofeedback, physical therapy, occupational therapy, and psychological intervention plays in the treatment of headache and migraine

Learning Outcomes

Students will see patients at the Headache and Pain Clinics at the Tampa General Hospital Rehabilitation Building and the USF Morsani Clinics. Upon completion of this elective, students should understand the principles of diagnosis and management of patients with the diagnosis of headaches and migraines.

Evaluation

Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations completed by all residents and faculty who work with them.

Length: 4 weeks       Time(s): Full Time       Hours: 40 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at TGH; 1 at USF-MS

MEL 8675 Senior Elective in Movement Disorders

Drs. Theresa Zesiewicz, Robert Hauser, and Juan Sanchez-Ramos

All students enrolled in this elective must email Dr. Zesiewicz at tzesiewi@health.usf.edu at the start of the academic year.

This elective will provide instruction in the diagnosis and treatment of movement disorders. Students will rotate with each of the movement disorders physicians (Dr. Zesiewicz, Sanchez-Ramos, and Hauser) one day per week. Students will also observe a movement disorder neurosurgeon, either in the OR or in clinic, one day per week (Drs. Smith and Vale). The diagnosis, treatment, and pathophysiology of movement disorders will be emphasized. Movement disorders will consist of Parkinson's disease, Essential tremor, Dystonia, Ataxia, Tic disorders, Huntington's Disease, and others. Students will have the opportunity to participate in evaluation and management of patients with a variety of movement disorders including Parkinson's disease, Atypical Parkinsonisms, Essential tremor, dystonia, and chorea. Students may also have the opportunity to observe clinical trial visits and injections of botulinum toxin for movement disorders.

Objectives

1. Diagnose movement disorders, including Parkinson's disease, Essential Tremor, Dystonia, Ataxia, and Huntington's disease
2. Experience in treatment of movement disorders, including observing botulinum toxin injection
3. Observe with the movement disorders neurosurgeons
4. Provide opportunity for participation in clinical or basic science research in movement disorders

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

Hours: The approximate hours per week the student will be involved with this elective.

Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
Learning Outcomes

Students see patients at the North and South Campus Movement Disorder centers and on the consultative services at Tampa General Hospital. Upon completion of this elective, students should understand the principles of diagnosis and management of patients who have movement disorders.

Evaluation

Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations completed by all residents and faculty who work with them.

Length: 4 weeks      Time(s): Full Time      Hours: 40 per week

Months: 1 o 2 o 3 o 4 x 5 x 6 x 7 x 8 x 9 x 10 x 11 x

Availability: 1 at USF-MC

MEL 8677   Outpatient Neurology

Drs. Theresa Zesiewicz, Charles Brock, Angel Cruz, Robert Hauser, A. Carvel Gipson, Leon Prockop, Juan Sanchez-Ramos, Maria-Carmen Wilson, Stanley Kroczyn, Rossitza Chichkova, Selim Benbadis, Lara Katzlin, Reza Behrouz, Michael Sloan, and

With the course director's assistance, the student will construct a calendar of outpatient experiences which can include any or all of the following Clinics: Alzheimer's Disease; brain tumor; cancer pain; epilepsy; general neurology; headache and chronic pain; independent neurological evaluation; neuro-muscular; multiple sclerosis, Parkinson's Disease; and stroke. Selected reading will be advised. The course is designed to assist students who want a career in primary care or neurology as they prepare for outpatient delivery of care. The department may assign students to USF Clinics, the James A. Haley or Bay Pines Veteran's Hospitals, Moffitt Cancer Center, Harbourside Medical Tower, or Tampa General Hospital to complete this elective.

Length: 4 weeks      Time(s): Full Time      Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at USF-MS; 1 at CCF

MEL 8678   Vascular Neurology

Drs. Michael Sloan, Reza Behrouz, and David Decker

Interested students must meet with Dr. Sloan to plan the elective. This should be done prior to the start of the academic year and preferably six months before the start of the elective.

This elective is designed to fourth-year students more extensive exposure to the practice of Vascular Neurology. Under the supervision of clinical faculty, students will have the opportunity to evaluate patients with known or suspected stroke syndromes in hospital and ambulatory clinical environments. Students will round with the Stroke Team in the hospital on the Vascular Neurology Service and see patients in the outpatient stroke clinics under the supervision of a Vascular Neurology Attending. The elective will provide students with a better understanding of the dimension of Stroke, which is a leading cause of disability and the third leading cause of death in the United States.
Objectives

1. Introduce the heterogenous nature of stroke syndromes and be able to differentiate them from non-stroke mimics
2. Apply principles of evidence-based medicine to cerebrovascular diagnosis and management
3. Evaluate the proper use of laboratory and neuroimaging studies in cerebrovascular diagnosis
4. Appreciate the diagnostic and management algorithms in acute stroke intervention
5. Understand the principles of management of acute ischemic stroke
6. Understand the principles of management of acute hemorrhagic stroke
7. Identify risk factors and treatment strategies for primary and secondary prevention of stroke

Learning Outcomes

Students will see patients at Tampa General Hospital and the South Tampa Center for Advanced Health Care. Upon completion of this elective, students should understand the principles of diagnosis and management of patients who have vascular neurological disorders.

Evaluation

Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations completed by all residents and faculty who work with them.

Length: 4 weeks     Time(s): Full Time           Hours: 60 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at TGH

MEL 8690  Research in Neurology

Drs. Charles Brock, Angell Cruz, Robert Hauser, Jan Korthals, Leon Prockop, Juan Sanchez-Ramos, Maria-Carmen Wilson, Michael Hoffmann, Theresa Zesiewicz, Selim Benbadis, Stanley Krolichtyk, and Michael Sloan

This elective course is designed for the student who is interested in furthering his/her neurological knowledge by concentrating on an area of clinical research with the expectation of reporting the results in a paper. The student will work directly with one or more departmental faculty members in researching the literature, collecting clinical data and in approaching a particular subject. Research can be conducted in a number of areas including: Alzheimer's Disease, epilepsy and EEG, cancer and chronic pain, neuro-oncology, neurotoxicology, multiple sclerosis, Parkinson's Disease, neuro-muscular disease, and stroke. The elective is offered with approval of the chairman.

Evaluation

Grades will be determined by faculty evaluation and resulting paper.

Length: 4 weeks     Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 2 at USF-MS
MEL 9999N  Independent Study in Neurology

Faculty

This elective course will benefit the student who wants to develop a knowledge and skills base in addition to that provided by BCC 7154. The student will select an area(s) of neurology sub-specialty. Selected reading, patient contact, and clinical investigation will occur under the direct supervision of a faculty mentor. The areas available are: multiple sclerosis, Alzheimer's Disease, neuro-muscular disease, neuro-oncology, and neurotoxicology. In most cases student involvement in therapeutic drug trials is possible.

Length: 4 weeks    Time(s): Full Time    Hours: variable

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: No Limit at USF-MS

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Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

Hours: The approximate hours per week the student will be involved with this elective.

Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
**NEUROSURGERY**

**BCC 8122**  Surgical Aspects of Neurological Disease
**MEL 7320V**  Externship in Neurosurgery
**MEL 7881**  Neurosurgical Research
**MEL 9999V**  Independent Study in Neurosurgery

**BCC 8122  Surgical Aspects of Neurological Disease**

Drs. Smith, Freeman, Vale, van Loveren, Greenberg, Gaskill, Marlin Uribe, and Youssef

This will be a clinical experience in which the student will work under the supervision of the Residents and Fellows in Neurological Surgery, and the attending neurosurgeons at the College of Medicine. It will be based at Tampa General Hospital. There will be a concentrated experience in the diagnosis and management of neurosurgical illness and active participation in the radiological, clinical, and teaching rounds.

On the first day of the rotation, students are to report to the Chief Neurosurgery Resident for morning rounds at 6:30 a.m., Neuroscience ICU 5th Floor at Tampa General Hospital.

Students will participate in daily ward rounds and will be integrated into the ward management team. Participating students will be required to submit neurological histories and physicals and to follow their patients from the time of admission through surgery into the post-operative period and discharge. At least one oral presentation will be expected during the rotation. Student participation in the operating room will be geared toward individual talents at the discretion of the operating surgeon.

**Evaluation**

At the conclusion of the rotation, the student should be quite familiar with and have a basic appreciation of the scope of neurosurgical practice and the approach to neurological emergencies. Students will be evaluated by a consensus of the faculty and fellows based on their ward performance, conference performance, and the quality of their histories and physicals.

Length: 4 weeks          Time(s): Full Time           Hours: 40-50 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 6 at TGH

**MEL 7320V  Externship in Neurosurgery**

Length: 4 weeks          Time(s): Full Time: AM/PM     Hours: 22-44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 x 9 x 10 x 11x

Availability: No Limit at EXT

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

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MEL 7881  Neurosurgical Research
Drs. Sanberg, Freeman, Brem, vanLoveren, Borlongen, and Johnson

The student will be exposed to a variety of techniques currently used in neuroscience research including anatomic, behavioral, histologic, imaging, and physiologic assessment in laboratories currently emphasizing research in neural tissue transplantation, molecular biology, angiogenesis in brain tumors, and spinal biomechanics. Short clinical research projects can also be arranged if planned well in advance.

This rotation is considered an introductory step for students who may be planning an academic course and can be tailored to the individual student's interests and needs.

Evaluation
Evaluation will be based on faculty assessment of the student's research productivity.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 3 at USF-MS

MEL 9999V  Independent Study in Neurosurgery
Dr. Fernando Vale

Length: 4 weeks          Time(s): Full Time           Hours: Variable
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: No limit at USF-MS

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
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OBSTETRICS and GYNECOLOGY

MEL 7320O  Externship in Ob/Gyn
Dr. James Mayer

This elective provides the student with the opportunity to gain further training in "off-campus" settings in the form of approved extramural electives.

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 x 9 x 10 x 11 x

Availability: No Limit at EXT

MEL 7411  Senior Internship Elective in Ob/Gyn
Dr. James Mayer

This elective provides advanced clinical experience in the medical and surgical aspects of obstetrics and gynecology. Students will take an active role in all phases of patient evaluation and management, both inpatient and outpatient. Pertinent topics will be assigned for presentation and discussion. This course will be offered at Tampa General Hospital/Genesis/USF Medical Clinic.

Evaluation
The assigned faculty member and resident will be responsible for evaluating the student and providing the evaluation to the elective director.

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 x 7 x 8 x 9 o 10 o 11 o

Availability: 2 at TGH

MEL 8416  Rural Women’s Health (AHEC)
Dr. James Mayer and Faculty and Staff of Manatee County Rural Health Services (Bradenton), DeSoto Memorial Hospital (Arcadia), or other rural sites.

This elective is designed to familiarize the student with the practice of obstetrics and gynecology in a rural, medically underserved community. All students will be under the supervision of a precepting obstetrician/gynecologist and will gain a better understanding of rural women’s health and the tremendous health needs of the rural and/or migrant population. Experience in gynecology as well as managing labor and

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Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
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Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
conducting deliveries will be obtained. Students will also have the opportunity to work with nurse midwives and nurse practitioners. Gulfcoast South AHEC will provide housing and a mileage stipend for students in Bradenton or Arcadia.

Evaluation
Evaluation will be done on an individual basis by the clinical preceptors and will be based on patient interaction, presentations, medical plans, and documentation. The assigned faculty member will be responsible for evaluating the student and providing the evaluation to the the elective director.

This elective must be scheduled through the Registrar’s Office. The Department of Obstetrics and Gynecology and Gulfcoast South AHEC will make final arrangements.

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week
Months: 1  o  2  o  3  o  4  o  5  o  6  x  7  x  8  x  9  o  10  o  11  o
Availability: 2 at CF

MEL 8417  Primary Care Community-Based Women’s Health (AHEC)
Dr. James Mayer

This elective is designed to familiarize the student with the practice of obstetrics and gynecology in an inner city, underserved population. All students will be under the supervision of a departmental faculty member and will gain a better understanding of women’s health care in a community-based clinic and the tremendous health needs of a medically underserved population. Experience in gynecology as well as in managing low and high risk pregnancies will be obtained.

Evaluation
Evaluation will be done on an individual basis by the clinical preceptors at Genesis Clinic and will be based on patient interaction, presentations, medical plans, and documentation. The assigned faculty member will be responsible for evaluating the student and providing the evaluation to the the elective director.

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week
Months: 1  o  2  o  3  o  4  o  5  o  6  x  7  x  8  x  9  o  10  o  11  o
Availability: 2 at CF

MEL 8420  Ob/Gyn Subspecialty Elective
Dr. James Mayer

This elective is designed to introduce senior students to the OB/GYN sub-specialty chosen by the student. The student will be under the supervision of the Division Director. The student will work one on one with the sub-specialist, attending or fellow. This individualized exposure to the sub-specialty should provide a clinical, procedural, and operative experience to that sub-specialty.
Objectives

1. Provide an introduction and appreciation to an OB/GYN sub-specialty
2. Develop student independent interest and research in the sub-specialty
3. Provide the student with a clinical interactive opportunity with a sub-specialty attending

Evaluation

The division director of each sub-specialty will be responsible for evaluating the student and providing the evaluation to the elective director.

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**Length**: 4 weeks  
**Time(s)**: Full Time  
**Hours**: 44 per week  

**Months**: 1 o 2 o 3 o 4 o 5 o 6 x 7 x 8 x 9 o 10 o 11 o  

**Availability**: 1 at TGH; 1 at USFMC

**MEL 9999O Independent Study in Obstetrics and Gynecology**

Dr. James Mayer and Faculty Preceptor

This elective is used to schedule individually tailored and approved activities not covered by other elective courses, such as research and special programs of study in individual interest areas.

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**Length**: 4 weeks  
**Time(s)**: Full Time  
**Hours**: variable  

**Months**: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o  

**Availability**: No Limit at USF-MS
## OPHTHALMOLOGY

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### MEL 7320E  Externship in Ophthalmology
- **Length:** 4 weeks
- **Time(s):** Full Time
- **Hours:** 44 per week
- **Months:** 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 x 9 x 10 x 11 x
- **Availability:** No Limit at EXT

### MEL 7501  Medical Ophthalmology
- **Dr. Lisa Gamell and departmental faculty**
- This course will consist of ophthalmic signs and symptoms of systemic medical disease presented through lectures and patient examination. The course includes participation in departmental referral teaching clinics as well as observation of ophthalmic surgery. The course is oriented to those students who are primarily interested in the specialties of medicine, pediatrics, neurology, and ophthalmology. On the first day of the rotation, report to the USF Eye Institute, Stacy Parker Deraps.
- **Length:** 4 weeks
- **Time(s):** Full Time
- **Hours:** 44 per week
- **Months:** 1 x 2 x 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
- **Availability:** 2 at USF-MS

### MEL 7503  Pediatric Ophthalmology
- **Dr. Linda Nakanishi**
- This course is designed for students interested in ophthalmology as a career. The student will participate in the pediatric ophthalmology service. The course includes participation in pediatric ophthalmology clinics and observation of surgeries. Attendance at departmental conferences will be expected and independent reading and investigation is encouraged. On the first day of the rotation, report to the USF Eye Institute, Stacy Parker Deraps.
- **Length:** 4 weeks
- **Time(s):** Full Time
- **Hours:** 40 per week
- **Months:** 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
- **Availability:** 1 at USF-MS

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
MEL 7506  Cornea/External Disease
Drs. Craig Berger and Lewis Groden

This course is designed for students interested in ophthalmology as a career. The student will participate in the cornea/external disease service. The course includes participation in cornea clinics and observation of corneal surgery. Clinical and laboratory methods used in the diagnosis and treatment of external diseases of the eye will be presented. Attendance at departmental conferences will be expected, and independent reading and investigation is encouraged. On the first day of the rotation, report to the USF Eye Institute, Stacy Parker Deraps.

Length: 4 weeks          Time(s): Full Time          Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at USF-MS

MEL 7507  Retinal Elective
Drs. Peter Reed Pavan and Brian Madow

The student will evaluate patients with diabetic retinopathy, hypertensive retinopathy, senile macular degeneration, and retinal detachments at the USF Eye Institute using direct and indirect ophthalmoscopy and slit lamp examination of the fundus. The student will learn the interpretation of fundus fluorescein angiography and ultrasonography. He/She will participate in argon and krypton laser photocoagulation as well as assist on scleral buckles and vitrectomies. For those interested in ophthalmology as a career, this course is an opportunity to learn the most advanced diagnostic and therapeutic techniques used in eye care today. Those interested in family practice, internal medicine, geriatrics, and endocrinology will see the retinal pathology most often encountered in their future specialty and learn the resources that are available for evaluation and treatment.

Evaluation will be determined by daily performance observed during the 4-week elective period. On the first day of the rotation, report to the USF Eye Institute, Stacy Parker Deraps.

Length: 4 weeks          Time(s): Full Time          Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at USF-MS

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Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
MEL 7509  Glaucoma
Drs. David Richards, Christine Callahan, and Lisa Gamell

This course is designed for students interested in ophthalmology as a career. The student will participate in clinics on the glaucoma service. The course includes participation in glaucoma clinics and observation of glaucoma surgery. Clinical methods used in the diagnosis and treatment of glaucoma will be presented. Attendance at departmental conferences will be expected and independent reading and investigation is encouraged. On the first day of the rotation, report to the USF Eye Institute, Stacy Parker Deraps.

Length: 4 weeks   Time(s): Full Time   Hours: 40 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at USF-MS

MEL 9999E  Independent Study in Ophthalmology
Dr. David Richards and departmental faculty

This course is designed for students interested in ophthalmology research. An interview with Dr. David Richards is required at least 30 days in advance of the start of the rotation to determine if the student will be accepted. The student will work directly with a faculty member doing research in ophthalmology. Independent reading and research will be required. The number of slots per year will be limited. On the first day of the rotation, report to the USF Eye Institute, Louise Switzer.

Length: 4 weeks   Time(s): Full Time   Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: No Limit at USF-MS

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
ORTHOPAEDICS

MEL 7320U  Externship in Orthopaedic Surgery
MEL 7823  Orthopaedic Elective
MEL 9999U  Independent Study in Orthopaedic Surgery

MEL 7320U  Externship in Orthopaedics

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 x 11 x

Availability: No Limit at EXT; 1 at CCF

MEL 7823  Orthopaedic Elective

Dr. G. Douglas Letson, Dr. David Leffers, and Orthopaedic Faculty

This elective will give prospective orthopaedic residents exposure with the Program Director, Dr. G. Douglas Letson, and the Department Chair, Dr. David Leffers. Students will also have the opportunity to work with the faculty and residents of the Department of Orthopaedics & Sports Medicine. Students on this rotation will experience the clinical and surgical treatment of benign and malignant disease, sports medicine injuries and trauma of the musculoskeletal system. Students will spend one week at the Moffitt Cancer Center-Sarcoma Department, one week at the Morsani Center for Advanced Healthcare-Sports Medicine Clinic, one week at Tampa General Hospital-Orthopaedic Trauma, and one week at the James A. Haley Veterans Administration-General Orthopaedics.

Objectives

1. Understand the anatomy and physiology of the musculoskeletal system, with emphasis on the upper and lower extremities and joints
2. Accurately diagnose, properly manage, and appropriately consult for common orthopedic conditions and emergencies
3. Understand which x-rays are appropriate to order for each common condition, and how to interpret them.
4. Demonstrate understanding of aspiration and injection techniques
5. Explain the treatment of simple and complex fractures, bone infection and neoplasms
6. Demonstrate understanding of the management of complex soft tissue injuries as they relate to the musculoskeletal system
7. Demonstrate knowledge of the elements of the orthopaedic examination of the injured patient
8. Understand the multidisciplinary role of the Orthopedic Surgeon, Physician Assistant, Nurse, Operating Room Team, Physical Therapist and Athletic Trainers in the provision of coordinated, safe and high quality Orthopaedic care

Learning outcomes

Students will participate in the weekly orthopaedic core lecture series on Friday mornings from 7 am -11 am. Upon completion of this elective, the trainee should understand the principles of diagnosis and management of patients with musculoskeletal trauma, abnormalities or diseases.

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: O = Open, X = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
Evaluation

Evaluations will be done on an individual basis by the clinical preceptors and will be based on patient interaction, case presentations, medical plans, and documentation.

Any interested student MUST get final approval from the Education Coordinator, Ann Joyce, to plan the elective. Ideally, this should be done prior to the start of the academic year but MUST OCCUR AT LEAST 1 MONTH PRIOR TO THE START OF THE ELECTIVE. There are additional compliance forms from UCH and Moffitt that the student MUST complete before their rotation.

Length: 4 weeks  Time: Full Time  Hours: 40 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 4 at MCC/TGH/TVAH/MCAH

**MEL 9999U  Independent Study in Orthopaedics**

Faculty

The purpose of this elective is to provide students the flexibility of pursuing creative scholarly projects/research under the direct supervision of a mentoring faculty member. Prior to scheduling this course, students must meet with their preceptor in order to identify and define their independent study. It is expected that clear goals and objectives will be established in advance of registering for this course. After determining a course of study, the student must obtain signatures from both their faculty preceptor and the Education Coordinator, Ann Joyce. Assessment will be based on attainment of goals and objectives set at the beginning of the project by the faculty member and student.

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 s 9 s 10 s 11 x

Availability: No Limit at USF-MS

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
OTOLARYNGOLOGY

MEL 7320T  Externship - Otolaryngology
MEL 7816  Otolaryngology/Head and Neck Surgery
MEL 9999T  Independent Study - Otolaryngology

MEL 7320T  Externship in Otolaryngology

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 x 10 x 11 x
Availability: No limit at EXT

MEL 7816  Otolaryngology/Head and Neck Surgery

Faculty

This clinical preceptorship is designed to provide an in-depth experience in the practice of otolaryngology. Students will participate in the preoperative study of patients in private offices and will follow them upon their admission to the hospital. They will assist at the operative procedures on selected patients and will be expected to follow their postoperative course. Opportunity will also be afforded to carry out long-range observation of postoperative results in patients who have previously been treated for otolaryngological problems.

By the completion of the elective, all students will be able to demonstrate proficiency in the otolaryngological head and neck exam and will have obtained experience and/or understanding of a variety of ear, nose, and throat disorders such as acute respiratory obstruction, hearing loss, dizziness, sinusitis, external otitis, otitis media, modern diagnosis and management of head and neck cancer, maxillofacial trauma, epistaxis, hoarseness, and dysphasia.

The objective is to provide greater exposure to the field of otolaryngology than what is possible in the basic surgical course, and to give further opportunity for first hand experience in this area for students who are considering ultimate specialization in this field.

Evaluation

The formal evaluation will be prepared by otolaryngology faculty based on the following: fund of medical knowledge, quality of assessment and presentation, clinical judgment as indicated by rationale of didactic and management plans, attitude and rapport with patients and families and subjective elements of interpersonal relationships, motivation, and ability.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 3 at USF-MS

Length:  The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s):  Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours:  The approximate hours per week the student will be involved with this elective.
Months:  Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability:  The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
This course is designed to provide the student interested in otolaryngology as a career an opportunity to carry out an in-depth study of a selected topic in otolaryngology that is of interest to the student. The student will work directly with a faculty member. Assessment will be based on attainment of goals and objectives set at the beginning of the project by the faculty member and student. The student is required to obtain the signature of the faculty mentor prior to registering for the course.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: No Limit at USF-MS
PATHOLOGY and CELL BIOLOGY

ANATOMY

BMS 7187 Advanced Human Anatomy
BMS 7188 Selected Topics in Human Anatomy
MEL 9999A Independent Study in Anatomy

When scheduling Anatomy electives, students must contact Dr. Arslan in advance to secure permission.

Orhan E. Arslan, DVM, PhD
Director of Anatomy
Department of Pathology and Cell Biology
University of South Florida College of Medicine
12901 Bruce B Downs Blvd MDC 2012
Tampa, FL 33612
(813) 974-0636

PATHOLOGY

BMS 7661 Research in Pathology
BMS 7663 Pathologic Anatomy
BMS 7664 Flexible Elective in Pathology
BMS 7665 Blood Bank Sciences
BMS 7666 Clinical Cytopathology
BMS 7667 Elective in Laboratory Medicine
BMS 7668 Forensic Pathology
MEL 7320P Externship in Pathology
MEL 9999P Independent Study in Pathobiology

For all pathology electives, please report by 8:00 AM on the first scheduled day.

HOSPITAL ROOM
MCC Pathology office – 2071J
T-VAH 1D179
HCME Main Entrance
USF-MS MDC 2049 (unless prior arrangements have been made)
TGH B232
FBS Main Entrance

HOSPITAL CONTACT
USF-MS Michelle Lyons (813) 974-0554
TGH Michelle Lyons (813) 974-0554
T-VAH Leah Strickland-Marmol, MD (813) 972-2000 ext. 4566
MCC Adeshir Hakam, MD and Prudence Smith, MD (813) 745-1874
HCME Vernard I. Adams, MD (813) 914-4500
FBS German LeParc, MD (727) 568-1161

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
This course entails supervised regional dissection, discussion of the clinical relevance of the identified structures, participation in gross anatomy laboratory sessions and independent case-based presentations.

Objectives

This course is designed to provide senior students with the opportunity to perform an in-depth study of anatomy in relation to surgical fields and other clinically relevant disciplines such as radiology and emergency medicine. It enables students to master the delicate relationships of anatomical structures through supervised comprehensive dissections. It is expected, that prospective students will be able to correlate structural organization of human body to the interpretation of disease processes. Students will be able to participate in teaching anatomy to junior medical students in an interactive laboratory environment.

Evaluation

Evaluation is based on completion of the assigned dissection and active participation in anatomy laboratory teaching. Minimum of 5 PowerPoint presentations detailing a series of clinical vignettes with complete history, laboratory values, differential diagnosis and discussions are required. These vignettes must emphasize the importance of structural relationships of the affected organs and the anatomic basis of the conditions discussed.

Students should contact Dr. Arslan to receive permission in advance and to insure proper coordination.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 7 at USF-MS

BMS 7188  Selected Topics in Human Anatomy

Dr. Arslan

This is a supervised independent study that requires prospective students to select a topic of study, conduct the necessary research and present their findings. Students are expected to meet with the course director in order to devise a plan of study to meet the required learning objectives. Students are encouraged to utilize both scientific and clinical perspectives to explore selected subjects.

Objectives

This course is designed to provide senior medical students with the opportunity to gain an in-depth knowledge of anatomy and imaging in relation to the selected topics. In this elective, students are expected to utilize current literature and other available research data in the preparation and presentation of their projects. Through this wide array of academic activities, this elective will broaden students' knowledge, strengthen their scientific experience and develop critical thinking essential for life-long learning in the practice of medicine.

Evaluation

Student performance in this course will be evaluated on the basis of timely completion of the assigned educational/scientific projects. Students should be prepared to present their findings in oral or written form.

This elective MUST be supplemented with another half time elective.

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MEL 9999A  Independent Study in Anatomy
Dr. Arslan

This course entails collaborative study to explore innovative ideas which are applicable to basic and clinical sciences.

Objectives
This elective enables prospective students to develop a collaborative independent plan of study based on the anatomical sciences. Students are expected to explore research topics in order to discover or expand on the possible anatomic basis for disease processes that have not yet been fully explored.

Evaluation
The nature of this elective dictates that variable methods of evaluation will be used to periodically assess the viability and applicability of the results obtained from the investigated areas of study. Students should be prepared to present their findings in the form of a PowerPoint presentation.

BMS 7661  Research in Pathology
Faculty

Objectives
The primary objectives of this course are to teach the basic principles of investigative work with emphasis on:

1. Formulation of a specific hypothesis
2. Critical analysis of pertinent literature
3. Development of an appropriate experimental design to test the hypothesis
4. Appreciation of methodological limitations and pitfalls
5. Analysis and interpretation of experimental data

Evaluation
1. Monitoring the student's interest, initiative, and progress through daily interactions and at weekly research conferences
2. Evaluating the student's problem-solving ability and diligence in the performance of realistic research assignments
3. Evaluating the student's judgment and critical approach in assigned library work as well as in analyzing and interpreting experimental data
The student will conduct investigative work in human or experimental pathology under the supervision of the senior investigator. These studies will use primarily morphologic and biochemical techniques with human materials or disease models pertaining to inflammation, degeneration, neoplasia, immunopathology, reproductive biology and pathology, pulmonary pathobiology, or metabolic disorders.

The staff pathologists will evaluate the student using a standardized student evaluation form.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: Specific to each location

Availability:
1 at USF-MS 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
1 at MCC 1 o 2 x 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
1 at T-VAH 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

BMS 7663  Pathologic Anatomy

Faculty

Objectives
The objective of this course is to strengthen the students in areas of anatomic pathology relevant to the practice of clinical medicine. The student will assist in autopsies and examine surgical specimens under supervision at the James A. Haley Veterans Hospital. He/she will be expected to attend all Pathology Conferences. Particular attention will be given to clinico-pathological correlation.

Evaluation
The student will be evaluated by the Staff Pathologists using a standardized Student Evaluation Form.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: Specific to each location

Availability:
1 at T-VAH 1 x 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
1 at MCC 1 x 2 x 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
1 at TGH 1 x 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

BMS 7664  Flexible Elective in Pathology

Faculty

Objective
The objective of this elective is to gain experience regarding the practice of pathology for those students considering a career in pathology. Partial credit for certain specialty boards may be obtained for this elective.

This program is offered at the James A. Haley Veterans Hospital and is flexibly designed to accommodate students wishing to have an elective in a subspecialty of either anatomical or clinical pathology. Students will be

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Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
expected to attend all pathology conferences. Particular attention will be given to clinico-pathological correlation relating to the desired subspecialty.

The student will be expected to become familiar with laboratory testing techniques, but clinico-pathological correlation with current case material will be stressed.

Evaluation
The staff pathologists will evaluate the student using a standardized student evaluation form.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: Specific to each location
Availability:

1 at MCC 1 o 2 x 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
1 at T-VAH 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

**BMS 7665  Blood Bank Sciences**

Faculty

Objective
The objective of this elective is to provide the student with the opportunity to participate in the production and provision of transfusion products. This will enable the student to consider choices in transfusion therapy. Alternatively, major emphasis can be placed on immunological techniques and pretransfusion testing of donors and patients. The training will be supervised by physician-specialists in blood bank sciences.

Evaluation
The student will be evaluated using a standardized student evaluation form.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at FBS

**BMS 7666  Clinical Cytopathology**

Faculty

Objective
The objective of this course is to introduce the students to the principles used by the cytopathologist to recognize normal and abnormal biologic processes (hormonal states, infectious diseases, neoplasia) through the examination of cellular specimens obtained from a variety of body sites. Major emphasis will be placed on clinical-cytologic correlations. Students will review selected cytologic specimens during regular "sign-out" sessions.

Evaluation
The staff cytopathologist will evaluate the student using a standardized student evaluation form.

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
Length: 4 weeks    Time(s): Full Time    Hours: 44 per week

Months: 1 o 2 x 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at MCC

**BMS 7667  Elective in Laboratory Medicine**

**Faculty**

**Objective**

The objective of this elective is to acquaint the student with appropriate technical and interpretative laboratory information important to the practice of medicine. Current economic emphasis places even greater importance on the proper use of the laboratory by the physician.

The student will participate under supervision in several areas of the clinical laboratory of his/her choice such as clinical chemistry, microbiology, hematology, etc. The student will have the opportunity to work closely with the senior and resident staff. Major concentration will be on appropriate interpretative laboratory tests. The student will be expected to attend pathology conferences.

**Evaluation**

The staff pathologists will evaluate the student using a standardized student evaluation form.

Length: 4 weeks    Time(s): Full Time    Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at T-VAH

**BMS 7668  Forensic Pathology**

Dr. Adams and Faculty

**Objectives**

1. Learn to correlate autopsy findings with clinical information and information derived from scene investigations
2. Learn to complete death certificates in a manner acceptable to the Office of Vital Statistics and the World Health Organization
3. Learn anatomy pertinent to the future clinical practice specialty of the student
4. Gain an understanding of the working relationships between forensic pathologists and other professionals, including those in law enforcement, the Office of the State Attorney, the defense bar, the funeral industry, the press, and other medical specialties

**Methods**

1. Assist with autopsies on the bodies of persons dead from suicide, accident, and natural disease by performing dissections and medical chart review under the supervision of staff pathologists
2. Review pertinent medical literature for selected cases
3. Accompany staff during testimony under oath at criminal and civil trials and at depositions.
4. Accompany staff during death scene investigations (evening and night call-out optional)
5. Participate in departmental conferences. These comprise a working case conference thrice weekly, a pending (cause-of-death opinion deferred to further study) case conference weekly, a photo review...
6. Investigate deaths referred for approval of cremation and shipment out-of-state by evaluating death certificates prepared by private physicians and performing telephone follow-up
7. Present an informal talk on a topic of personal interest related to autopsy pathology or anatomy for extra credit

Please check for availability prior to registration.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 x 3 x 4 x 5 o 6 o 7 x 8 o 9 o 10 o 11 o
Availability: 1 at HCME, space permitting

**MEL 7320P  Externship in Pathology**

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 x 10 x 11 x
Availability: No limit at EXT

**MEL 9999P  Independent Study in Pathology**

Faculty

Objective
The objective of this elective is to provide selected students with the opportunity to be exposed to current issues in pathobiology including ovarian cancer biology, advanced cell signaling, and tumor genetics.

Evaluation
Research staff pathologists will evaluate the student using a standardized student evaluation form.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 x 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: No Limit at USF-MS

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
PLEASE NOTE: An identification badge is a requirement before STARTING your 4th year elective rotation at All Children's Hospital and/or Tampa General Hospital.

IDENTIFICATION BADGE INFORMATION:

Tampa General Hospital (TGH): Please check in at the Graduate Medical Education/House Staff office at Tampa General Hospital to obtain a TGH badge. Phone: (813) 844-7412

All Children’s Hospital (ACH): Please contact the Graduate Medical Education Office at All Children’s Hospital to obtain an ACH badge. Phone: (727) 767-4106

MEL 7103 Pediatric Cardiology
MEL 7320K Externship in Pediatrics
MEL 7551 Acting Internship - In-Patient Pediatrics
MEL 7563 Pediatric Nephrology
MEL 7565 Neonatology
MEL 7596 Pediatric Diabetes and Metabolic Disease
MEL 8554 Primary Care - Pediatrics
MEL 8555 A/I – Inpatient Pediatrics - ACH
MEL 8556 A/I - Acquired Immunodeficiency Syndrome - ACH
MEL 8559 Pediatric Rural or Migrant Health (AHEC)
MEL 8566 Pediatric Endocrinology: Clinical
MEL 8567 Pediatric Practice
MEL 8568 Pediatric Hematology - Oncology
MEL 8570 Genetics Elective
MEL 8571 Developmental Pediatrics
MEL 8573 Pediatric Allergy and Clinical Immunology
MEL 8574 Pediatric Pulmonary Disease
MEL 8575 Pediatric Intensive Care Elective
MEL 8576 Pediatric Urgent Care-After Hours Pediatrics
MEL 8577 Neonatology - ACH
MEL 8579 Pediatric Gastroenterology/Nutrition
MEL 8580 Pediatric Emergency Medicine
MEL 8582 Pediatric Infectious Disease
MEL 8585 Laboratory and Basic Immunology
MEL 8587 Sports Medicine
MEL 8588 Honors in Pediatrics
MEL 9999K Independent Study in Pediatrics

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
Principles of pediatric cardiology will be taught with three types of encounters. A board certified Pediatric Cardiologist will supervise patient care during the elective rotation. A Clinical or basic research project is available in echocardiography, tissue culture of cardiac cells, fetal cardiology, ischemia-reperfusion injury, and cardiac transplantation.

Clinical cardiology:
1. Outpatient service - Weekly cardiac clinics at All Children's Hospital in St. Petersburg. Emphasis is placed on physical diagnosis.
2. Inpatient Service - Students will participate in work-up and care of cardiac patients including those admitted for diagnostic cardiac catheterization and in-patient consultation.
3. Conferences - Participation in weekly disposition and educational conferences

Non-invasive cardiac studies: Principles in cardiac electrophysiology and anatomy will be taught using electrocardiography and echocardiography at All Children's Hospital.

Cardiac catheterization and angiography and cardiothoracic surgery: Students may observe procedures. The anatomic and physiologic aspects of congenital and acquired lesions and the methodology utilized to obtain data will be emphasized.

Students will be given the option of observing cardiac surgical procedures.

Contact Number: (727) 767-4429

Length: 4 weeks Time(s): Full Time Hours: 44 per week

Availability: 1 at ACH

MEL 7320K Externship in Pediatrics

Length: 4 weeks Time(s): Full Time Hours: 44 per week

Availability: No Limit at EXT

MEL 7551 Tampa General- Acting Internship: In-patient Pediatrics

The in-patient pediatric elective is presented to give the student an experience in the management of children with problems requiring hospitalization. The student will have the responsibility for the evaluation and treatment of a limited number of pediatric cases. The student will care for these patients as an acting intern in consultation with a senior member of the pediatric house staff. The student will take call with the ward team every fourth night.

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.

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Objectives

1. The student should be able to conduct a history and physical examination in a concise and logical fashion and define the child’s problems.
2. The student should be aware of the diagnostic and therapeutic tools available in pediatrics and be able to use them when appropriate to patient care.
3. The student should develop increasing clinical responsibility and judgment in dealing with hospitalized children and their families.
4. The student should gain familiarity in performing certain basic procedures including venipuncture, lumbar puncture, intravenous line placement, suprapubic puncture, arterial puncture, and bone marrow aspiration.
5. The student should be able to give the indications for admission to the hospital for children with various diagnostic and therapeutic problems.

Contact Number: (813) 259-8752

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at TGH

**MEL 7563  Pediatric Nephrology**

Drs. Campos, Panzarino, Flores, and Perlman

This elective will aid students in their initial approach to pediatric renal disease, understanding the mechanisms of renal injury and evaluation and therapy of renal diseases. Tutorials are offered at least twice a week, covering topics such as proteinuria, hematuria, developmental anomalies, urinary tract infection, acute and chronic glomerulonephritis, nephrotic syndrome, acute and chronic renal failure, lupus erythematosus, hypertension, dialysis, and transplantation. Other topics may also be covered as determined by student preference.

The students will provide inpatient (TGH and /or ACH) and outpatient (USF Clinics) care under close faculty supervision. The student is expected to either provide a discussion of one selected topic or present a patient management case towards the end of the rotation.

TGH Contact Number: (813) 259-8760
ACH Contact Number: (727) 767-4181

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at TGH; 1 at ACH

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
MEL 7565  Neonatology-TGH
Drs. Nelson, Haubner, Ashmeade, Tolosa, Hutchinson and Wadhawan

This elective is for a clinical rotation in the neonatal intensive care unit at Tampa General Hospital.

Objective
The objective of this elective is the development of clinical expertise in the management of disorders of the neonate. The clinical clerk will be an integral part of the neonatal management team with participation in conferences, attending rounds and clinical care under close faculty, and neonatal fellow supervision.

Evaluation
Evaluation of the student’s performance will be made by observing development of his/her clinical expertise and the use of informal quizzes.

Students should report to the NICU on the 4th floor at TGH. Please call the Neonatology Office at (813) 259-8812 at least one week in advance to confirm your rotation. Contact Dr. Ashmeade at (813) 259-8812 at 8 a.m. on the first day of the rotation if you need further information.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at TGH

MEL 7596  Pediatric Diabetes and Metabolic Disease
Dr. Malone

This elective is designed to provide clinical exposure to children with insulin dependent diabetes, PKU, galactosemia, glycogen storage disease, and other inborn errors of metabolism as they appear in the clinic. The activity will be based at the medical school, but daily rounds at Tampa General Hospital will also be required. Special emphasis will be placed upon nutrition as it relates to these disorders and will be supervised by the Diabetes Center dietitian. The psychosocial issues of chronic disease will also be presented by the Diabetes Center social worker. The Diabetes Center staff (coordinated by the diabetes nurse educator) will provide specific education about the techniques required for home management of these chronic disorders.

Objective
The objective is to provide clinical exposure to common as well as rare chronic metabolic disease and improve understanding of the basic clinical disorders and the problems associated with nutrition and routine home management.

Interested students must contact the director, Dr. Malone at (727) 767-4237, prior to selecting this elective. Those interested in more intense exposure to children with a chronic disease should contact Dr. Malone to learn the dates of a two-week camp session for children with diabetes.

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
This rotation allows the student to experience the broad range of primary pediatric care issues in the USF Health Pediatric Clinic, located at 2A Columbia Dr., South Tampa Center, 2nd Floor, and Tampa. The student is expected to improve skills of obtaining histories, performing physical examinations, and developing thorough differential diagnoses and management plans. Primary care issues are discussed daily. Each student will present a topic relevant to ambulatory pediatrics at the end of the rotation. Attendance at Pediatric Grand Rounds and scheduled conferences is required. At the end of this rotation the student will have acquired substantial pediatric outpatient skills and confidence.

Objective

Introduce the student interested in pediatric medicine to the wide range of problems encountered in an ambulatory setting.

Please contact Dr. Sharon Dabrow via email at sdabrow@health.usf.edu at least four-weeks prior to beginning this elective.

Contact Number: (813) 259-8752

The senior medical student will serve as an "acting intern" with the resident staff assigned to the inpatient medical teaching service of All Children’s Hospital. He/She will interview and examine patients and participate in the planning and execution of diagnostic and therapeutic programs under the supervision of residents and faculty in pediatrics. The student will participate actively in teaching rounds, journal clubs, and seminars as a junior house staff member.

Objective

Offer the student a period of intensive exposure to inpatient general pediatrics by permitting the student maximal responsibility for patient cares in a supervised setting.

Evaluation

The student's written histories and physical examinations, problem list, and plans of evaluation and therapy will be reviewed by the attending faculty, the director of the Inpatient Service and senior residents of All Children's Hospital.

Length: 4 weeks           Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at TGH; 1 at ORHC (ORHC site must be scheduled through the Registrar’s Office)
Hospital, each of whom will meet with the student frequently. The quality of these records as well as the student's daily activities at rounds and conferences will form the basis of the evaluation.

Night call is no more frequent than every 4th night.

Contact Number: (727) 767-4106.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at ACH

**MEL 8556  AI - Acquired Immunodeficiency Syndrome**

Drs. Rodriguez, Lujan-Zilberman and Emmanuel

The senior medical student will participate in both inpatient and outpatient clinical duties involving HIV-infected children and adolescents. The student will perform history and physical examinations on infants born to infected mothers and on HIV-infected children. Diagnostic and therapeutic programs will be executed with the supervision of the Pediatric Infectious Diseases faculty. The principles of laboratory evaluation of the HIV-infected child will be demonstrated in the clinical immunology laboratory. For students interested in participating in clinical and/or basic research, participation in small pilot projects is encouraged under the mentorship of a faculty member. The student will participate in teaching rounds, journal clubs, and seminars with the faculty, and will rotate at the ACH Clinic and the CMS clinic in Tampa.

**Objective**

Offer the student a period of intense exposure to HIV infection in infants, children, and adolescents with participation in a supervised outpatient, inpatient, and laboratory setting.

**Evaluation**

The student's history and physical examinations, generation of problem lists, and plans for evaluation and treatment will be reviewed frequently by the attending faculty. The quality of these records as well as the student's daily activities at rounds and conferences will form the basis of the evaluation.

No night is call required.

The medical student should report to Dr. Carina Rodriguez in the Division of Pediatric Infectious Diseases. Contact Number: (813) 259-8800.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at ACH
MEL 8559  Pediatric Rural or Migrant Health (AHEC)

Faculty and Staff at Suncoast Community Health Centers (Ruskin, Dover, Plant City), Family Medical Center (Dade City), Health Resource Alliance (Zephyrhills), and Manatee County Rural Health Services (Bradenton)

PRIOR APPROVAL REQUIRED - Please contact Dr. Cynthia Selleck at cselleck@health.usf.edu or (813) 974-3507 at least six weeks prior to registering for this elective.

This elective is designed to familiarize the student with general outpatient pediatric care in a rural migrant health center. All students will be under the supervision of a precepting physician participating in well childcare as well as acute walk-in care. This rotation will provide students with a better understanding of rural medicine and the tremendous health needs of rural and migrant populations. In certain settings, many patients are Spanish speaking, and students will have the opportunity to work with interpreters. Depending on the site selected, Gulfcoast North or Gulfcoast South AHECs will provide housing and/or a mileage stipend to students.

Evaluation
The clinician preceptors will evaluate students on an individual basis by. Evaluations will be based on patient interaction, presentations, medical plans, and documentation.

At certain sites this elective is available to USF students only. The Department of Pediatrics and Gulfcoast North or Gulfcoast South AHEC will make the final arrangements.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at CF

MEL 8566  Pediatric Endocrinology: Clinical
Drs. Root, Bercu, Diamond, and Shulman

The student will participate in the evaluation and management of children with aberrations of the endocrine system. The student will interview and examine outpatients and inpatients referred for pediatric endocrine consultation. The student will assist in the planning and execution of diagnostic and therapeutic programs for these patients. He/She will participate in clinical endocrine rounds, endocrine journal club, and seminars as a junior member of the endocrine team.

Objective
Introduce the student to the clinical aspects of diseases of the endocrine system in infants, children, and adolescents

Evaluation
The progress of the student will be monitored on an individual basis. The student will be expected to read widely and to participate actively in the service. The student will present one seminar pertinent to a clinical pediatric endocrinologic subject. The grade for the course will be a composite of the daily activities and the didactic presentation.

Please report to the ACH Physician’s Office Building, Suite 120, at 8:30 AM on the first scheduled day of the course. For further information, please contact Allen W. Root, MD, at (727) 767-4237.
Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at ACH

**MEL 8567  Pediatric Practice**

Faculty

This rotation is a tutorial association with a community pediatrician. The student will see patients in the physician's office, may be on call for emergencies, will accompany the physician on hospital rounds, and will participate in appropriate hospital conferences and seminars. The experience should broaden the scope of the student interested in the community practice of pediatrics.

Objective

Provide a realistic view of community pediatric practice

Final arrangements concerning the course location/preceptor will be made through a faculty member after the student receives his/her elective choice.

Contact the course coordinator at least two weeks prior to elective at (813) 259-8713.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 x 2 o 3 o 4 o 5 o 6 x 7 o 8 o 9 o 10 o 11 o

Availability: 1 at USF-MS

**MEL 8568  Pediatric Hematology - Oncology**

Drs. Barbosa and Grana

The student will be involved in the management of patients with hematologic and oncologic problems both in the inpatient and outpatient settings. With the inpatient services, the student will participate in the AM rounds, assist with diagnostic procedures and planning therapy. The student will interview and examine patients referred for consultation. Written histories and physical examinations and plans for evaluation and treatment will be reviewed with the attending physician. In the outpatient setting, the student will actively participate in interviewing and examining follow-up patients and newly referred patients. The student will attend the weekly multidisciplinary patient care rounds and monthly tumor board. By the end of the period the student is expected to be proficient in the morphologic interpretation of peripheral blood smears and bone marrow.

Objective

Introduce the student to the clinical aspects of hematologic and oncologic disease in children

Contact Number: (727) 767-4176.
Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at ACH

**MEL 8570  Genetics Elective**

Drs. Ranells, Loscalzo, Prijoles, and Staff

**Objective**

The goal of this elective is to acquaint the student with genetic disorders in pediatrics: diagnostic evaluation, differential diagnosis, inheritance, management and counseling. Students will attend Genetics Clinics Monday and Thursday, full day, at CMS on campus, occasional outreach CMS clinics; and/or ACH clinics Tuesday AM and PM, Wednesday AM and Friday AM. Students will be responsible for either the extensive work-up of one new patient or see re-visits as scheduled. Students will participate in inpatient consultations. The elective may be done primarily at either USF or ACH site. The USF site also offers exposure to prenatal genetics cases. Two days will be spent in the cytogenetics lab and/or the molecular genetics laboratory. Phone: (813) 259-8772

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 x 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at CMS; 1 at ACH

**MEL 8571  Developmental Pediatrics**

Drs. Lilly, Shapiro, and Armstrong

**Objective**

The goal of this challenging elective is to familiarize the student with the clinical aspects of child development. Participating in patient evaluations via observation and direct contact and interacting with various members of a multidisciplinary team will facilitate an understanding of the diversity of the field. Students will learn to administer basic screening tests and to assess the many aspects of development, which contribute to diagnosis and intervention. In addition to "hands-on" training, weekly lectures and meetings will provide teaching in the basic areas of normal and pathologic child development including neurological and genetic disorders, mental retardation, and learning disabilities. This elective incorporates a wide variety of clinic environments, with exposure to NICU follow-up, age 0-3 Early Intervention Program, and the school-age population. The objectives of this elective can be met via a research track, a clinical track, or a literature review/writing track.

Contact: Dr. Carol Lilly at clilly@health.usf.edu at least 4 weeks prior to the start of the elective. Phone: (813) 974-0601

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at TGH
MEL 8573  Pediatric Allergy and Clinical Immunology
Drs. Sleasman, Sher, and Dorsey

This elective is designed to give the student experience on both the outpatient and inpatient immunologic services of All Children's Hospital. The participant will assist in the diagnosis, treatment, and management of patients with a broad spectrum of immunologic, allergic, and rheumatologic diseases. The elective will emphasize a logical approach to clinical immunologic problems and to the use of current laboratory methods in the delineation of the immunologic aberrations basic to the disease process. The student will learn about the performance and interpretation of allergy skin testing, spirometry, tympanometry, rhinoscopy, food challenge procedures, immunotherapy to aeroallergens, and drug desensitization. Students will gain experience in the role of bone marrow transplantation in the treatment of immunodeficiency disease, malignant disease, and inherited metabolic disorders.

Objective
Offer the student an intensive exposure to clinical allergy-immunology by exposing the student to supervised responsibility for patient care

The student should report to the Division of Allergy/Immunology at 8:30 AM at ACH, Health Systems Building, 1st floor, 777 4th Street South, St. Petersburg, FL, 33701.

Contact Number: (727) 767-4470.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at ACH

MEL 8574  Pediatric Pulmonary Disease
Drs. Schnapf, Kriseman, Ewig, Couluris, and Gondor

This elective will involve working with a multidisciplinary team that will provide experience in the evaluation and management of acute and chronic pediatric respiratory diseases. An understanding of the basic principles of respiratory physiology and the pathophysiology of common pulmonary disorders will be emphasized. Experience with pulmonary function testing of children, flexible bronchoscopy, sleep-related disorders of breathing, upper airway problems, and the approach to common respiratory signs and symptoms will be covered. Students will participate in the evaluation and care of inpatients as well as outpatients with asthma, bronchopulmonary dysplasia, cystic fibrosis, and other respiratory disorders. Interaction with daily pediatric and radiographic conferences will be encouraged. Pertinent literature will be reviewed. Students will present a brief talk on a pulmonary medicine topic of their choice.

Contact number at TGH is (813) 259-8767.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 x 7 o 8 o 9 x 10 o 11 o

Availability: 1 at TGH; 2 at ACH
MEL 8575  Pediatric Intensive Care Elective
Drs. Weibley, Riggs, Everett, Saltiel, and Staff

The PICU is a multidisciplinary unit providing acute care for pediatric patients with a wide variety of medical and surgical problems. The goals and objectives for this elective are intentionally broad to allow for a learning experience in meeting the student's individual needs. Students will learn to utilize a physiologic-based organ system derived approach to patient problems. Integration of multiple healthcare providers is emphasized. Students are given the responsibility for patient care under the direct supervision of the PICU resident or attending faculty. Educational goals will be met through discussions on teaching rounds, didactic presentations on aspects of pediatric critical care medicine, and self-directed study on individual patients. Final evaluations will be based on the guidelines presented on the USF COM MSIV evaluation form and the degree to which the student has met his/her stated objectives.

Contact Number: (727) 767-4755

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at TGH; 1 at ACH

MEL 8576  Pediatric Urgent Care-After Hours Pediatrics
Dr. Charles Welborn

In this "after hours" clinical setting, each student will participate in all aspects of pediatric urgent care at After Hours Pediatrics. The student is expected to become familiar with a broad range of medical problems including traumatic injuries. Under the guidance of an attending physician, students will participate and assist in all aspects of acute care including history, physical examination, and technical procedures that the case requires. Students will also be asked to work as a member of the medical team consisting of specially trained and credentialed pediatric emergency physicians, nurses, and support personnel. Emphasis will be placed on rapid assessment skills, prioritization of care, and interaction with primary care pediatricians. Opportunities exist for the development of procedural skills in addition to medical management skills.

Please contact Dr. Welborn at cwelborn@tampabay.rr.com at least one week prior to the rotation. Administrative Office Phone: (813)775-4022

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at CF
MEL 8577  Neonatology-ACH
Dr. Sosa and Faculty

The student will directly care for several neonates in the neonatal intensive care unit of the All Children's Hospital under close supervision. In addition to daily teaching rounds, conferences include monthly combined perinatal morbidity, mortality conferences, bi-weekly radiology rounds, and several conferences each week pertaining to clinical problems in neonatology. Involvement in on-going research projects is also available with prior arrangement.

Objective
Introduce the student to intensive neonatology and provide in-depth clinical experience under close supervision

Contact Number: (727) 767-4313.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at ACH

MEL 8579  Pediatric Gastroenterology, Hepatology and Nutrition
Dr. McClanathan and Wilsey’s Group and Dr. Reinstein’s Group

The Pediatric Gastroenterology/Nutrition Department is a very active clinical service. The student will participate in the evaluation and management of children with gastrointestinal disease. The student will interview and examine outpatients and inpatients referred for pediatric gastrointestinal disorders. The student will assist in planning the diagnostic and therapeutic program for these patients. He/She will observe diagnostic modalities such as endoscopy, manometry, esophageal dilation, suction rectal biopsies, and pH probes. The student will also participate in clinical gastrointestinal rounds and GI Journal Club.

There will be one slot available at Drs. McClanathan & Wilsey’s Group (ACH/Tampa Office), and one slot available at Dr. Reinstein’s Group (ACH).

Evaluation
The student will be expected to read about the diseases of their clinic and hospital patients. Grading for the course will be a reflection of the student's participation and daily activities.

Contact Heather at (727) 822-4300 prior to the first day of the rotation.

Length: 4 weeks          Time(s): Full Time           Hours: 40 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at ACH
The Pediatric Emergency Medicine elective at All Children's Hospital and/or Tampa General Hospital is designed to give an in-depth exposure to the identification and management of acutely ill and injured children. Students are integrated into the health care team and participate directly in all aspects of patient care for medical/surgical/trauma emergencies including history, physical examination, management options, evaluation of laboratory and radiographic studies, utilization of consultants, decision making, and disposition. Under the supervision of an attending physician, students are involved in technical procedures including suturing, immobilization, splints, phlebotomy, IVs, ABGs, lumbar puncture, bladder tap, central venous access, arterial lines, endotracheal intubation, chest tube insertion, thoracentesis, and cardiopulmonary resuscitation. The emergency center environment features a computerized tracking system and exposes students to this modality for expediting patient care. Students participate in daily didactic conferences, radiology rounds, chart review, plus monthly mock code scenarios designed to integrate with syllabus material. By the completion of the rotation, students will be able to identify an acutely ill or injured child and develop and implement an appropriate management plan.

TGH Contact Number: (813) 627-5908 and (813) 627-5906
ACH Contact Number: (727) 767-8480

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at TGH; 2 at ACH

MEL 8582  Pediatric Infectious Disease
Drs. Bergamo, Lujan-Zilbermann, Rodriguez, Dumois, Berman, Messina, and Emmanuel

This elective in pediatric infectious disease is a clinical preceptorship with the Infectious Disease team. The majority of time is spent on inpatient consults. The student is exposed to all areas of the hospital since consults are answered in critical care areas, the general pediatric wards, and NICU. Inpatient consultations on the Tampa rotation will be performed at St. Joseph’s Children’s Hospital. In the ambulatory setting, the student will have exposure to the outpatient ID clinic and the pediatric/adolescent HIV clinic. Microbiological laboratory utilization and antibiotic therapy are emphasized during the rotation. Informal teaching conferences are held frequently. The student is expected to participate in weekly journal club, presenting an article each week. No night call is required.

For the Tampa rotation, the medical student should report to Dr. Dale Bergamo in the Division of Pediatric Infectious Diseases. Please contact the department at least two weeks prior to starting elective. Contact Number: (813) 259-8800

For the ACH rotation, the medical student should report to Drs Juan Dumois and David Berman at ACH Pediatric Infectious Disease. Contact Number: (727) 767-4160
Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at ACH; 1 at SJH

**MEL 8585  Laboratory and Basic Immunology**

Dr. Day

In this elective, an opportunity is offered for fourth year medical students and immunology residents to have hands-on experience using modern techniques in the laboratory. These include:

1. Learning to quantify immunoglobulin and immunoglobulin subclass levels, cytofluorometric enumeration of T cells, proliferative responses to phytomitogens, allogeneic cells or common antigens
2. Experience in the analysis of the biological amplification systems, e.g., total hemolytic complement (C), and each of the components of the primary or alternative complement (C) pathway and their inhibitors
3. Experience in molecular techniques for detection of viruses (HIV and HCV)
4. Analyses of basic effector mechanism, e.g. phagocytosis, bacterial killing, chemiluminescence responses, nitroblue tetrizolium dye reduction responses, thymus hormone (thymulin) analysis, serum Zn, and cellular lymphocyte or granulocyte Zn concentrations.

Cytokine studies (levels and gene expression) are also included. During the elective period, the students will become comfortable in interpreting and analyzing laboratory investigation of major cells and defense mechanisms of the body.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at ACH

**MEL 8587  Sports Medicine**

Dr. Gereige

The student in this elective will have the opportunity to work with orthopedic/sports medicine specialists, physical therapists, and certified athletic trainers. The sports medicine experience includes sports medicine clinics, hands-on field experience with a certified athletic trainer at the University of Tampa, familiarity with rehabilitation modalities at a physical therapy center, and game coverage opportunities. In addition, students might have exposure to sports for children with disabilities.

Objectives

This elective is designed to provide the students, as general practitioners, with the background to comfortably evaluate, treat, diagnose, and selectively refer athletic injuries. The educational objectives include:

1. Sports participation evaluation and normal orthopedic exam
2. Evaluation, diagnosis, and mechanism of common athletic and overuse injuries both on the field and in the clinic setting
3. Familiarity with available physical therapy and rehabilitation modalities
4. Participation in counseling about injury prevention education, nutrition, healthy lifestyles, dehydration, and anabolic steroid issues.

Scheduling Information: Please contact Dr. Rani Gereige at (727) 767-4106 at least two weeks prior to beginning this elective.

Length: 4 weeks          Time(s): Full Time          Hours: 44 per week

Months: 1 x 2 x 3 x 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at ACH

**MEL 8588  Honors in Pediatrics**

Dr. Nelson and Faculty

All students are eligible to apply for the Honors Course in Pediatrics. The Honors Program curriculum includes a creative scholarly project with the preceptor of the student's choice. The project and registration for the course must be approved by Dr. Nelson or his designee. In addition, a clinical experience pertinent to the scholarly activity of choice is required during the four-week block. An interest in pursuing a career in Pediatrics or Internal Medicine-Pediatrics is suggested for this elective. Depending on their preceptor selection, students may rotate at All Children's Hospital, the USF Medical Clinics, or Tampa General Hospital.

Objectives

1. Scholarly project presentation at noon conference or publication
2. Exposure to related clinical experience

Evaluation

An evaluation form will be submitted by the preceptor with whom the student will directly work.

Prior approval of this elective is required. Students should contact Dr. Nelson at least four-weeks prior to registering to discuss topics of interest and to identify preceptor.

This elective is NOT available to visiting students.

Length: 4 weeks          Time(s): Full Time          Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 x 6 x 7 x 8 x 9 x 10 x 11 x

Availability: 4 at USF-MS

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
The purpose of this elective is to give students the opportunity to work directly with a mentoring faculty member. At least 30 days prior to registering for this elective, students must meet with their preceptor to determine a course of study with goals and objectives for the course period.

Length: 4 weeks    Time(s): Full Time    Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: No Limit at USF-MS

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
PSYCHIATRY

MEL 7109    Outpatient Psychiatry
MEL 7320Y   Externship in Psychiatry
MEL 7602    Child and Adolescent Psychiatry
MEL 7611    Acting Internship in Psychiatry: Advanced Adult Inpatient Psychiatry
MEL 7612    Geriatric Psychiatry
MEL 7613    Alcoholism and Substance Abuse
MEL 8608    Memory Disorders Clinic
MEL 8614    Acting Internship in Consultation Liaison Psychiatry
MEL 8621    Mood Disorders Across the Life Cycle
MEL 8625    Motivational Interviewing in Medical Settings
MEL 8626    Neurostimulation in Psychiatry
MEL 8627    Functional Psychiatric Neuroimaging
MEL 8628*   Seminar in Neuropsychology
MEL 8664    Psychiatric Research
MEL 8665    Molecular Genetic Research in Psychiatry
MEL 8666    Neuroimmunology Research in Psychiatry
MEL 8667    Cognitive Medicine, Neuropsychiatry, and Neuroscience
MEL 8668    Neuropsychopharmacology
MEL 9999Y   Independent Study in Psychiatry

*PROVISIONAL NUMBER SUBJECT TO CHANGE

MEL 7109    Out-Patient Psychiatry
Drs. Saundra Stock, J. Zak, Francisco Fernandez, and Medical Staff

This elective is designed to provide interested students with clinical and didactic training in outpatient psychiatry. The student will have an opportunity to develop greater diagnostic and management skills in varied outpatient settings including the University Psychiatry Center Outpatient Clinic and the Tampa VA Hospital. Specific experiences can include the anxiety and memory disorders clinic, the Adult Evaluation Clinic, and the Child Evaluation Clinic. An opportunity to gain increased understanding of crisis intervention in an outpatient setting at the Tampa VA Hospital is also available.

Objectives
1. Become more skilled in interviewing patients who present both medical and psychiatric problems in various outpatient settings
2. Gain an increased understanding of and develop skills in specialized evaluation and treatment situations (family, child, and adult)
3. Develop a more in-depth understanding of psychopathology
4. Gain a greater familiarity with a variety of psychotherapy modalities including individual, group, family, and marital therapy
5. Become more skilled in utilizing psychotropic medications

Evaluation
The supervising faculty will evaluate the student’s clinical performance according to the elective objectives. In addition, the student will be required to prepare a written summary of the elective experience including a description of clinical and academic activities, a self-evaluation of what the student learned in the elective, and a...
MEL 7320Y  Externship in Psychiatry
Dr. Francisco Fernandez

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 2 at UPC

MEL 7602  Child and Adolescent Psychiatry
Drs. M. Bengtson, Saundra Stock, H. Nagera, and Medical Staff

This elective is designed to provide the interested student with an opportunity to develop diagnostic and management skills essential to the evaluation and treatment of children with psychiatric problems including the behavioral disorders that are commonly encountered in family medicine and pediatric practices.

Objectives
1. Learn how to evaluate and diagnose psychiatric problems including common behavioral disorders in children
2. Learn basic management skills of psychiatric problems including common behavioral problems
3. Become familiar with community agencies available to help children with psychiatric and behavioral problems
4. Become more familiar with the general practice of child psychiatry
5. Enhance interviewing skills of children and their families

Evaluation
The supervising faculty will evaluate the student's clinical performance according to the elective objectives. In addition, the student will be required to prepare a written summary of the elective experience including a description of clinical and academic activities, a self-evaluation of what the student learned in the elective, and a critique of his/her elective experience.

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week
Months: 1 x 2 x 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: No Limit at EXT

MEL 7611  Acting Internship in Psychiatry: Advanced Adult Inpatient Psychiatry
Drs. Patrick Marsh, Nate Upshaw, P. Powers, D. Sanchez, W. Levy, E. Settle, R. Velasco and Medical Staff

This elective is designed to provide advanced clinical and didactic training in inpatient psychiatry. Students will participate as a "sub-intern" on an inpatient psychiatric ward. Students are expected to have a small case load of

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
patients that they actively manage taking on primary responsibility for the patient’s care in conjunction with the supervising faculty. Students will perform the history and physical for patients being admitted to the hospital and follow the patient on a daily throughout the hospital course. Students will learn to construct a biopsychosocial formulation of the patient's presenting problems along with providing acute, intense biological, psychocological and social interventions during the hospitalization. Students will also learn to compose discharge summaries. Close supervision, seminars, and independent study will complement the clinical activities.

Objectives
1. Develop a more in-depth understanding of psychopathology
2. Become more skilled in the use of psychotropic medication
3. Gain a greater familiarity with a variety of psychotherapy modalities including individual, group, and family psychotherapy
4. Become more skilled in the interviewing of psychiatric patients
5. Understand how eating disorders are evaluated and treated (Dr. Powers at Fairwinds Hospital)

Evaluation
The supervising faculty will evaluate the student’s clinical performance according to the elective objectives. In addition, the student will be required to prepare a written summary of the elective experience including a description of clinical and academic activities, a self-evaluation of what the student learned in the elective, and a critique of his/her elective experience.

Length: 4 weeks     Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at TGH; 3 at T-VAH; 1 at BP-VAH; 1 at FTC
NOTE: FTC is not available all months. Please check with the education coordinator for availability

MEL 7612  Geriatric Psychiatry
Drs. F. Fernandez, J. Fils, M. Schoenberg, J. Stewart, J. Hashimie, R. Velasco, and Medical Staff

This elective is designed to offer advanced experience in the evaluation, treatment, and rehabilitation of elderly patients with psychiatric disorders. Students can participate in both inpatient and outpatient geriatric psychiatry care. Students will have clinical responsibility for diagnosis, treatment, and rehabilitation of elderly psychiatry patients. Supervision, seminars, and independent study will complement the clinical activities.

Objectives
1. Become familiar with the multidisciplinary assessment of elderly patients
2. Develop specialized diagnostic skills for identifying and differentiating organic brain syndromes
3. Learn how to integrate psychiatry and medical care of the elderly
4. Become familiar with utilization of community resources in the care of the elderly

Evaluation
The supervising faculty will evaluate the student’s clinical performance according to the elective objectives. In addition, the student will be required to prepare a written summary of the elective experience including a description of clinical and academic activities, a self-evaluation of what the student learned in the elective, and a critique of his/her elective experience.
Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at T-VAH; 1 at UPC

**MEL 7613  Alcoholism and Substance Abuse**

Drs. E. Francis and M. Brown

This elective is designed to offer advanced experiences in the evaluation, treatment, and rehabilitation of alcoholic and substance abuse patients, and the assessment and diagnosis management of other co-existing psychiatric disorders. The student will participate in a therapeutic community treatment program for chemical dependency, have direct clinical responsibilities for patient care and interact with available community resources for chemically dependent patients. The student will have the opportunity to participate in ongoing addiction research activities.

**Objectives**

1. Enhance diagnostic skills in chemical dependency and associated medical and psychiatric disorders
2. Learn individual, group, and community treatment techniques for the chemically dependent patient
3. Learn how to facilitate rehabilitation of chemically dependent patients
4. Learn about community resources for chemically dependent patients

**Evaluation**

The supervising faculty will evaluate the student’s clinical performance according to the elective objectives. In addition, the student will be required to prepare a written summary of the elective experience including a description of clinical and academic activities, a self-evaluation of what the student learned in the elective, and a critique of his/her elective experience.

Length: 4 weeks          Time(s): Full Time           Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at UPC/DACCO, 1 at T-VAH

**MEL 8608  Memory Disorders Clinic**

Drs. J. Fils, M. Schoenberg, Michelle Mattingly, and Francisco Fernandez

This elective is designed to provide interested senior medical students with an advanced experience in the evaluation and treatment of Memory Disorder Clinic patients. The psychiatric evaluation will allow the senior student to become proficient in the diagnostic work-up of the patient with a memory complaint and with the memory disorders work-up which includes neuroimaging studies of the brain, laboratory studies, neuropsychological testing and psychosocial evaluation. Students will gain expertise in geriatric medicine, geriatric psychiatry and the differential diagnosis of patients with memory complaints and psychiatric disorders.

The student will spend the majority of the elective at the Johnnie B. Byrd, Sr., Alzheimer’s Center and Research Institute. The student may be involved at other facilities such as an Assisted Living Facility or Assisted Living Facility.
nursing home as relates to the geriatric population. Supervision and seminars will complement these clinical activities.

Objectives
1. Become familiar with the multidisciplinary assessment of elderly patients
2. Develop specialized diagnostic skills for identifying and differentiating the multiple causes of dementia
3. Learn how to integrate psychiatry and medical care of the elderly
4. Become familiar with utilization of community resources in the care of the elderly

Evaluation
The student's clinical performance will be evaluated by the supervising faculty according to the elective objectives. In addition, the student will be required to prepare a written summary of the elective experience including a description of clinical and academic activities, a self evaluation of what he/she learned on the elective, and a critique of his/her elective experience.

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 1 at BYRD

MEL 8614 Acting Internship in Consultation Liaison Psychiatry
Drs. B. Keefe, Barbara Lubrano, and Glenn Catalano

This elective is designed to provide students with a greater understanding of the interface between psychiatry and medical illness in the pediatric and adult populations. Students will assist the consultation team in interviewing medical/surgical patients at Tampa General Hospital. Students will be asked to evaluate patients and ascertain how the patient's medical illness is affected by psychological factors. They will be exposed to a wide range of psychopathology including mood disorders, conversion disorders, psychotic disorders, delirium, dementias, and other organic illnesses.

Objectives
1. Become familiar with psychiatric diagnoses in both the adult and child populations
2. Improve interviewing skills by performing interviews on difficult medical/surgical patients
3. Learn to be part of a consultation/liaison team and be able to work with members of other medical teams and other disciplines

Evaluation
Supervising faculty will evaluate the student's clinical performance according to the elective objectives. In addition, the student will be required to evaluate the rotation as a learning experience.

Length: 4 to 8 weeks  Time(s): Full Time  Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 2 at TGH; 2 at TVAH
MEL 8621  Mood Disorders Across the Life Cycle
Drs. Francisco Fernandez, M. Bengtson, Y. Bannon, RN, MS, CCRC

This elective is designed to provide interested senior medical students an intense clinical training and research in mood disorders. The student will become involved in individual and team evaluations of patients with cognitive and behavioral symptoms. They will be an integral part of the evaluation team, acting as primary patient evaluator, coordinator of collateral information and liaison with families, other medical disciplines and ancillary services. The student will spend the majority of the elective at the University Psychiatry Center and Silver Child Development Center, but may work at other facilities as well inclusive of Tampa General Hospital. Students with subspecialty interests may have other liaison and educational opportunities by individual request. In addition, students will participate in the monitoring of patients with Treatment Resistant Depression who neurostimulation (as with ECT or have been implanted with a vagal nerve stimulator).

Objectives
1. Become more skilled in the evaluation of patients with mood disorders
2. Gain an increased understanding of mood disorders through systematic clinical training and didactic education
3. Become involved in and gain an understanding of collaborative, interdisciplinary clinical treatment team, understand the basis for interventional and laboratory techniques (inclusive of vagal nerve stimulation), and develop experience in the use of specific assessment instruments critical to diagnostic assessments
4. Prepare a publication based on his/her experience

Evaluation
The supervising faculty will evaluate the student’s academic performance according to the elective objectives. In addition, the student will be required to prepare a written summary of the elective experience including a description of clinical and academic activities, a self-evaluation of what the he/she learned in the elective, and a critique of his/her elective experience.

Length: 4 to 8 weeks  Time(s): Full Time  Hours: 44 per week
Months:  1 o  2 o  3 o  4 o  5 o  6 o  7 o  8 o  9 o  10 o  11 o
Availability: 2 at UPC and/or Silver Child Development Center

MEL 8625  Motivational Interviewing in Medical Settings
Dr. Mariann Suarez

This is a half-time course which must be supplemented with another half-time course.

This elective is designed to teach the Motivational Interviewing method for enhancing practitioner skills in health behavior interventions for working with ambivalent and difficult to treat adolescent and adult patients. Students will participate in didactic instruction, in-vivo role play, group discussion, video analysis, and may also choose to have practice encounters evaluated via audio taped practice.

Objectives
1. Review the empirical basis of Motivational Interviewing and become familiar with outcome research.
2. Learn basic Motivational Interviewing skills.
3. Practice Motivational Interviewing skills during in-vivo role plays and group practice sessions.
4. Conduct independent Motivational Interviewing and receive feedback on skills acquisition and implementation.

Evaluation
The supervising faculty will evaluate the student’s performance according to elective objectives. In addition, the student will be required to prepare a written summary of the elective experience including a description of activities, a self-evaluation of what the student learned in the elective and a critique of his/her elective experience.

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<th>Time(s): Half Time</th>
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<td>Availability: 8 at UPC</td>
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**MEL 8626 Neurostimulation in Psychiatry**
Drs. Patrick Marsh, F. Fernandez, and Ruta Dimaite, MA

This elective is designed to introduce senior students to the use of various forms of neural stimulation in the treatment of psychiatric disorders. Under the supervision of clinical faculty, students will have the opportunity to practice in a university neural stimulation clinic. Students will participate in the initial evaluation of patients for neural stimulation. Students will also take part in the neural stimulation treatment of suitable patients. This elective will provide students with a better understanding of the current use of neural stimulation for the treatment of psychiatric disorders.

Objectives
1. Familiarize the student with the multiple available methods for neural stimulation
2. Identify the psychiatric disorders which are indications for treatment by neural stimulation
3. Compare neural stimulation to the pharmacologic treatment of psychiatric disorders
4. Compare the treatment response of neural stimulation to other current treatment methods
5. Evaluate new patients for suitability for deep brain stimulation, transcranial magnetic stimulation, vagal nerve stimulation and eletro-convulsive therapy
6. Participate in the treatment of patients with transcranial magnetic stimulation and deep brain stimulation

Learning Outcomes
The trainee will see patients at the South Tampa Center Neurotherapies Clinic. Trainees will be provided with a training packet prior to the start of the elective pertaining neurostimulation. Upon completion of this elective trainees should understand the principles of neurostimulation, selection of appropriate patients and the implementation of neurostimulation treatment plan.

Evaluation
The trainee will work closely with the Neurostimulation Attending who will provide the assessment.

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<th>Length: 4 weeks</th>
<th>Time(s): Full Time</th>
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<td>Availability: 2 at TGH</td>
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This elective is to familiarize senior students with the techniques and devices available to facilitate neuroimaging research and to learn diagnostic characteristics of Psychiatric diseases.

Objectives
1. Learn the available neuroimaging techniques available in the community
2. Learn the possible applications to research projects
3. Learn the limitations of available techniques

Evaluation
The trainee will work closely with the Neuroimager who will provide the assessment.

Length: 4 weeks    Time(s): Full Time         Hours: 40 per week

Months: 1  2  3  4  5  6  7  8  9  10  11

Availability: 1 at UDI

MEL 8628*    Seminar in Neuropsychology
Drs. Mike Schoenberg, Michelle Mattingly, Eric Rinehart, and Francisco Fernandez

*PROVISIONAL NUMBER SUBJECT TO CHANGE

This elective is designed to provide interested senior medical students with an overview of neuropsychology, clinical neuropsychiatry, and behavioral neurology. Advanced training and exposure to neuropsychology will be offered. Students will have the opportunity to be involved in individual and team evaluations of patients with cognitive and behavioral disorders due to known or suspected neurological disease. The student will be an integral part of the evaluation team obtaining exposure on how to identify neuropsychological issues and problems, conducting bedside neuropsychological evaluations, obtaining collateral information from patients and families related to neuropsychological dysfunction, and exposure to the principals and practice of evidenced based neuropsychology practice. Interface with psychiatry, neurology, and neurological surgery will be common. The student may choose to complete the elective primarily at the USF South Campus Center or at the University Psychiatry Center. Students with an interest in research may participate in ongoing laboratory research with epilepsy or traumatic brain injury or Alzheimer’s disease/Mild Cognitive Impairment (MCI). Opportunities to publish in peer-reviewed journals can be made available.

Objectives
1. Become more skilled in the evaluation of patients with neuropsychological dysfunction due to known or suspected disease
2. Increased understanding of neuropsychology and the science of brain-behavior relationships by systematic clinical training and didactic education
3. Become familiar with bedside neuropsychological assessment
4. Become familiar with evidenced based neuropsychology practice and identify when more thorough neuropsychological evaluation is necessary to improve patient care
5. Become involved in and gain an understanding of collaborative, interdisciplinary research, understand the basis for research methods and statistics, and develop experience in data analysis. This involvement (both

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.

Learning Outcomes

The trainee will see patients at the USF South Tampa Center Neuropsychology Clinic and/or Neuropsychology Clinic at the USF main campus. Trainees will be provided with a training packet prior to the start of the elective pertaining to neuropsychology. Upon completion of this elective trainees, should understand the principles of neuropsychology as a science and a discipline, how to complete a basic bedside neuropsychological evaluation, and how to provide appropriate multidisciplinary referrals for further evaluation and treatment.

Evaluation

The trainee will work closely with Neuropsychology Attendings who will provide the assessment.

Length: 4 weeks      Time(s): Full Time     Hours: 40 per week

Months: o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at TGH

MEL 8664  Psychiatric Research

Drs. Francisco Fernandez, C. Santana, Y. Bannon, Brian Giunta, Patrick Marsh, Jamie Fernandez, and Faculty

This elective is designed to enable the advanced student to become acquainted with the methodologies of behavioral medicine and their application in psychiatry and medicine. Admission to this elective requires the prior approval of the project by the Director of Medical Student Education. Each student will participate in an ongoing research project and/or an individual tutorial during this time under faculty supervision and review and will evaluate the literature that pertains to his/her chosen topic.

Objectives

1. Increase the knowledge of psychiatry and behavioral medicine in an area of particular interest to the student
2. Become familiar with research methodology
3. Gain an enhanced perspective of the role of behavioral principles in the practice of psychiatry and medicine

Evaluation

The research supervisor will evaluate the student’s research performance according to the elective objectives. The student will also be expected to prepare a written summary of the research project including an appropriate review of the relevant literature and a description of the student's research activities. In addition, the student will provide the elective supervisor with a written critique of his/her elective experience.

Students must obtain permission from the department PRIOR to scheduling this elective.

Length: 4 to 8 weeks      Time(s): Full Time     Hours: 44 per week

Months: o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at UPC
This elective is designed to expose the student to current methodology, techniques and practice of molecular genetic research in psychiatry. Students will become familiar with the current theories for the genetic basis of psychiatric illness. Students will become familiar with the most common and advanced laboratory techniques used to investigate genetic hypotheses in psychiatric research. Students may participate in ongoing research in the genetics of Alzheimer's disease, schizophrenia, alcoholism, panic disorder, anorexia nervosa, and other neuropsychiatric disease.

Objectives
1. Increase the student's knowledge of genetic theories of neuropsychiatric disorder
2. Expose the student to the principles and practice of molecular genetic research
3. Expose the student to the practical application of molecular genetics to the study of neuropsychiatric disorder
4. Expose the student to the use of informatics in the study of genetics of neuropsychiatric disorders

Evaluation
The extent to which these objectives are reached will be evaluated by a research supervisor. A summary of completed research will be expected and may contribute to publications.

Length: 4 to 8 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o

Availability: 1 at UPC

MEL 8666 Neuroimmunology Research in Psychiatry
Drs. Jun Tan, Brian Giunta, Jamie Fernandez, and Francisco Fernandez

This elective is designed to teach medical students basic aspects of research in neuroimmunology. By working one-on-one with each student in the laboratory, the student will experience and learn the finer details of the technical aspects of experimentation (including immunohistochemistry, in situ hybridization, flow cytometry, western blot, northern blot, and RT-PCR, etc.). In addition, each student will participate in ongoing research in the Alzheimer's disease and HIV-cognitive disorders. Furthermore, the approach to teaching will allow for the interpretation of results from experimentation to be openly discussed by everyone involved in these ongoing projects.

Objectives
1. Understand the basic tenets of the field of neuroimmunology
2. Obtain a basic understanding of the neuroimmunologic basis of Alzheimer's disease and HIV-cognitive disorders
3. Obtain the necessary basis for general scientific laboratory techniques.
4. Get hands on experience in molecular biology techniques
5. Develop experience in data acquisition and learn to critically analyze a data set
6. Complete a limited set of experiments as part of an ongoing project in the laboratory allowing the student to author a publication based on their project
Clinical experience will be optional and inclusive of participation in a Memory Disorders Clinic and Cognitive Medicine Program two half days per week. Neuropsychological, neuroradiological, and psychosocial manifestations will be correlated with clinical abnormalities in a staffing conference.

Evaluation
Evaluation will consist of observation and discussion with research and clinical faculty. A summary of the academic project of publishable quality is expected. The only prerequisite is the successful completion of the third year clerkship in Neuropsychiatry. The supervising faculty will evaluate the student’s clinical performance according to the lecture objectives. In addition, the student will be required to prepare a written summary of the elective experience, including a description of clinical and academic activities, a self-evaluation of what the student learned on the elective, and a critique of his/her elective experience.

Length: 4 to 8 weeks Time(s): Full Time Hours: 44 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 x
Availability: 2 at UPC

**MEL 8667 Cognitive Medicine, Neuropsychiatry, and Neurosciences**
Drs. Francisco Fernandez, M. Schoenberg, Michelle Mattingly, and Jun Tan

This elective is designed to provide interested senior medical students an intense clinical training and research in the neurosciences and neuropsychiatry. The student will have the opportunity to become involved in individual and team evaluations of patients with cognitive and behavioral symptomatology. He/She will be an integral part of the evaluation team, acting as primary patient evaluator, coordinator of collateral information, and as liaison with families, ancillary services, and other medical disciplines. The student will spend the majority of the elective at the University Psychiatry Center, but may work at other facilities as well. Students with subspecialty interests may have other liaison and educational opportunities by individual request. In addition, the student will participate in ongoing laboratory research in Alzheimer’s disease and HIV-cognitive disorders inclusive of learning the finer details of the technical aspects of experimentation.

Objectives
1. Become more skilled in the evaluation of patients with cognitive and other neuropsychiatric disorders
2. Increased understanding of neuropsychiatry through systematic clinical training and didactic education
3. Become involved in and gain an understanding of collaborative, interdisciplinary research, understand the basis for general scientific laboratory techniques, and develop experience in data acquisition and data analysis. This involvement (both basic and clinical) will, in turn, serve as a model for their professional careers.
4. Obtain a basic understanding of the neuroimmunological basis of Alzheimer’s disease and HIV-related cognitive disorders
5. Prepare a publication based on the experience

Evaluation
The supervising faculty will evaluate the student’s clinical performance according to the lecture objectives. In addition, the student will be required to prepare a written summary of the elective experience, including a description of clinical and academic activities, a self-evaluation of what the student learned on the elective, and a critique of his/her elective experience.
**MEL 8686  Neuropsychopharmacology**
Drs. Lynn Wecker and Francisco Fernandez

This elective is designed to provide students with the most up-to-date information on theories and drug targets for neuropsychiatric disorders, and how laboratory research is used to advance our knowledge in the field. Students will participate in laboratory discussions and experimentation and learn how current clinical findings and drug responses provide insight to the etiology of schizophrenia, depression and addiction. Students will experience the technical aspects of experimentation in this field and will work with laboratory animal models and learn how to measure and analyze behaviors, and how to probe for cellular and molecular alterations in transcription factors thought to underlie these conditions using the latest laboratory techniques.

**Objectives**

1. Understand the basic tenets of neuropsychopharmacology research
2. Understand the current cellular and molecular alterations thought to underlie the manifestation of schizophrenia, depression, and addiction
3. Appreciate how clinical observations of drug responses provide insight to the etiology of these disorders
4. Obtain hands-on experience in behavioral and molecular techniques and learn how to analyze data obtained from these experiments
5. Appreciate the translation of research from "bench to bedside"

**MEL 9999Y  Independent Study in Psychiatry**
Dr. Francisco Fernandez

Course of study will be determined by Faculty member and student. Example areas of study include psychopharmacology, neuropsychiatry, psychotherapy, child psychiatry, forensic psychiatry, and cognition, memory and aging. Students must obtain permission from the supervising faculty and the Chair of the Department PRIOR to scheduling this elective.

**Availability:** No Limit at USF-MS
**RADIOLOGY**

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<td>Externship in Radiology</td>
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<td>MEL 7703</td>
<td>Vascular Radiology</td>
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<tr>
<td>MEL 7704</td>
<td>Diagnostic Radiology</td>
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<tr>
<td>MEL 7710</td>
<td>Musculoskeletal Imaging</td>
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**MEL 7320R  Externship in Radiology**

Length: 4 weeks  
Time(s): Full Time  
Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 x 9 x 10 x 11 x

Availability: No Limit at EXT

**MEL 7703  Vascular Radiology**

Dr. Bruce Zwiebel

Diagnostic and therapeutic methodologies in vascular radiology will be studied in this elective. The primary objective of this elective is to introduce the student to this specialized area of radiology and to help him/her evaluate the appropriateness of these techniques in patient management. Emphasis will be placed on interventional techniques and their realistic place in the therapeutic armamentarium available for patient care. During this elective, a project will be undertaken under the supervision of one of the instructors. The elective is offered at the Veteran's Administration Hospital (Dr. Farber) and Tampa General Hospital (Dr. Black).

Length: 4 weeks  
Time(s): Full Time  
Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 2 at TGH

**MEL 7704  Diagnostic Radiology**

Dr. Todd Hazelton

This elective is an introduction to basic diagnostic radiology principles. Each student will participate the activities of the department through clinical rotations in the chest, body computed tomography, emergency radiology, musculoskeletal radiology, nuclear medicine, ultrasound, neuroradiology, and interventional radiology sections at Tampa General Hospital. A series of conferences and lectures in diagnostic radiology will be presented to provide a background for students planning to practice in diagnostic radiology itself or in other medical specialties. Each student will prepare and present a PowerPoint presentation on a topic in diagnostic radiology. Students interested in radiology as a career should also attend daily resident case conferences as well as various clinical conferences.

Registration preference for periods 2-4 will be given to students interested in applying to Radiology as a specialty.

**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
Length: 4 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 x 2 o 3 o 4 o 5 o 6 o 7 x 8 o 9 o 10 o 11 x

Availability: 8 at TGH

**MEL 7710  Musculoskeletal Imaging**

Drs. Neel Prakash

This elective is designed to introduce senior students to the practice of musculoskeletal imaging, including conventional radiography, computed tomography, magnetic resonance imaging, and imaging-guided procedures. During this rotation, students will spend time with faculty and housestaff in the Imaging Center at the USF Morsani Center for Advanced Healthcare. This elective will provide students with a better understanding of the role of imaging and diagnostic procedures in disorders of the musculoskeletal system. Students will have the opportunity to attend musculoskeletal imaging lectures and conferences at USF, Tampa General Hospital, and the H. Lee Moffitt Cancer Center.

**Objectives**

On this elective, the senior medical student will obtain:

1. An understanding of the indications for advanced musculoskeletal imaging (ultrasound, CT, arthrography, and MRI)
2. A fundamental understanding of basic musculoskeletal imaging with respect to pertinent normal anatomy in a musculoskeletal radiograph
3. The ability to categorize and organize subdivisions of musculoskeletal imaging such as rheumatology, neoplasm, infection, etc.
4. The ability to discuss the most common musculoskeletal pathologic entities
5. A basic understanding of technique and indications for arthrography, bone biopsy, and other invasive procedures

**Methods**

The trainee will review and musculoskeletal imaging studies with musculoskeletal imaging faculty and housestaff at the USF Morsani Center for Advanced Healthcare. The trainee will also participate in musculoskeletal and orthopedic imaging conferences during their elective period. A presentation on a topic in musculoskeletal imaging will be required. Upon completion of this elective, the training should understand the role of imaging in the diagnosis of musculoskeletal pathology and have a basic understanding of imaging diagnosis of musculoskeletal pathology on radiography, computed tomography, and magnetic resonance imaging.

**Evaluation**

The trainee will work closely with the attending musculoskeletal radiologists and housestaff who will provide the assessment of performance.

Length: 4 weeks  Time(s): Full Time  Hours: 40 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at MCAH

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).
MEL 9999R  Independent Study in Radiology

Faculty

Independent study in diagnostic radiology is offered for those students who wish to spend additional learning time in a focused area of clinical or research in diagnostic radiology.

Length: 4 weeks   Time(s): Full Time   Hours: variable

Months: 1 o  2 o  3 o  4 o  5 o  6 o  7 o  8 o  9 o  10 o 11 o

Availability: No Limit at USF-MS
<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>MEL 7320S</td>
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<td>MEL 7803</td>
<td>Plastic Surgery - Hospital Based</td>
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<td>MEL 8811</td>
<td>General Surgery Acting Internship</td>
</tr>
<tr>
<td>MEL 9999S</td>
<td>Independent Study in Surgery</td>
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</tbody>
</table>

**SURGERY**

**FINAL ARRANGEMENTS CONCERNING COURSE LOCATION/PRECEPTOR WILL BE MADE BY THE MEDICAL STUDENT COORDINATOR (974-0078).**

**MEL 7320S** Externship in Surgery

**Length:** 4 weeks  
**Time(s):** Full Time  
**Hours:** 44 per week  
**Months:** 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 x 9 x 10 x 11 x  
**Availability:** No Limit at EXT

**MEL 7803** Plastic Surgery - Hospital Based

Drs. David Smith, Wayne Cruse, Rami Ghurani, and Paul Smith  

This elective provides the opportunity to participate in the active "hands-on" care of plastic surgery patients including critically ill burned patients. The student is under the direct supervision of the faculty in the intensive care unit, operating room, and outpatient follow-up care. No night call is required.

**Evaluation**  
Evaluation will be completed by direct observation. There will be no examination.

**Length:** 4 weeks  
**Time(s):** Full Time  
**Hours:** 60-70 per week  
**Months:** 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o  
**Availability:** 3 at TGH/MCC; 1 at T-VAH

**MEL 7805** Trauma Surgery Elective

Dr. David Shapiro and Trauma Surgery Faculty  

Students electing this course will work with the residents and faculty in the Division of Trauma in the surgical ICU, floors, ER and OR at TGH. The trauma surgeon emerges as the last of the classical general surgeons. We see the entire spectrum of elective general surgery cases in the clinics and the urgent and emergent cases that are seen in consultation on the regular patient units as well as the ER. This includes patient with...
appendicitis, biliary disease, bowel obstruction GI bleeding to name a few. In addition the surgeons on our service are able to care for the victim of blunt and penetrating trauma. Therein lies the drama and excitement of the trauma bay. It is the best of rotations embracing general and trauma surgery and critical care.

The student will participate as a member of the trauma team in all these endeavors and become conversant in the initial assessment and resuscitation of the trauma patient, critical care and post operative management. At least a 1-week rotation on nights will be required. What greater challenge is there than to join with the team in the trauma bay and feel confident with your ability to manage the care of a badly injured patient? The lessons learned here will serve you well no matter what your ultimate career decision.

Evaluation
Students will be evaluated based on their clinical performance

Length: 4 weeks Time(s): Fulltime Hours: 60-70/week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 3 at TGH

MEL 7815  Honors Course in Surgery
Dr. Steven Goldin and the General Surgical Faculty

This elective will rely heavily on State of the Art Simulation and include sections on open, laparoscopic and endoscopic procedures, central line placement using ultrasound guidance and advanced trauma & code simulations. Lectures will be on advanced surgical topics. Cutting edge simulation will enable students to complete realistic operations on humanistic models where measurable outcomes can be observed, feedback given and improvement noted. At the completion of the elective, participants should have gained many skills needed to function as a surgical house officer.

This elective is NOT available to visiting students.

Length: 4 weeks Time(s): Full Time Hours: 60-70 per week
Months: 1 o 2 x 3 x 4 x 5 x 6 x 7 x 8 x 9 x 10 x 11 x
Availability: Minimum of 10 at USF-MS

MEL 7818  Pediatric Surgery Elective
Drs. Charles Paidas and Mark Kayton

This elective will provide the student with a full range of clinical problems involved in the practice of pediatric surgery. In addition, the student will take direction from the attending and work closely with the general surgical resident rotating through the Pediatric Surgical Service. The student will have clinical contact, including patient work-ups, pre- and post-operative care, and will be carefully monitored by the staff. In addition, time in the operating room will provide an exposure to a variety of pediatric surgical problems. This surgical elective will be conducted at The Tampa General Hospital and will include attending related conferences at The College of Medicine. Night duty will be on an on-call basis in association with the residents rotating through the service. The objective of this course is a broad exposure to pediatric surgery. This will involve hands-on care of the
pediatric surgical patients under close supervision of both the resident and attending. In addition, participation in conferences, didactic lectures, and other teaching opportunities will be available while the clerk is rotating on the service.

**Evaluation**

Students will be evaluated based on ward performance.

Length: 4 weeks  Time(s): Full Time  Hours: 60-70 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at TGH

**MEL 7819 Surgical Transplant Elective**

Dr. Victor Bowers and Faculty

Students will work under the direct supervision of the Director of Transplant Surgery, LifeLink Transplantation Institute, Inc. They will gain insight and experience in the area of transplantation immunology tissue typing and the concepts of histocompatibility antigens.

This elective is designed to offer students active participation in organ procurement, the harvesting and preservation of kidneys and livers, and an understanding of the role of the organ sharing networks.

Students will be directly involved with the evaluation and work-up of possible renal and liver transplant recipients, observe surgery, and play an active role in the postoperative management of transplant patients, particularly identification, management and treatment of infections, and rejection complications.

Students will receive an overview of all aspects involved in liver and renal transplantation, from donor identification through clinical transplantation and long term follow-up.

**Evaluation**

Students will be evaluated based on their ward performance.

Length: 4 weeks  Time(s): Full Time  Hours: 60-70 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at TGH

**MEL 7828 Vascular Surgery Elective**

Dr. Bandyk and Faculty

During this elective the student will participate in clinical care involving the Vascular Surgery Service at Tampa General Hospital. The student will work closely with the vascular surgery resident in preoperative, operative, and postoperative patient management and will attend outpatient clinics at the USF Medical Clinics with full time faculty members. The student will also gain exposure to noninvasive vascular diagnosis in the Tampa General Vascular Diagnostic Center. Interpretation of physiologic data relative to angiographic findings and clinical symptoms will be emphasized. This rotation should provide the student with a broad exposure to clinical
evaluation, diagnostic evaluation, and operative and non-operative therapy for a wide variety of arterial and venous diseases.

Evaluation
Students will be evaluated based on their ward performance and oral examination.

Length: 4 weeks  
Time(s): Full Time  
Hours: 60-70 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: 1 at TGH

MEL 7884  Vascular Surgery Research Elective
Drs. Bandyk and Faculty

This elective is designed to allow students an exposure to research in vascular diagnosis and fundamental problems in vascular disease. Current ongoing research projects include in situ replacement of infected vascular prostheses, immune-response to bacterial biofilms, hemodynamic factors modulating myointimal hyperplasia, color duplex ultrasonography for pre- and intraoperative diagnosis, and noninvasive bypass graft surveillance. This elective provides the student with an opportunity to have hands-on experience with instrumentation which maps arterial and venous flow fields, participate in surgical procedures, and analyze the outcome of arterial reconstructions. Vascular research experience provides further development of surgical technique and diagnostic skills as well as in-depth exposure to academic medicine. Students will be expected to read and participate in one area of research with effort rewarded by co-authorship on any published data generated.

Evaluation
Students will be evaluated based on their laboratory performance and an oral presentation at the Vascular Surgery Conference.

This elective is NOT available to visiting students.

Length: 4 weeks  
Time(s): Full Time  
Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 x

Availability: 1 at USF-MS

MEL 8811  General Surgery Acting Internship/Sub internship
Drs. Michael Albrink, Jared Frattini, Scott Gallagher, Steven Goldin, Colleen Jakey, Jorge Marcet, Michel Murr, Alexander Rosemurgy, Sharona Ross and Terry Wright

This elective places the senior student on the General Surgical Service of their choice, in the role of "intern." Responsibility will vary with the ability of each student, but the intent is for the student to assume all responsibilities usually assumed by an intern. The elective will afford the student an in-depth experience in total patient management so that these responsibilities may be assumed with confidence in the internship year, regardless of career field choice.

Attendance will be required at Grand Rounds, Morbidity, and Mortality Conference, and various other
The student will perform histories and physical examinations, write all progress notes, and all orders for diagnostic and therapeutic intervention with supervision from house staff. Students will be encouraged to perform procedures such as CVP placement, invasive monitoring line placement, chest tube placement, etc. Operating room experience will be extensive, and students can expect to participate with the operative intervention at the discretion of the operating surgeon.

**Evaluation**

Students will be evaluated based on their ward performance.

**Length:** 4 weeks  
**Time(s):** Full Time  
**Hours:** 70 per week

**Months:** 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

**Availability:** 3 at TGH; 1 at BP-VAH

**MEL 9999S  Independent Study in Surgery**

General Surgery Faculty

The objective of this course is to help the student understand the scientific basis and general principles of research in the field of General Surgery. This is accomplished by introducing him/her to the theoretical and practical aspects of conducting experimental and clinical research. Students may participate in an ongoing research project under close supervision by the primary faculty investigator based on availability and prior approval of the investigator. The involvement in research during this course will improve the student's ability to evaluate results published by other investigators and to develop the intellectual tools necessary for initiating research of his/her own. Students will be expected to read and participate in the research with effort rewarded by co-authorship on published data generated.

An Independent Study Application MUST have signatures of BOTH the elective faculty preceptor and Surgery Education Coordinator at least one month prior to the start of the elective. This form can be obtained from the Registrar's office.

This elective is NOT available to visiting students.

**Length:** 4 weeks  
**Time(s):** Full Time  
**Hours:** 44 per week

**Months:** 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 x

**Availability:** No Limit at USF-MS
MEL 7822  Clinical Urology Elective

Dr. Jorge Lockhart and Faculty

For additional information regarding this elective, please contact Edyth Roberts at (813) 259-8581 or erobert@health.usf.edu.

The Division of Urology, at the University of South Florida provides comprehensive, urologic patient-oriented care with concern for quality of life and education. Physicians and staff provide state-of-the art multidisciplinary patient care while striving to blend compassion, technology and advanced techniques.

The elective is an introduction to basic urology with emphasis on clinical service designed to provide a background for students planning to practice in related specialties. Students will be assigned to preceptors and rotate at the H. Lee Moffitt Cancer Center, and the Tampa General Hospital. The clinic rotations will be designed at a level of learning for medical students. During the rotation students will be supervised and instructed on a one-to-one basis by their preceptor(s), fellows, residents, and other qualified faculty responsible for teaching and evaluation.

Students will participate in the pre-operative work-up of urological patients. Students will learn from attending faculty and residents alike. Participation in cystoscopy and surgical procedures will form a significant part of the experience provided on this rotation. Students will follow patients to the operating room; assist in the procedures carried out, and will share in the responsibilities for post-operative care. Participation in the evaluation and treatment of common urological problems in the outpatient clinics will give the student an overall understanding of office urology. Students will attend and participate in all conferences and activities of the Urology Service and perform such activities assigned as a part of their added learning experience. Students will present a case to the weekly conference for urology residents and faculty during the last week of the rotation.

The objectives of this rotation are to provide exposure to the field of Urology as a background for practice in other areas and to offer closer acquaintance with this field for those considering it for possible future specialization.

Evaluation

Students will be evaluated based on their ward performance and oral examination.

Length: 4 weeks          Time(s): Full Time           Hours: 50 per week
Months: 1 x  2 x  3 o  4 o  5 x  6 x  7 x  8 x  9 x  10 x 11 x
Availability: 2 at TGH/MCC

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
REQUIRED CLERKSHP

BCC 8116  Skin and Bones Medicine Clerkship
BCC 8117  Oncology Clerkship
BCC 8190  Critical Care Senior Clerkship

BCC 8116  Skin and Bones Medicine Clerkship
Drs. Joanne Valeriano, Mary Lien, Helen Bateman, Eric Coris, Micki Cuppett, and Faculty

Skin & Bones is a multidisciplinary four-week clerkship designed to enhance the student’s competence in recognition, diagnosis, and treatment of musculoskeletal, rheumatologic, and dermatologic disorders. Students participate in clinical experiences in all three disciplines and are given instruction in various techniques used in these specialties followed by practice sessions in workshop format. In addition, students are exposed to therapy and rehabilitation techniques for musculoskeletal disorders. Skin and Bones students will be exposed to more than 20 hours of lectures and hands-on workshops which include:

1. Musculoskeletal lectures followed by skills sessions (foot, ankle, knee, hip, spine, shoulder, elbow, wrist and hand)
2. Demonstration and practice of rheumatologic exams utilizing standardized patients with actual rheumatologic conditions
3. Skin biopsy and suturing workshop utilizing pig’s feet
4. Injection and aspiration workshop utilizing injection models
5. Musculoskeletal radiology lecture (x-ray, MRI, CT scan)
6. Arthur, an interactive learning tool, which allows students the ability to construct differential diagnoses and identify joint pattern recognition for the most common musculoskeletal diseases.

Objectives
1. Perform an appropriate history and physical examination on patients with common systemic rheumatologic disease, dermatologic, orthopedic and other musculoskeletal conditions.
2. Recognize the clinical, laboratory, and radiographic features of the more common rheumatologic, dermatologic, orthopedic and musculoskeletal diseases
3. Understand the pathophysiology of the common rheumatologic, dermatologic, orthopedic, and musculoskeletal diagnoses.
4. Construct an appropriate differential diagnosis when evaluating patients with systemic rheumatic disease, dermatologic, orthopedic, and other musculoskeletal conditions
5. Apply the skills and medical knowledge learned during the didactic sessions to evaluate patients in rheumatology, dermatology, orthopedics, and sports medicine clinics and design an appropriate differential diagnosis, and diagnostic and therapeutic plans for the more common conditions.

Length: 4 weeks          Time(s): Full Time           Hours: 50 per week

Months: 1 o  2 o  3 o  4 o  5 o  6 o  7 o  8 o  9 o  10 o 11 o.

Periods will be cancelled if enrollment is under 7 students for any given period.

Availability: 13 at USF-MS

This course is NOT available to visiting students.
BCC 8117  Interdisciplinary Oncology Clerkship

Dr. Dessureault and Faculty

In this four-week required course all students will be expected to learn the fundamental principles of oncology and the multidisciplinary approach to the prevention, diagnosis, treatment, and rehabilitation of cancer patients.

Students will be expected to know the natural history of common cancers (e.g. breast, lung, colorectal) and be familiar with the diagnosis and management of individual cancer patients at the time of diagnosis and throughout the course of their disease.

Students will be expected to understand the concept and significance of staging. They will be expected to have a basic knowledge of cancer treatment modalities, including surgery, radiotherapy, chemotherapy, immunotherapy, and endocrine therapy. They will require an understanding of the fundamental biology of cancer, carcinogenesis, epidemiology, tumor markers, tumor pathology, clinical pharmacology, tumor immunology, and endocrinology, as well as an understanding of potential benefits and complications of multimodality therapy. They will be expected to understand the causes of pain and suffering in cancer patients and be familiar with the appropriate treatment options for palliation of symptoms. Students will also be expected to have sufficient familiarity with statistical methods to properly evaluate results of published research studies.

The course will consist of a) a preceptor-based rotation in one of the clinical programs at the Moffitt Cancer Center & Research Institute; b) a core curriculum of lectures, student “mock” tumor boards, small group seminars, student presentations, and journal clubs; and c) a required set of select experiences critical to the full understanding of total cancer care. Students will be evaluated by a written examination, by their preceptor, and by participation in core activities and required experiences.

Length: 4 weeks          Time(s): Full Time           Hours: 50 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o
Availability: 12 at USF-MS

This course is NOT available to visiting students.
The goals of this clerkship are to develop an approach to the care of patients with complex, critical illnesses; to understand the physiologic and pathologic abnormalities that occur in ICU patients; and to apply science principles basic to the practice of medicine in the clinical management of complex illness.

After being exposed to critical care patients in a variety of disciplines, the student will demonstrate specific knowledge, skills, and attitudes relevant to critical care practice. The student will have an understanding of critical care guidelines and practices so that the student will recognize patients with immediate life threatening conditions, institute appropriate initial therapy, and outline an initial course of management for patients with serious conditions requiring critical care.

This course is required for USF senior medical students and will include a rotation either through the Medical ICU, Pulmonary/Critical Care Consult ICU, Anesthesia Critical Care or Surgical/Trauma ICU at the James A. Haley Veterans Hospital, Tampa General Hospital or Morton Plant Hospital. Students will be evaluated by written, oral, and/or practical methods which include direct patient contact and simulation training. In addition, the students will evaluate electro-cardiograph (ECG) tracings through weekly quizzes to enhance interpretation skills.

Length: 4 weeks Time(s): Full Time Hours: 80 per week
Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 x 8 o 9 o 10 o 11 o
Availability: Min of 10 and Max of 12 at USF-MS

This course is NOT available to visiting students.
INTERDEPARTMENTAL ELECTIVES

MEL 7320G  Externship in Basic Science
MEL 7740  Radiation Oncology
MEL 8134*  Introduction to Internal Medicine-Pediatrics
MEL 8939  Clinical Science Review
MEL 8965  Theory and Practice of Teaching
MEL 9999G  Independent Study in Basic Science
MEL INT  Interview Month

*PROVISIONAL NUMBER SUBJECT TO CHANGE

MEL 7320G  Externship Basic Science

Length: 4 weeks  Time(s): Full Time  Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 x 8 x 9 x 10 x 11 x

Availability: Determined by need

MEL 7740  Radiation Oncology

Drs. Harris, Stevens, Dilling, Trotti, Berk, Hoffe, Heysek, Chinnaiyan, Yu, Torres-Roca, Biagioli, Rao, Lavey, Tomblyn, and Shridhar

The Department of Radiation Oncology, Moffitt Cancer Center, provides comprehensive, patient-oriented care for all types and stages of cancer using the most technically advanced equipment with concern for quality of life and education. Physicians and staff provide state-of-the-art multidisciplinary patient care while striving to blend compassion, technology and advanced techniques.

This elective is an introduction to basic Radiation Oncology with emphasis on clinical service designed to provide a background for students planning to practice in related oncology fields or in Radiation Oncology. Students will be assigned to one or two preceptors and will learn about the various Radiation Oncology applications to a wide range of disease sites. The clinic rotations will be designed at a level of learning for medical students. During the rotation students will be supervised and instructed on a one-to-one basis by their preceptor(s), residents, fellows and other qualified faculty responsible for teaching and evaluation.

Medical Students will participate in all aspects of Radiation Oncology including clinical treatment planning, treatment delivery, medical physics, dosimetry, simulation, and port film evaluation. Students will understand the natural history of cancers, the role of radiation therapy in the treatment of cancer, general principles of oncology, basic radiation safety, multidisciplinary patient care, specialized treatment procedures, clinic structure and supportive care. Students will learn how to conduct a thorough history and physical examination and how to examine patients to assess tumor response and progression. To enhance the clinical experience and further knowledge, students will be required to do some reading of textbooks and the medical literature as assigned by their preceptor(s). In addition, students will attend regularly scheduled tumor board conferences and didactic programs as assigned by their preceptor(s).

Length: The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.
Time(s): Half-time elective or full-time elective. Two half-time electives or one full-time elective must be selected for each elective period.
Hours: The approximate hours per week the student will be involved with this elective.
Months: Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.
Availability: The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm.
Rotation requirements:
1. Read at least 10 pertinent articles from the medical literature.
2. Attend all departmental conferences and multidisciplinary conferences with the preceptors.
3. Participate in simulations, procedures, follow-ups, on treatment visits and treatment planning.
4. Complete at least 4 history and physical exam documents on new patients consults seen with the preceptors.
5. Complete a treatment planning project. All requirements must be reviewed with the preceptors for evaluation and feedback.

At the completion of the elective, training faculty and students will complete performance evaluations.

Length: 4 weeks   Time(s): Full time   Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 x 7 x 8 x 9 x 10 x 11 x

Availability: 2 at MCC

**MEL 8134** *Introduction to Internal Medicine-Pediatrics*

Drs. John McCormick, Erika Abel, Denise Edwards, and Hugo Narvarte

*PROVISIONAL NUMBER SUBJECT TO CHANGE*

This elective is designed to introduce senior students to the specialty of Internal Medicine-Pediatrics. Under the supervision of faculty, students will care for adults and children in an ambulatory primary care setting. Students will also have the opportunity to participate in rounds on inpatients at Tampa General Hospital. In addition to clinical experiences, didactic sessions will include participation in the weekly resident clinic curriculum, as well as department conferences (i.e. Grand Rounds, noon conferences). This elective will provide students with a robust clinical experience in primary care as well as a better understanding of Med-Peds as a career.

Objectives
1. Evaluate and treat common acute problems encountered in adults and children in a primary care setting
2. Evaluate and treat chronic conditions in adults and children in a primary care setting
3. Perform appropriate preventative health maintenance measures in adults and children including well child care, vaccinations, anticipatory guidance, and screening tests
4. Gain familiarity with procedures common to the primary care setting including arthocentesis, joint injection, and circumcision
5. Gain appreciation for the specialty of Internal Medicine-Pediatrics

Methods
Senior medical students will see patients in the Internal Medicine-Pediatrics combined clinic at the USF Health South Tampa Center for Advanced Health Care under direct supervision of faculty. Trainees will also attend didactic conferences and participate in the weekly resident clinic curriculum. Students will also have the opportunity to see patients in an inpatient setting.

Evaluation
Ongoing as well as summative final assessment will be provided by supervising faculty. Students will also be required to prepare and present a primary care topic during their rotation.

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on http://hsc.usf.edu/medicine/registrar/new/course_key.htm;
The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

Time(s): Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

Hours: The approximate hours per week the student will be involved with this elective.

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**MEL 8939  Clinical Science Review**

Faculty

The Clinical Science Review I and II course is a variable contact hour multi-disciplinary course for medical students. This comprehensive course will consist of an in-depth review and application in the clinical science areas and will include basic science review if deemed appropriate. This course is for remedial work only.

**Section I**
- Emergent and Urgent Care Clerkship
- Integrated Internal Medicine-Pediatrics Clerkship
- Maternal Newborn Health Clerkship
- Neuropsychiatry Clerkship
- Primary Care and Special Populations Clerkship
- Surgical Care Clerkship

**Section II**
Additional areas not identified in Section I above.

The course objective is to enhance clinical skills in any of the listed Clinical Sciences.

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**MEL 8965  Theory and Practice of Teaching**

Dr. Frazier Stevenson

This elective will introduce senior students to the practice and theory of adult education. They will teach for 70 hours in the College of Medicine in basic and clinical sciences, paired with seminars that introduce them to education pedagogy and effective teaching technique. They will reflect and write on their teaching experience, and receive feedback from students, course faculty, and the elective director about their teaching performance. The course is longitudinal, so teaching activities can occur throughout the senior year, tailored to students' individual schedules.

**Objectives**
1. Develop the practice of good clinical and small group medical school teaching
2. Understand the theory of adult education
3. Reflect on teaching experiences in written and verbal media
4. Be able to deliver effective feedback to students and peers
Evaluation

By the end of the elective, students should feel competent to teach in both small group and clinical teaching settings. They will understand how to give feedback to individuals. Their progress will be assessed by review of student teaching evaluations, observation of COM course leaders, and direct observation by the elective director.

All interested students must meet with and get approval from Dr. Stevenson before registration. Students must agree to hours requirements and need to inform concurrent senior course directors of their involvement in this longitudinal course.

Length: 40 weeks       Time(s): Full Time       Hours: 4 per week

Months: Year long

Availability: 10 at USFMS

**MEL 9999G  Independent Study in Basic Science**

Length: 4 weeks       Time(s): Full Time       Hours: 44 per week

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: Determined by need

**MEL INT  Interview Month**

This course number is designated for students to utilize when scheduling interviews, studying for the USMLE Step II Exam, or for participating in research experiences.

Length: 4 weeks

Months: 1 o 2 o 3 o 4 o 5 o 6 o 7 o 8 o 9 o 10 o 11 o

Availability: No limit at USF-MS

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**Length:** The length of time a student will be in the elective: 4 weeks = one elective period. 4 to 8 weeks indicates the elective can be taken for 1 or 2 elective periods.

**Time(s):** Half-time elective or full-time elective. Two half-time electives OR one full-time elective must be selected for each elective period.

**Hours:** The approximate hours per week the student will be involved with this elective.

**Months:** Each month (1-11) is designated as: o = Open, x = Closed, s = not able to start during this month; this designation is used for electives of length greater than four weeks.

**Availability:** The number of students able to take an elective at an offered site during any month the elective is open. Site codes are listed on [http://hsc.usf.edu/medicine/registrar/new/course_key.htm](http://hsc.usf.edu/medicine/registrar/new/course_key.htm).