2013-2014 Electives Catalog

Explore each category of elective offered by USF Health MCOM by clicking on its name. Please reference the Course Key for further information.

It is the students' responsibility to verify where and to whom they report before the start of each course no later than the Friday before the start of the rotation.

Anesthesiology

<table>
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<tr>
<th>Course Key</th>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tr>
<td>MEL 7320Z</td>
<td>1,2,3,4,5,6,7</td>
<td>Year 4 status</td>
<td>no limit @USFMS</td>
<td>FT, 44 hr wk</td>
<td>4</td>
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<td>Externship in Anesthesiology Externship form required.</td>
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MEL 7760:
Anesthesiology Elective
Dr. Malcolm Klein
Location:
Second floor Anesthesia Department
James A. Haley VA Medical Center
13000 Bruce B. Downs Blvd., Tampa, FL 33612

Objective
The primary objective of this course is to introduce the student(s) to the practical/hands on approach to anesthesiology with emphasis on airway management, respiratory physiology, cardiovascular physiology, perioperative management, and invasive procedures.

Medical students are expected to make preoperative rounds with the anesthesiology staff on patients scheduled for surgery. Preoperative examinations and assessments of patients.
are expected. Participation in the decisions of anesthetic drugs and anesthesia choice are required. Students will assist in the preparation of the patients for surgery which include starting IV's, connecting monitoring equipment, learning the pharmacology of various anesthetistic agents, and learn to problem solve basic anesthetic situations. Emphasis on airway management include placement of LMAs, LTDs, masking patients, and intubation via direct laryngoscopy and video laryngoscopy. Invasive procedures include arterial line insertions and central line placement. An introduction to peripheral regional blocks will be included for those students that express an interest. Students will follow their patients throughout the anesthetic care into the postoperative recovery for continuity of care.

The course is directed towards medical students who plan to enter Anesthesiology, Critical Care Medicine, or Emergency Medicine. The course emphasis will be tailored to the medical specialty the extern expects to enter and the skill set of the student. Excellent hand-eye coordination is a must for this course, since students are expected to perform procedures on patients.
Evaluation

Oral, practical, and/or written evaluations of medical students will include clinical performance, medical knowledge, professionalism, motivation, and ability to problem solve.

1st Contact Person: Layne Jackson
Telephone: 1-813-978-5946
E-mail: Layne.Jackson@va.gov
Room: 2D-207

2nd Contact Person: Dr. Lee
Telephone: 1-813-972-2000 ext. 5157
E-mail: Lelan.d.Lee@va.gov
Room: 2C-207

Basic Science Selectives

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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</thead>
<tbody>
<tr>
<td>BMS 8187: Advanced Human Anatomy</td>
<td>Dr. Arslan and Faculty</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>none</td>
<td>No limit@USF-MS</td>
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</table>

Objectives

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.
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 step-by-step 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.

Orhan E. Arslan, DVM, PhD
Director of Anatomy Department of Pathology and Cell Biology,
University of South Florida
College of Medicine
12601 Bruce B Downs Blvd MDC 2012
Tampa, FL 33612
(813) 974-0636

Track

Required for Radiology
One of the options for Emergency Medicine, and Family Medicine

Note: This course is also listed under Internal Medicine.
Drs. Nagwa Dajani and James Mayer

This elective is not available to visiting students.
The goals of this course are to review various aspects of basic anatomy, physiology, pathology, and genetics that are found within the daily clinical care setting. Students will be asked to provide a summary power point presentation based on a clinical patient management topic. The topic will focus on the underlying fundamental basic science knowledge and skills required to fully utilize the clinical decision making process. This course will be held over a two week period. It will be approved first for those students designated on the Ob/Gyn track and then be available to a limited number of students on a first come, first serve basis.
Understanding the basis for differences in both drug responses and psychosocial therapies forms the basis for treatment selection in psychiatric disorders. This course will explore and expand knowledge and applications of (a) why specific medications may have either a therapeutic benefit or emergent adverse effect for some, but not all individuals; (b) genetic polymorphism of neurotransmitter-associated proteins including enzymes, transporters and receptors that mediate chemical neurotransmission, and the possible role of these alterations in the manifestation of behavioral disorders; (c) how psychosocial factors influence the manifestation of both positive and negative health related behaviors; and (d) the utility of empathy with patients and its impact on differential therapeutics inclusive of integrating pharmacotherapy and psychotherapy in optimal care.
**Goals and Objectives**

The goals and objectives of this course are to complement the basic and clinical information gained during their first three years of medical school and provide students a solid understanding of both pharmacogenomics and the behavioral aspects of patient care. Specifically, Pharmacogenomics and Psychosocial Aspects of Patient Care is designed (a) to provide an understanding of the interactions between genetic inheritance, drug actions, and the body’s response to drugs; and, (b) to expand on personalized medicine and patient-centered care that were previously learned or encountered by the medical student during the first three years in medical school. A working knowledge that psychiatric treatments (either psychopharmaco logical or psychosocial) can be tailored made and adapted to the individual is essential as these issues have implications for patient health, adherence to treatment and patient-physician relationship.
Teaching faculty
USF faculty of Psychiatry

Evaluation
Students will be evaluated based on faculty evaluation of interaction, participation, and presentation on a current issue in pharmacogenomics.

Track
One of the options for Emergency Medicine, Family Medicine, Psychiatry, and Pediatrics

MDE 8521: Applied Head and Neck Anatomy
Dr. Orhan E. Arslan, DVM, PhD

The course will demonstrate and enforce the interface between clinical and foundational science, and reinforce skills of literature review and mechanistic thinking about clinical problems. Specifically, students will review the anatomy of the head and neck through online materials, lectures, and dissection. Students will learn of common clinical correlates, imaging studies, and surgical procedures through lectures by clinical faculty.

| MDE 8521: Applied Head and Neck Anatomy | Year 4 status | 6-30@USFMS | FT, 40 hr wk | 2 |
Goal and Objectives

The overall goal of this course is to provide a thorough review of human head and neck anatomy from a clinical perspective. Topics covered during the elective will include anterior and posterior triangles of the neck, the larynx and pharynx, the face, the infratemporal fossa, the oral cavity and submandibular triangle, the eye and orbit, the ear, the cranial base, the blood supply and venous drainage of the brain, the cranial nerves, the meninges, and major gross brain structures. The objective is to enable students to recognize the anatomical background of common clinical problems and surgical procedures.

Teaching Faculty

Summer Decker, PhD and other USF Health faculty

Evaluation
Students will be evaluated on the basis of their course participation in discussions and dissection and on their oral presentation of a chosen and approved research project.

**Track**

One of the options for Neurology, Neurosurgery, Orthopaedics, Emergency Medicine, Family Medicine, and Pediatrics.

**MDE 8522: Applied Anatomy of the Musculoskeletal System**

Dr. Orhan E. Arslan, DVM, PhD

Students will review the anatomy of the back and extremities through the use of assigned online materials, lectures, and dissections. Students will learn of the clinical correlation, common imaging studies, and common surgical procedures of the musculoskeletal system.

**Goals and Objectives**

| 1,2,3,4,5,6,7,8,9,10,11 | Year 4 status | 6:30@USFMS | FT, 40 hr wk | 2 |
The overall goal of this course is to provide a thorough review of human osteology and musculoskeletal anatomy from a clinical perspective. The objective is to enable students to recognize the anatomical background of common clinical problems and surgical procedures. Specifically, the gross anatomy of the back and limbs will be reviewed, and the clinical relevance of this anatomy will be emphasized.

Teaching faculty
Summer Decker, PhD, and other USF Health faculty

Evaluation
Evaluation of the student's final oral presentation with respect to
- knowledge of the anatomical basis to clinical practice,
- the incorporation of the topic of basic sciences and
- the references cited

Track
One of the options for Emergency Medicine, Family Medicine, Orthopaedics, and Pediatrics
This course is an introduction into the pathophysiology of common vision threatening disorders with emphasis on the scientific foundations of this knowledge. Clinical methods sessions are to complement the basic science review.

**Teaching Faculty**

USF and VHA faculty of Ophthalmology

**Evaluation**

Students will be evaluated by direct observation of their participation in didactic sessions and clinics, their understanding of the correlation between the scientific foundations of ophthalmology and clinical utility, and a student project.

**Track**

Required for Ophthalmology

One of the options for Emergency Medicine and Family Medicine
The course will provide a conceptual framework to think about brain disease following the National Institutes of Mental Health Strategic Plan agenda, seeking new ways of classifying psychopathology based on dimensions of observable behavior and neurobiologic measures. Specifically, this interdisciplinary course is designed to provide students with basic science lectures integrating state-of-the-art knowledge about how brain networks integrate into dimensions of behavior spanning the spectrum of health to disease, with the experimental and clinical application of therapeutic techniques (neurostimulation and optogenetics). Students will learn in depth about dynamic integration of networks and functional brain anatomy in week one, and about therapeutic and experimental applications in week two. Classroom lectures during the morning will be integrated with laboratory and neurotherapiea clinic attendance in the afternoon. At the end of the course, all students will be required to present a small conceptual paper on a topic of their choice related to course materials.
Goals and Objectives

At the end of the course students will:

- Understand the concept of dimensions of behavior with different classes of variables (or units of analysis) including genes, molecules, cells, neural circuits, physiology, behaviors, and self-reports.
- Describe the circuits that represent the core aspect of these classes of variables – as central to the various biological and behavioral levels of analysis.
- Understand the selection, implementation and limitations of modern treatment modalities for brain disorders (neuromodulation and optogenetics).
- Integrate the basic science knowledge described with clinical applications and laboratory research problems.
- Critically evaluate the pertinent literature to one topic of their choice and summarize it into a 20 minute conceptual presentation.
### Teaching Faculty

Dr. Patrick Marsh, Dr. Jamie Fernandez, Dr. Andrew Kozel, Dr. Luna Albaferrara, Dr. Sandra Stock

### Evaluation

Students will be evaluated based on faculty evaluation of interaction, participation, peer evaluation, and a final scholarly project.

### Track

One of the options for Emergency Medicine, Family Medicine, and Psychiatry

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<tr>
<th>Track</th>
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<tbody>
<tr>
<td>MDT 8200A: Infectious Diseases</td>
<td>10A,10B,11A,11B</td>
<td>Drs. Charunut Somboonwit MD, Beata Casanas DO, Sally Alrabaa MD, and Susan Pross PhD</td>
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</table>

Clinical experiences are directed by the 3 section leaders – Drs. Somboonwit, Casanas, and Alrabaa with 2 students max per section. Students would be together.

### Goals and Objectives

This course will combine evidenced-based didactic lectures on infectious diseases (including antibiotics, infection, and epidemiology), interaction with the clinical faculty, presentations, and discussions.

### Evaluation

Students will be evaluated based on literature research for clinical rounds, presentations, and discussions.

### Teaching Faculty

USF and Moffitt faculty

### Track

One of the options for Dermatology, Emergency Medicine, Family Medicine, Internal Medicine, and Pediatrics
MDT 8200B: The Genetics of Channelopathies and Cardiomyopathies

Dr. Sanders H. Chae

The course will have 3 components:
- Didactics
  - Basic Science Lectures
  - Clinical Lectures
  - Journal Clubs
  - Teaching Conferences
- Clinical Activity
  - USF Cardiology Clinic
  - Research/Presentations

Goals and Objectives
This course is designed to demonstrate and enforce the interaction between clinical and foundational science, reinforcing skills of literature review.

Teaching Faculty
USF Department of Cardiology, Eric Bennett PhD, Craig Doupnik, PhD, and Jiashin Wu, PhD

Evaluation
Students will be evaluated based on interaction with the faculty, a research project, and oral or written presentations.

Track
One of the options for Emergency Medicine, Family Medicine, Internal Medicine, and Pediatrics

MDT 8200C: Advanced Concepts in Gastroenterology

Dr. Patrick Brady, MD

This course is designed to give students an appreciation for the relationship between basic science and clinical gastroenterology. It will focus on four m

Goals and Objectives
This course will address the relationship of innate and acquired immunity to the disordered immune response in inflammatory bowel disease, the brain

Teaching faculty
Drs. Joel Richter, MD, Jay Mamel, MD, Scoojong Hong-Chae, MD, and Yasser Saloum, MD

Evaluation
Students will be evaluated based on direct faculty observation and feedback from patients and families during patient interactions, participation in confri

Track
One of the options for Emergency Medicine, Family Medicine, Internal Medicine, and Pediatrics

MDT 8200D: Molecular Biology of Cancer and Personalized Cancer Care

Dr. Alberto Chiappori, MD
The course is a review of the signaling transduction pathway that in “recent” years have become relevant to the study, but most important to the treatment of cancer and are the basis for the new paradigm of personalized medicine in oncology that Moffitt is championing.

Morning didactic lectures as well as journal club presentations and faculty case presentations will be held in the Moffitt FOB1 Conference Room. Laboratory and specialty outpatient clinic rotations will take place at their corresponding locations in the Moffitt Campus.

The course consists of:

- Basic science didactic lectures that describe the pathways and how they are relevant as targets to treat cancer (theory behind personalized medicine)
- Didactic lectures that review the methods to analyze those pathways like IHC, FISH, gene analysis (microarray, DNA sequencing), proteomics, etc.
- Rotations through some of the Moffitt laboratories to see first hand how these technologies work.
• Outpatient clinic rounds to see patients that are benefiting of the therapeutic options provided by these advances (practice and reality behind personalized medicine)
• Independent Research Project will consist of a project where the students will be first provided, in advance, seminal basic science articles as background references. Students will review the literature, identify, analyze and present clinical publications (minimum 2) relevant to the application of the personalized medicine concept to the care of the oncologic patient.
• Interactive case presentation where the Faculty will present real cases of their own practice where the students will be asked to evaluate the patient (decision making of diagnosis and treatment) with real time faculty feedback (labs, x-rays, scans, path, molecular studies).
Goal and Objectives

The goal of this course is the reintroduction to the pathophysiology of common solid and hematologic malignancies with emphasis on the basic scientific foundations (molecular and technologic) currently available to better understand them and treat them. Clinical methods sessions are to complement the basic science review.

Teaching Faculty

Faculty at Moffit Cancer Center and the USF Dept of Oncologic Science

Evaluation

Students will be evaluated on case presentations, journal club presentations, and interaction in clinic and didactic sessions.

Track

One of the options for Dermatology, Emergency Medicine, Family Medicine, Internal Medicine, and Pediatrics
Advanced Respiratory Pathophysiology
Dr. Kendall F. Morris, PhD

This course is specifically designed to enhance student competency in Respiratory Pathophysiology. It will provide an overview of key concepts and present the clinical significance of principles of pulmonary physiology. Particular emphasis will be placed on recent advances in the understanding of pulmonary physiology. The course consists of in-depth reading, didactic sessions and case scenario experience. Students will prepare and present a case report.

Goals and Objectives

The goal of the course is to provide a review of pulmonary physiology as applied to clinical scenarios. Topics will include but are not limited to Adult Respiratory Distress Syndrome (ARDS), asthma, hyperbaric medicine and airway inflammation.

Teaching faculty
Evalu
a
tion

Students will be evaluated on oral presentations, application of the principles of pulmonary physiology to clinical scenarios, the incorporation of historical and recent basic science discovery in oral case reports, and the use of references and judgment of evidence in case reports.

Track

One of the options for Emergency Medicine, Family Medicine, and Pediatrics

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
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<th>Hours/Week</th>
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<td>MDT 8600: Advanced Surgical Anatomy and Pathophysiology</td>
<td>5</td>
<td>Year 4</td>
<td>10@USFMS, FT, 40-60 hr wk</td>
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</table>
This course is specifically designed to prepare students for surgical internship with a focus on the basic principles that must be mastered by all general surgeons and should be familiar to all medical doctors. It will provide an overview of the key concepts in anatomy and physiology that are fundamental to the care of surgical patients and the students' long term success as surgeons. The course consists of a one-month intensive reading, dissection and case scenario experience. This is a 4-week elective. Lectures will be given at the USF South Tampa Center, Tampa General Hospital, or the USF campus. Anatomic dissections will take place at the medical school gross anatomy lab.

Goals and Objectives

At the completion of the elective, students should be able to:
have an undisclosed logy, anatomic holology and physiologic man-
3. Have an understanding of the postoperative psychosocial state.
5. Be able to recognize and treat complications in the postoperative patient.
Students must successfully complete each component of the course in order to receive a passing grade for the course. Requirements include: Morbidity and Mortality Conference, Grand Rounds, orientation, weekly quizzes, pre-test and post-test, didactic lectures, anatomic dissections, and clinical case conferences.

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**Track**

Required for General Surgery and Surgery Subspecialties

MDT 8800: Neuroimmunology Component in Neurological Diseases

Drs. Marzena Wiranowska, PhD and Alfred T. Frontera, MD

| 10B, 11A | Year 4 status | No Limit@USFMS | FT, 40-60 hr wk | 2 |
This course is designed to demonstrate that most of the neurological diseases have an immune/inflammatory component, and the list of neurological diseases in which the immune system plays an important role continues to grow. Because of the critical correlation between the nervous system and immune system, neurologists should be aware of neuromunologic principles especially as immunologic therapeutic strategies are currently being tested in many neurologic disorders. The course will be a balance between basic science and clinical activities and include seminars, journal clubs, clinical correlation and paper presentations by the students selected from the 'List of Major Topics'.

Major Topics
- Multiple Sclerosis (MS)
- Acute Disseminated Encephalomyelitis (ADEM)
- Neuromyelitis Optica (NMO)
- Myasthenia Gravis
- Acute Inflammatory Demyelinating Polyradiculoneuropathy (Guillain-Barre syndrome)
- Chronic Inflammatory Demyelinating Polyradiculoneuropathy (CIDP)
- Epilepsy (Mesial Temporal Sclerosis, see also paraneoplastic syndromes such as Anti-Voltage-Gated Potassium and anti-NMDA receptor antibody syndromes)
- Movement Disorders (Hashimoto’s encephalopathy, Parkinson’s Disease)
- Alzheimer Dementia
- AIDS Dementia
- CNS Immune Reconstitution Inflammatory Syndrome (IRIS)
- CNS infections e.g., meningoencephalitis
- Cerebrovascular Disease (e.g., Stroke, CNS Vasculitis)
- Primary CNS Tumors
- Paraneoplastic Syndromes
- Prion Diseases (Creutzfeldt-Jacob Disease)
- Autism
Teaching Faculty

Alfred T. Frontera MD, Marzena Wisniewska, PhD, Tuan Vu, M.D, Liral Katzin, MD, Selim Benbadis, MD, Ali Bozorg, MD, Juan Sanchez-Ramos, MD, PhD, Robert Hauser, MD, W. Scott Burgin, MD, David Decker, MD, David Rose MD, and Frank Vrionis, MD, PhD, Michael Yu, MD, Nem Tran, MD, and Ed Pan, MD

Evaluation

Students will be evaluated based on punctuality of assignments, presentations, interactions with patients and staff, discussions, and a final product (oral or written presentation).

Tracks

One of the options for Emergency Medicine, Family Medicine, Neurology, and Pediatrics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Instructor(s)</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MEL 8351:</td>
<td>Harvey Elective in Cardiology</td>
<td>Dr. Fred Beane and Dawn M. Schocken, MPH</td>
<td>4</td>
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</tbody>
</table>
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.

Track

One of the options for Emergency Medicine, Family Medicine, and Internal Medicine

Note: This course is also listed under Internal Medicine.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
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<td>Externship in Dermatology</td>
<td>1,2,3,4,5,6,7</td>
<td>Year 4 status</td>
<td>no limit</td>
<td>FT, 44 hr wk</td>
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<td>Externship form required.</td>
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<tr>
<td>MEL 7324:</td>
<td>Elective in Dermatopathology</td>
<td>8,9,10,11</td>
<td>Year 4 status</td>
<td>2@USDMS</td>
<td>FT, 40-44 hr wk</td>
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<td>This course is designed for students interested in expanding their knowledge of dermatopathology.</td>
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<tr>
<td>MEL 8321:</td>
<td>Clinical Dermatology</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
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<td>BCC 7164, BCC 7144</td>
<td>FT, 40-44 hr wk</td>
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<td>3@USFMC</td>
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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 Morsani Center, the James A. Haley VA Hospital, Moffitt Cancer Center, and other ancillary clinics. The student will attend various weekly conferences with the Dermatology residents.
Student progress and performance in the clinical setting will be evaluated by the faculty and residents.

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

| MEL 9999L: Independent Study in Dermatology & Cutaneous Surgery Faculty | 1,2,3,4,5,6,7,8,10,11 | Year 4 status | no limit @USFMS | FT, 44 hr wk | 4 |
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.
### MEL 7258:
Elective in Rural or Underserved Medicine (AHEC)

<table>
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<tr>
<th>Periods</th>
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<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>Year 4 Status</td>
<td>1@SCHC 1@DMH 1@CCHD 1@PCHG 1@TFHC 1@CHCP</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
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Faculty and Staff at Premier Community Health Care Group (Hialeah City), Suncoast Community Health Care Centers (Ruskin, Dover, Plant City), Tampa Family 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 mileage stipend to students.
Goals and Objectives
Intruclidean/semi-study to crystals-cultural uses in althecare
Undertake understanding and mechanics and distinctions for cousins and referrals in actual versus practical settings.
5. Evaluate the significance of real or underdeveloped problem, including organization of Elective.
1. Arrangement for a monumental will be made through the Department of Family Medicine in conjunction with the Coast North HEC and Coast South HEC.

2. Arrangement for some commemorative will be made through the Department of Family Medicine in conjunction with HEC.
Evalu ation

The assigned faculty preceptor will provide an individual evaluation addressing the student's adaptability and understanding as well as knowledge, judgment, and rapport.

Avail ability

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.

MEL 7259: Emergency Medicine Elective
Emergency Room Faculty at Florida Hospital North Pinellas

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 (large)
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.
Senzise the student to the motivation of material. Teach the student how to deal with family members during a medical crisis.
9. Stimulate the student's interest in primary care and family medicine.

**Evaluation**

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

**Preceptor evaluations**

For FHNP: contact Dr. Michael Longley at (727) 343-3699 or (813) 769-7252.
MEL 7267: **International Health Elective**  
1,2,3,4,5,6,7,8,9,10  
Year 4 status  
4@EXT  
FT, 45-50 hr wk  
4  

Dr. Eduardo Gonzalez and Dr. Carlos Callegari  

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 obtain an international medical experience during their fourth year.  

Experiences may include:  
- Foreign travel and provision of medical services  
- Academic study abroad (readings and lectures) on the health problems of a particular area  
- Preparation and/or presentation of a report on the student's experience  

**Objectives**  
1. Identify the general and specific health care needs of a particular foreign country  
2. Identify the role of the primary care physician 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 and/or Dr. Callegari prior to scheduling the elective.  

**Course Requirements**  
Any interested student MUST meet with Dr. Gonzalez and/or Dr. Callegari to plan the elective. Ideally, this should be done by the middle of the second semester of the third year.  

Emergency medical insurance is required for all electives abroad.  

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MEL 7320F: **Family Medicine Externship**  
1,2,3,4,5,6,7,8,9  
Year 4 status  
no limit@ EXT  
FT, 44 hr wk  
4  

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 are not required to provide a rotation application form, as this is handled by the Department of Family Medicine. You must submit the completed externship application form by the middle of the second semester of the third year. Students are required to have completed all required courses in the family medicine curriculum.  

For further information contact the Department of Family Medicine Education Coordinator at (813) 974-2445 or lgiordan@health.usf.edu.  

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MEL 8251: **Acting Internship - Family Medicine**  
Faculty and Staff at Bayfront Medical Center and Morton Plant Mease Health Care  
1,2,3,4,5,6,7,8,9,10,11  
Year 4 status  
1@BFMC, 1@MPMHC  
FT, 50 hr wk  
4  

Objectives  
1. Ingest the student into the hospital atmosphere  
2. Make the student feel at home  
3. Introduce the student to the hospital team  
4. Provide clinical experience  
5. Prepare the student for a future residency  
6. Help the student understand the medical system  
7. Foster a sense of community  
8. Encourage the student to think critically  
9. Develop the student's clinical skills  
10. Foster the student's professionalism.
services such that student functions at the level of an intern, managing their own patients under the supervision of a senior resident to enhance the student's satisfaction to develop.
2. pan 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 hospital admissions.

3. Educate the student regarding common medical problems requiring hospital admission, indications for common procedures.
Responsibilities

The student is expected to function as a Family Medicine intern under the direct supervision of the senior resident and attending. 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 the AI.

Evaluation
• Fund of medical knowledge
• Quality of assessments, plans, and presentations
• Clinical decision-making skills
• Attitude, motivation, and rapport with patients and team members

**Scheduling**

To determine availability of elective space at Morton Plant Family Medicine Residency, contact Lee Blomberg at (727) 467-2517. Housing may be 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) 893-6789.

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

ONLY MPMHC IS AVAILABLE TO VISITING STUDENTS
**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 Family Medicine and Sports Medicine Residency Electives. 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.

**Other**

Last day to drop/add is end of Period 4.

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**MEL 8255: 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**

BFMC- 1,2,3,4,5,6,7,8
FH-1,2,3,4,5,6,7,8
HH-3,4,5,6,7
TMH-2,3,4,5,6,7,8
SVMC-3,4,5,6,7,8
MPMHC- 1,2,3,4,5,6,7,8

Year 4 status: 2@BFMC 2@FH 1@HH 2@TMH 2@SVMC 2@MPMHC

FT, 44 hr wk
1. In trodue the stude to the latio of Fam family Me urc to the medcal community
2. Demystify the location of a bulb at the pole and the effect utilization of others particularly concepts.
I'm proving the student's skills and clinical judgment by and effecting and supervising and performing

4. Develop the architectural structure of a family medicine, mental health, social, and preventive medicine.
Evalu\textit{ation}

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

- Fund of medical knowledge
- Quality of assessment and presentation
- Clinical judgment as indicated by the rationale of diagnostic and management plans
- Attitude and rapport with patients and families
- 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. Students should not expect that living accommodations will be provided.

Contact information can be obtained through the Family Medicine Education Coordinator at 974-2445 or lgiordan@health.usf.edu.

Mont hs

Specific to each location

ONLY MPMHC IS AVAILABLE TO VISITING STUDENTS
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.

Availability: 2 at USF MS 1,2,3,4,5,6,7,8,9,10,11

None 2@USFMC FT, 44 hr wk 2,4
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. Identiﬁcation and management problems which present clinically in family medicine, epidemiology, and follow-up.
2. Ideationally, biologically, psychologically, and socioculturally, factors that are relevant in the etiology of patients' problems and in the treatment plan...
I propose problems solving study the role of each professional's significance in a patient's care (consuls, social workers, nurses, psychiatrists, etc.) and there is no
Evaluation

Based on competence, consideration of patients, and practical approach to problems.

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

Students are required to meet with Dr. Gonzalez one month prior to the start of the rotation to discuss this.
Contact

Education Coordinator – (813) 974-2445 or iglor@health.usf.edu

NOT AVAILABLE TO VISITING STUDENTS

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.

Objectives

1,2,3,4,5,6,7,8,9,10,11 Year 4 status 1 per period FT, 44-50 hr wk 2,4
1. Identify and manage problems which present commonly in family practice, emphasizing the importance of continuous 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 assessment planning.
3. I propose problems - solving study through the role of ethical problems in the patient's healthcare (consulants, social workers, nurses, psychiatrists, etc.) and...
the relationship between them and the family physician.

**Evaluation**

Based on 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.

NOT AVAILABLE TO VISITING STUDENTS
MEL 8272: Morton Plant Mease Women’s Health Elective

| 1,2,3,4,5,6,7,8,9,10, 11 | BCC 7184 | 1@MPMHC | FT, 50 hr wk | 2,4 |

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, etc.

Responsibilities

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

Evaluation

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

Scheduling

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

MEL 8273: Morton Plant Mease Family Medicine Flexible Elective

| 1,2,3,4,5,6,7,8,9,10, 11 | None | 3@MPMHC | FT, 40 hr wk | 2,4 |

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 might include the following: FM in-patient acting internship, women’s health, pediatrics, geriatrics, nursing home, research, Ob/Gyn, acute care, etc.
2. To provide the student with 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

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

Scheduling

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

MEL 9999F: Independent Study in Family Medicine

| 1,2,3,4,5,6,7,8,9,10, 11 | None | no limit@ USFMS | FT, variable | 2,4 |

Faculty and Staff of the Department of Family Medicine

Prior to scheduling this course, students must meet with their preceptor in order to identify and define their independent study. Prior approval must be given by the preceptor to take this elective as a 2 week rotation. This paperwork must be completed at least 3 months prior to the start of the elective and submitted to the Registrar’s Office along with a copy to the Family Medicine Education Coordinator.

Interdepartmental Electives

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3,4,5,6,7,8,9,10, 11</td>
<td>BCC 7184 or</td>
<td>4 to 8 @USFMS</td>
<td>FT, 40 hr wk</td>
<td>4</td>
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</table>
Skin and Bones is a multi-disciplinary four-week elective designed to enhance the student’s competence in the recognition, diagnosis, and treatment of musculoskeletal, rheumatologic and dermatologic disorders. The clinical experience, designed to gain exposure to rheumatology, sports medicine, orthopedics (outpatient injury assessment and management) and dermatology, is tailored to the student’s specialty track. Unlike the third-year clerkship rotations, Skin and Bones clinical experiences are primarily outpatient-based. Students are given instruction followed by hands-on experience in various procedures used in each of these specialties.

Didactic highlights include
• Skin biopsy and suturing workshop providing hands-on experience.
• Injection and aspiration workshop utilizing injection models, followed by clinical experiences to learn to perform joint injections and aspirations on patients with direct supervision.
• Opportunity to become familiar with hands-on musculoskeletal ultrasound in a clinical setting.
• Didactics and clinical exposure to musculoskeletal diagnostic imaging.
• Online and live didactics and knowledge self-checks aimed at providing a basis for increasing knowledge in these specialties serving as a great preparation for USMLE.

Objectives

1. Apply these skills and medical knowledge.
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2. Recognize the clinical, laboratory, and radiographic characteristics of the morbid cloacal, dermal cloacal, or topical deciduosis.
This course is NOT available to visiting students.

Other sites that may be included are Morsani, USF South Hospital, VA Hospital, and some private practices.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Pre-requisites</th>
<th>Duration</th>
<th>Workload</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCC 8117</td>
<td>Interdisciplinary Oncology Elective</td>
<td>BCC 7164 Surgical Care Clerkship and BCC 7144 Integrated Internal Medicine-Pediatrics Clerkship or at least one month of medicine and one month of surgery for visiting students.</td>
<td>10@MCC</td>
<td>FT, 40 hr wk</td>
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<td>Dr. Sophie Dessureault and Moffitt Faculty</td>
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<td>In this elective, students will have an opportunity to learn the fundamental principles of oncology and the multidisciplinary,</td>
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<td>The course will consist of a preceptor-based ambulatory rotation in one of the clinical programs at the Moffitt Cancer</td>
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<td>It is important to note that a significant degree of flexibility is allowed in order to individualize each student’s experience;</td>
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<td>Pre-requisites</td>
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**Pre-requisites**

- BCC 7164 Surgical Care Clerkship and BCC 7144 Integrated Internal Medicine-Pediatrics Clerkship or at least one month of medicine and one month of surgery for visiting students.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Pre-requisites</th>
<th>Duration</th>
<th>Workload</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCC 8190</td>
<td>Critical Care Senior Elective</td>
<td>Year 4 status</td>
<td>10-12@USFMS</td>
<td>FT, 80 hr wk</td>
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<td>Dr. Cox and Faculty</td>
<td>4 weeks</td>
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<td>The goals of this fourth year 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.</td>
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<td>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.</td>
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</tbody>
</table>
This course is a selective for USF senior medical students and will include a rotation either through a Medical ICU, Pulmonary/Critical Care Consult ICU, Anesthesia Critical Care, Surgical/Trauma ICU, NICU, or PICU at the James A. Haley Veterans Hospital or Tampa General Hospital. The rotation assignment will be made based upon the student's chosen career path. 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 electrocardiograph (ECG) tracings through weekly quizzes to enhance interpretation skills. This course is NOT available to visiting students.

<table>
<thead>
<tr>
<th>BMS 6994: Scholarly Concentrations Program Elective</th>
<th>Year 4 Status</th>
<th>no limit @USFMS</th>
<th>FT, 44 hr wk</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drs. Susan Pross, Ingrid Bahner, and Faculty with the Health Disparities, Innovation, Entrepreneurship and Business in Medicine, Law and Medicine, Medical Humanities, Health Systems Engineering, Public Health, International Medicine, Research, Medical Education, and Medicine and Gender Scholarly Concentrations.</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
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</table>
Students must select one of the specific course numbers listed below for their concentrations.

- BMS 6994 B Innovation, Entrepreneurship and Business in Medicine
- BMS 6994 H Medical Humanities
- BMS 6994 D Health Disparities
- BMS 6994 G Medicine and Gender
- BMS 6994 S Health Systems Engineering
- BMS 6994 L Law and Medicine
- BMS 6994 I International Medicine
- BMS 6994 P Public Health
- BMS 6994 E Medical Education
- BMS 6994 R Research

Objective
The purpose of this elective is to provide SCP 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 Scholarly Concentration Program to register.

Learning outcomes will be assessed based on attainment of goals and objectives set at the beginning of the project by the mentoring faculty member and student.

Elective Requirements
Prior to scheduling this elective, students must meet with their faculty mentor in order to identify and define their SCP capstone project. After determining a course of study, students must complete a SCP ELECTIVE Application, and attach a copy of the project proposal. Proposals must include goals, objectives, and an emphasis of study and be discussed with your faculty mentor before undertaking this elective. The student may be required to discuss the proposal in length with the SCP Director. Signatures need to be obtained from their USF Health faculty mentor, the concentration faculty leader and the SCP Director. Signed forms must be submitted to the Office of Educational Affairs/Scholarly Concentration’s Program in MDC 1100 at least 15 days before the start of the period.

**Evaluation**
ELECTIVE Self-Assessment and Evaluation form must be completed at the end of the elective period. Students should be prepared to present their findings, often in the form of a paper, poster or powerpoint presentation. Student will receive an Incomplete (I) if the SCP ELECTIVE Self-Assessment and Evaluation is not received within 2 weeks of the end of the period. Grade adjustments may be made once assessments are received.

**Grading**

Satisfactory / Unsatisfactory

This elective is NOT available to visiting students.

<table>
<thead>
<tr>
<th>Course</th>
<th>Elective</th>
<th>Year status</th>
<th>No limit</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEL 7320G: Externship Basic Science</td>
<td>Electrship form required.</td>
<td>1,2,3,4,5,6,7</td>
<td>no limit @ EXT</td>
<td>FT, 4 hr wk</td>
</tr>
<tr>
<td>MEL 7740: Radiation Oncology</td>
<td>1,2,3,4,5,6</td>
<td>BCC 7144 BCC 7164</td>
<td>2 @ MCC</td>
<td>FT, 44 hr wk</td>
</tr>
</tbody>
</table>

Drs. Dilling, Rao, Stevens, Trots, Caudell, Hoffer, Hoyvak, Chinnaiyan, Torres-Roca, Biagioli, Tomblyn, Shridhar, Wilder, etc.

The Department of Radiation Oncology, Moffitt Cancer Center, provides comprehensive, patient-oriented care for all types of cancer using the most technically advanced equipment with concern for quality of life and education.

This elective is an introduction to basic Radiation Oncology with emphasis on clinical service designed to provide a background in the field.

Medical Students will participate in all aspects of Radiation Oncology including clinical treatment planning, treatment delivery, follow-up, on treatment visits, and treatment planning.

**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. Present a 15 minute PowerPoint talk on a topic defined with the assistance of the faculty preceptor.

At the completion of the elective, training faculty and students will complete performance evaluations.
This senior medical student elective is intended to teach the practical and theoretical medical skills necessary to identify, treat and prevent medical problems unique to the outdoor environment. The course is directed towards the outdoor or travel enthusiast who may find themselves in situations outside of the traditional clinical setting where they may be called upon to provide medical assistance. There will also be ample opportunities for students to present outdoor medicine topics to peers and junior medical students.

This is a year long elective from May through April. Students will register for the course during the period of their choice. Meetings will mostly be held on Saturdays approximately 1-2 times a month, but may be held on weekday evenings, during lunch meetings, and some overnight activities. There will be a required 120 hours of attendance at meetings and there will be at least 160 hours available to accommodate senior students on externships. The culmination of the course is the Annual Florida Outdoor Medicine Conference.
usually held during the last month of the academic year in the Florida Keys (students are encouraged to register for the course during this month). Students are also encouraged to plan to attend the Annual ACWM Southeast Student Wilderness Medicine Conference, usually held in March, as well as conferences of the Wilderness Medicine Society. There may be other activities that require travel to places such as Great Smoky Mountains National Park, Everglades National Park, or other distant locations. Students should also budget at least $250 for admission fees and equipment rental throughout the year and approximately $550-$800 for the Annual Florida Outdoor Medicine Conference.

Examples of Meetings:
• "No Lifeguard on Duty" held at Ben T. Davis Beach and learned about Basic Water Rescue and Submersion Incidents.
• "A 3-Hour Tour" held on an island in the Tampa Bay and learned about Seafood Toxidromes while catching Pufferfish.
• "Disney World Marathon Weekend" providing medical support to endurance athletes from around the world.

Objectives

1. Practice medical skills to be used in situations outside of the hospital setting.
In creating studies' biologically pertinent medical information to people, GTC praticors create skills and experiences to locales' curcases.
Students will be evaluated by the course director at the end of the course. Students will be evaluated based on attendance and participation of course meetings (50%) as well as assigned outdoor medicine topic presentations (50%). Students will be required to attend 120 hours of meetings/activities over the 11 month period. There will be opportunities for at least 160 hours of meetings/activities. Students may expect to be given specific topics or scenarios to present at each meeting they plan to attend. Presentations will be evaluated by course directors and contribute to the presentation portion of the final grade.

MEL 8134: Introduction to Internal Medicine - Pediatrics
Drs. John McCormick, Erika Abel, Denise Edwards, and Hugo Narvaez

<table>
<thead>
<tr>
<th>Year status</th>
<th>1@TGH</th>
<th>FT, 40 hr wk</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>1,2,3,4,5,6</td>
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</table>
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 address common cutaneous problems encountered among adults and children in primary care settings.
2. Evaluate and set on conditions on adults and children in primary care setting
4. Cartesian family with preceding components, including inclusion, joint action, and circumscription.
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.
This elective is designed to provide USF Medical Students an opportunity to participate in an established International Medical Spanish program. Participation in these programs will allow students to learn and/or improve conversational Medical Spanish and to experience the culture of a Spanish speaking country. It is expected that this experience will allow students to appropriately interact in a clinical setting with Spanish speaking patients abroad and in the USA. It is expected that this experience will increase the student’s functional language skills in real cultural, clinical and medical environments. Depending on the program, students will normally have scheduled class hours to learn basic and intermediate Spanish skills as well as time to interact with the local community. During the 4 week elective, students will be exposed to various clinical scenarios and have an opportunity to experience local customs as well as visit local settings. Students
wishing to participate will be required to fund their tuition, transportation, meals and other necessary items. Interested students should sign up no later than 6 months prior to the course. Students should also plan to schedule a meeting with Drs. Callegari or Gonzalez to review the requirements no later than 6 months prior to the course.

**Objectives**

1. Students will be able to establish communication in Spanish to the degree of:
   1. Understanding a patient's needs for seeking health care and obtaining their reason for the encounter (chief compliant)
   2. Conducting basic medical interviews and being able to characterize the signs and symptoms of the patient
   3. Being able to communicate requests when performing a general physical examination
Students will understand the differences between various clinical settings in the country and compare them with the USA facilities and therapies.
3. Students will compare medical problems and health needs to a local population with the Hispanic and non-Hispanic USA population.
Students will understand and assess local, family, and cultural values and beliefs to the US Hispanic and non-Hispanic population.
The learner's evaluation will be based on:

- Performance obtaining a clinical medical history in Spanish which may be conducted in an OSCE format before and after the experience.
- A written report on the learner's experience.

Informal presentation to the directors on their experience as it relates to the cultural and medical Spanish aspects of the course.

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**Objectives**

1. Expose students to the role of the surgeon in the diagnosis, management, and surveillance of cancer patients.
2. Expose students to the importance of other disciplines (medical oncology, radiation oncology, pathology, etc.) in managing cancer patients.
3. Introduce students to various emotional responses of patients to cancer and how best to manage these responses.
4. Expose students to the basics of clinical research in the care of cancer patients.
5. Educate students on advantages and disadvantages to different diagnostic tests, surgical choices, chemotherapy, and radiation.

**Methods**

The student will be assigned to work with surgeons based on disease sites. These sites include: Breast, GI, GU, GYN, Head and Neck, Neurosurgery, Orthopedics, Plastic Surgery, and Thoracic Surgery.

**Evaluation**

The student will be evaluated by the course director at the end of the course. The evaluation will be based upon feedback from the attending surgeons who the student worked with.

**Pre-requisites**

This course is available to Year 3 students who have taken BCC 7144 Integrated Internal Medicine-Pediatrics Clerkship.
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 8954: Teaching the Sciences Basic to Medical Practice

Drs. Frazier Stevenson and Stanley Nazian

Please submit a brief email to Dr. Stevenson prior to signing up for this elective indicating

<table>
<thead>
<tr>
<th>Code</th>
<th>Prerequisites</th>
<th>Co-requisites</th>
<th>Delivery</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEL 8954</td>
<td>5,6,8,9,10,11</td>
<td>none</td>
<td>2@USFMS</td>
<td>FT, 40 hr wk</td>
</tr>
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</table>
which months you are available and why you are interested in the elective. Indicate any specific organ system blocks you would like to work in and why. Requests to add the course must be received at least 2 months prior to the start date. Education Scholarly Con students need to complete a total of 4 weeks to meet the concentration requirements.

This elective is designed to introduce senior medical students to the role of clinicians in teaching the "basic sciences". Students will work with Year 1-2 faculty to design active learning and case study materials, teach in interdisciplinary labs, active learning sessions, and case discussions, and review the content taught the students from the perspective of a generalist third or fourth year student. Students will receive seminar instruction on effective lecture and active learning teaching techniques, and will research and prepare two short lectures for a mixed faculty/student audience on basic science topics of their choice, with improvement demonstrated on the second lecture after feedback is received on the first.

**Objectives**
1. Understanding and the theoretical role of a cademic psychology in the pre-clinical curriculum.
Becoming effective technologists, engineers, and apportioning with difficulty
3. Collaborative projects involving faculty to teach MS1 and MS2 students at the undergraduate level, small group, and/or large group teaching settings.
4. Assume teaching responsibilities and acquire knowledge to improve their current teaching skills.
5. Demonstrate the ability to deliver an effective basic science lecture, integrating interactive learning principles into these sessions.

Learning Outcomes

By the end of this elective, the student should better understand basic principles of good basic science teaching and be able to demonstrate effective teaching techniques.

Evaluation
- Active participation in teaching seminars
- Active collaboration with pre-clerkship instructors to develop teaching materials.
- Delivery of a well-researched lecture, with improvement on a second presentation after feedback is received.

Requires permission of the course director.

MDE 8030: BRIDGE Clinic Longitudinal Elective
Drs. Eduardo Gonzalez and Lucy Guerra

| MDE 8030: BRIDGE Clinic Longitudinal Elective | Year-long | Year 4 status | 4@USF-MS | FT, 4 hr wk | 44 |
This longitudinal elective would reinforce and teach the knowledge, skills and attitudes that are needed to direct a multidisciplinary healthcare clinic. Students will be required to lead and attend monthly BRIDGE clinic meetings, meet with medical advisors regularly, attend and lead BRIDGE clinics over the year, develop a presentation/poster to present at a national meeting, organize and coordinate other specialties and organizations within BRIDGE. In all, it is expected that each student will have completed a minimum of 150 hours over the academic year. The course is longitudinal, as the responsibilities of these students will continue throughout the academic year.

Objectives
1. Develop skills to properly manage a multidisciplinary healthcare clinic.
2. To mandate professional relationships with Mount Hilsborough Department of Diagnostics, Security Protocol, Morson
3. Understand and the Businesses' perspective of Medicine throughout with Dr. Marc Hal an and the Businesses' Scientific Contact
4. Update and/or new documents for Clinical Operations including the Constitution, employee contracts, fundraising documents, and banking trust fund documents.
Provide access to healthcare for patients of many different backgrounds with limited access. Collaborate effectively with Social Workers, Public Health, and Physical Therapy.
Evaluation
By the end of the elective, students should feel competent managing a multidisciplinary healthcare clinic. They will understand how to collaborate with various organizations and groups and have a sense of the business and financial needs of such a clinic. Their progress will be assessed by direct observation by the faculty medical directors, and successful completion of assigned responsibilities and projects which will include poster/presentation that will be presented at a national meeting.

Only students elected to be the student medical directors for BRIDGE will be eligible for this elective. Students must agree to hour requirements and need to inform concurrent senior course directors of their involvement in this longitudinal course. Students should notify and obtain permission from Drs. Guerra or Gonzalez prior to scheduling.

MDE 8036: Multidisciplinary Course in Patient Safety
Drs. Peter J. Fabri, Kay Perrin, Mary Webb, and Jose Zayas-Castro

This is an innovative, experimental course. Selected senior medical students, together with graduate
Students from engineering, nursing, communication and public health, will explore concepts of human error, patient safety, and related healthcare quality issues through a series of weekly seminars over three months. In addition, students will work in small interdisciplinary groups, together with faculty and staff from Tampa General Hospital and all four colleges, to identify and analyze a real patient safety problem and develop a solution. Students will develop a comprehensive understanding of the science relating to human error in general and human factors in particular, will master several critical skills in problem solving and error analysis, and will improve their skills in working together with other professionals in the collaborative resolution of a complex problem. Medical Students will receive credit for one block rotation, although the time commitment will be approximately 6 hours per week for three months (3 hours of seminar and 3 hours of small group work.) Invited experts will give many of the seminars, together with USF faculty from the five colleges. Each interdisciplinary group will be asked to give a summary presentation of their work and submit a referenced
paper describing the project.

Objectives

1. Explain the psychological basis of human error
2. Summarize an understanding of error in medical practice
3. Explanatory clauses at the beginning of medical practice.

4. Identities and analytical applications at the hospital.
Evalu\

The student will be evaluated by course faculty, based on participation in class seminars and on the submitted interdisciplinary patient safety project.

Interested students must meet with Dr. Fabri prior to August. Students should be prepared to describe why they should be selected for the course.

<table>
<thead>
<tr>
<th>MDE 8090: Doctoring IV - Theory and Practice of Teaching</th>
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<td>Year-long</td>
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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 co-facilitating Doctoring 1, 2, and 3 small groups with senior faculty, and attend 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. Demonstrate the practice of good clinical and educational standards for teaching and understanding the theory of adult education.
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 obtain approval from Dr. Stevenson before registration. Students must agree to hour's requirements and need to inform concurrent senior course directors of their involvement in this longitudinal course.

| MEL 9999G: Independent Study in Basic Science | 1,2,3,4,5,6,7,8,9,10, 11 | Year 4 status | TBD | FT, 44 hr wk | 2,4 |
| MEL INT: Interview Month | 1,2,3,4,5,6,7,8,9,10, 11 | Year 4 status | no limit @USFMS | FT, 44 hr wk | 4 |

**Internal Medicine**

**DIVISION OF ALLERGY AND IMMUNOLOGY**

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tbody>
<tr>
<td>MEL 8315: Clinical Allergy Immunology</td>
<td>1,2,3,4,5,6,7,8,9,11</td>
<td>BCC 7144 BCC 7184</td>
<td>2@TVAH</td>
<td>FT, 44 hr wk</td>
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</table>
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 immune-deficiency diseases (including HIV infection), eosinophilia, eosinophilic syndromes, and various other immunologic problems.
The student will primarily be involved in outpatient 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 will attend four weekly conferences on 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.

**Prerequisite**

BCC 7144 Integrated Internal Medicine-Pediatrics Clerkship and BCC 7184 Primary Care Clerkship

<table>
<thead>
<tr>
<th>MEL 8376: Basic and/or Clinical Respiratory Disease Research</th>
<th>Year 4 status</th>
<th>1@TVAH</th>
<th>FT, 44 hr wk</th>
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<tr>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
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</table>
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 cared for in the Division of Allergy and Immunology.

**Objectives**

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 as it relates to respiratory syncytial virus-induced respiratory diseases and the pathogenesis of pulmonary fibrosis and asthma. Many other projects by the faculty are underway and the students can participate in research projects in which they have an interest. The student will also have the opportunity...
to participate in the asthma, allergy and immunology clinical research unit, where up to 30 clinical research projects are ongoing at any one time. Diseases targeted for research include asthma, COPD, allergic rhinoconjunctivitis, chronic rhinitis, acute and chronic sinusitis, nasal polyposis, atopic eczema, urticaria and or angioedema, food allergy, hereditary angioedema and others. The student will learn the accepted methods used in clinical research in this state-of-the-art program.

The student will attend four 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.

**Evaluation**

The faculty members and staff associated with the training program will assess the level of competence and will complete evaluations.
### MEL 8303: Consultative Cardiology

Dr. Arthur Labovitz and Faculty at TGH, Dr. Fabio Leonelli and Faculty at the James Haley VA Hospital and Dr. Mazhar Afaq at the Bay Pines VA Hospital

At TGH and T-VAH. 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 database 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 Department teaching conferences is required.

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<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tr>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>BCC 7144 BCC 7184</td>
<td>2@TVAH 2@TGH 3@BPVAH</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
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**Evaluation**

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

At BP-VAH: This rotation will consist of direct exposure to clinical care of patients in the inpatient and outpatient settings. A low student to instructor ratio will facilitate a nourishing learning environment. Students will evaluate patients with all categories of cardiac disease, and cardiac history taking and examination skills will be honed. Additionally, students will be involved with interpretation of studies including echocardiograms, Holter monitoring, and stress examinations. Students will be given the opportunity to enhance their EKG interpretation skills and become familiar with the cardiac catheterization and electrophysiology laboratories. Per student preference, exposure to other cardiac imaging modalities including nuclear cardiology, cardiac MRI, and cardiac CT can be provided. Students will be provided with a schedule of subjects as an outline for reading.
Evaluation

Each student will be asked to complete a cardiology subject syllabus with the clerkship director. This will consist of 10-15 minutes mini-lectures provided to the student(s) several times per month. Each student will make one PowerPoint presentation on a subject decided upon at the beginning of the rotation.

DIVISION OF CARDIOVASCULAR DISEASE

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<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tr>
<td>5,9,11</td>
<td>BCC 7144, BCC 7164</td>
<td>6@USFMS</td>
<td>FT, 44 hr wk</td>
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MEL 8351: Harvey Elective in Cardiology
Dr. Fred Sloane 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.

**Track**

One of the options for Emergency Medicine, Family Medicine, and Internal Medicine.

Note: This course is also listed under Internal Medicine.

**DIVISION OF EMERGENCY MEDICINE**

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<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tbody>
<tr>
<td>MDE xxxx: Introduction to Emergency Medicine Dr. Anish Zachariah</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>None</td>
<td>5@TGH</td>
<td>FT, 40 hr wk</td>
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</tbody>
</table>
This introduction to Emergency Medicine 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. There is also interactive simulated skills sessions ranging from suturing, central lines, lumbar puncture, and intubations.
This rotation will enrich students’ knowledge, help them develop history-taking ability, physical skill assessment, and diagnostic and management skills, procedural skills, as well as help them develop a caring, compassionate, and empathetic attitude in dealing with patients and their families.

Because of the wide array of patients and pathology, the rotation is an excellent introduction to acute care and primary care medicine regardless of which field the student may be considering. It is required prerequisite for those USF students considering Emergency Medicine as a career.

Evaluation
The student's grade is primarily based on daily attending evaluations but will incorporate quality case presentations, clinical skills evaluations, required attendance at emergency medicine conferences, and written testing.

| MEL 73200: Externship in Emergency Medicine | 1,2,3,4,5,6,7 | Year 4 status | no limit @EXT | FT, 44 hr wk | 4 |

| MEL 8347: Acting Internship in Emergency Medicine Dr. Jim Gillen | 1,2,3,4,5,6,7,8,9,10,11 | BCC 7114, BCC 7144, BCC 7184 | 6@TGH | FT, 44 hr wk | 4 |
This subinternship integrates clinical skills and evidence-based medicine through didactic lectures, performance of clinical procedures, hands-on clinical experiences, observation 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. Students 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, diagnostic and management skills, as well as help them develop a caring, compassionate and empathetic attitude in dealing with patients and their families.
Evaluation

The student's grade is based on daily attending evaluations, quality case presentations, attendance at emergency medicine conferences and submission of two SAEM examinations.
MEL 8368: Emergency Medicine Outside the Hospital  
Dr. Catherine 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

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<tr>
<th>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.</th>
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</thead>
</table>
| BCC 7114  
BCC 7144  
BCC 7184 |
| 2@TGH |
| FT, 44 hr wk |
| 4 |
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 the elective faculty preceptor and Director of Students Program, Department Director for Internal Medicine, and the Associate Dean for Undergraduate Medical Education. This form can be obtained from the Registrar’s office.
**DIVISION OF ENDOCRINOLOGY AND METABOLISM**

<table>
<thead>
<tr>
<th>Periodes</th>
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<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tbody>
<tr>
<td>MEL 8305: Clinical Endocrinology and Metabolism</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>BCC 7144, BCC 7184</td>
<td>@TVAH FT, 44 hr wk</td>
<td>4</td>
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</tbody>
</table>

Dr. Joaquin Gomez-Daspet 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 1,2,3,4,5,6,7,8,9,10,11.
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).

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<th>Periods</th>
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<tr>
<td>MEL 8306:</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>BCC 7144, BCC 7184</td>
<td>2@TGH, 1@VUH, 2@MCAH</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
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<tr>
<td>Gastroenterology</td>
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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.

MEL 8318:
Esophageal and Swallowing Disorders
Drs. Joel Richter and David Estores
3,4,5,6,8,9,10,11
BCC 7144
BCC 7184
2@MACAH
FT, 40 hr wk
2,4
This course will familiarize and engage the senior medical student in the basic principles and management of complex patients who are referred to a tertiary care center. This course should provide an invaluable clinical experience particularly for those who wish to pursue further training in the fields of ENT (otorhinolaryngology), allergy and immunology, gastrointestinal surgery (laparoscopic esophageal surgery), gastrointestinal radiology or neurology. 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 radiographic examinations) and will be provided the opportunity to longitudinally follow patients they have initially seen for evaluation. They will be involved in a "team" together with the nurses, patient care coordinators, speech pathologist, and physician members. Clinical activities are mainly based at the fully equipped Esophageal, Swallowing and Voice Function Laboratory at the USF Health North campus with endoscopic procedures performed at the Endoscopy Units at the Morsani Center for Advanced Health Care and the Moffitt Cancer Center.
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 which include: Fiberoptic Endoscopic Evaluation of Swallowing
   1. Observation of the actual procedure being performed
   2. Discussion of the basic interpretation of these procedures
   3. Observe and participate in the discussions about the impact of test results on the therapeutic plan

3. 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

4. Expose the senior medical student to evaluation of neurologic conditions (i.e. ALS, Parkinson disease, Huntington Chorea), patient conditions after surgery (anti-reflux procedures, bariatric procedures esophagectomy, laparoscopic surgery) and treatment for head and neck cancer (radiation, chemotherapy, surgical therapy)

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 anatomic, radiographic, endoscopic and physiologic, aspects of swallowing, esophageal and voice functions

2. Become familiar with the different aspects of abnormal or pathologic function for swallowing, esophageal and voice related disorders

3. Become familiar with the diagnostic approach and treatment options for dysphagia, voice disorders and gastroesophageal reflux diseases

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

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

6. Become familiar with a "center" approach to complex but focused medical problems and understand the interaction between the different members of the team

Evaluation
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. Faculty perf or mance will be evaluated by the medical student (anonymously submitted to the center director). Any student interested in this rotation is encouraged to contact Dr. Estores (destores@health.usf.edu).

**MEL 8390:** Hepatology Elective
1,2,3,4,5,6,7,8,9,10,11
BCC 7144
BCC 7184
1@TGH
FT, 44 hr wk
2,4
This course will familiarize and introduce the senior medical student to multifaceted field of Hepatology. The medical student will be afforded the opportunity to learn from team members of a top five US solid organ transplant program. This course should provide an invaluable clinical experience particularly for those who wish to pursue further training in any surgical or medical field. The student will be involved in the numerous aspects of patient care, will receive daily didactic education, have the potential to participate in research projects, and offered the opportunity to observe the “gift of life” liver transplantation. The medical student will have the opportunity to help assist with critical ill patients, observe numerous endoscopic procedures, and observe the transplant selection committee.

Objectives
1. Understand the various possible causes and methods of treatment for acute and chronic liver disease.

2. Learn and appreciate the various pathological physiological diseases as mechanisms within the liver.

3. Observe and improve knowledge base and understanding of complications related to cirrhosis and hepatic end organ failure.

4. Recognize and be aware of exceptional performance.
In addition, there will be exposure to the management of pre and post 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 Tampa General Hospital.

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.

Any student interested in this rotation is encouraged to contact Dr. Neff at gneff@tgh.org.
Students will rotate on the Internal and Hospital Medicine (IHM) Inpatient service at Moffitt Cancer Center. The student will have exposure to problems such as atrial fibrillation, heart failure, diabetes management, thromboembolic disease, transfusion medicine, and neutropenic fever within the context of the oncology patient. Students will also be exposed to managing cancer pain and be an integral part of end-of-life care discussions with patients and their families. The student will work directly with the IHM attending on the interdisciplinary teaching service. The interdisciplinary team consists of a resident, intern and AI in addition to social work, pharmacy, case management, and advance practice professionals. During the month, the student is expected to attend Morning Report, Noon conference, Grand Rounds and Board review sessions. Depending on student interest, there are additional opportunities to gain exposure to outpatient and consultative services also provided by the IHM program.
Objectives

1. Introduction to comprehensive, interdisciplinary hospital-based care of cancer patients
2. Learn how to perform complete history and physical examinations
3. Master the art of communication with writing a daily progress note as well as oral presentation
4. Develop a thorough differential diagnosis in a problem-based fashion
5. Introduction to the management of many common inpatient medical problems/diagnoses

Evaluation

Evaluation of the student will reflect the overall performance on the rotation including history and physical examination skills, constructing differential diagnosis, and oral presentations by the attending physician.

MEL 8121: 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
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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Year 4 status</th>
<th>Status</th>
<th>Hours per week</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MEL 7320M</td>
<td>Externship in Medicine</td>
<td>1,2,3,4,5,6,7</td>
<td>no limit @EXT</td>
<td>FT, 44 hr wk</td>
<td>4</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>MEL 8332</td>
<td>Elective in Rural Medicine (AHEC)</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>per site</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
</tr>
<tr>
<td></td>
<td>Faculty and Staff at Health Resource Alliance (Pasco), Suncoast Community Health Centers (Hillsborough), DeSoto Memorial Hospital (Arcadia), or other rural sites</td>
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1,2,3,4,5,6,7,8,9,10,11
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
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 Anne Maynard from the AHEC office. Final arrangements for the elective must be made through the Ms. Maynard in conjunction with Gulfcoast North or Gulfcoast South AHEC.

| MEL 8334: Acting Medicine Internship | 1,2,4,5,6,7,8,9,10,11 | BCC 7134 BCC 7144 BCC 7154 BCC 7164 | 5@TGH 5@TVAH 1@MCC | FT, 64 hr wk | 4 |
Students will function as acting interns on the general ward teams at either Tampa General Hospital, Moffitt Cancer Center or at the James A. Haley VA Hospital. They will be given direct patient care clinical duties and responsibilities usually assigned to the first year house officer. The medical team residents and attending will closely supervise these clinical responsibilities. The level of clinical responsibilities will be distinctly above that of a third year clerkship rotation in internal medicine. Participating students will have an in depth autonomous inpatient experience so they may confidently assume such care in their PGY1 year regardless of their career choice. Mandatory attendance, excluding patient emergencies, is expected at morning report, noon conference, and grand rounds. Students are also encouraged to participate in the monthly journal club and the M&M conferences.

Objectives
1. Introduce the student to hospital based care and management.
2. Student will learn how to perform adequate and thorough history and physical examinations.
3. Write appropriate progress notes and all orders for therapeutic and diagnostic intervention with appropriate counter signature.
4. Participate on night call every fifth night as scheduled with the assigned team.
5. Learn and participate in internal medicine procedures including: paracentesis, thoracentesis, lumbar puncture, central line placement.
6. Transition of patients from the Medical Intensive Care Unit.
7. Communicate inpatient management and outcomes with patient’s primary care physician.
8. Participate and learn appropriate discharge planning, utilization of system based care in the management of their patients and how to do discharge summaries.
9. Learn to interpret EKG’s, radiographic studies, PFT’s and appropriate lab diagnostic studies.

At MCC:
This rotation allows the medical student to learn how to diagnose and treat common medical conditions and exposes the student to medical emergencies that are more common in cancer patients. During this rotation, the student will be required to attend morning report, noon conferences and Grand rounds. The student will perform history and physical examinations with the supervision of attending physicians and resident, write daily progress notes and assist in discharge planning. No overnight call or weekend responsibilities however students will be expected to stay late during certain days of the week to assist with admissions.

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

1,2,3,4,5,6,7,8,10,11
BCC 7144
BCC 7184
1@MCC, 1@TGH
FT, 44 hr wk
2@TGH, 4@MCC
At TGH:
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.
At MCC: Students will work directly with the Medicine attending on the Internal Medicine Consultation Service at Moffitt Cancer Center. The student will be exposed to a variety of different medical issues in the setting of an oncological diagnosis. This will include preoperative evaluations, as well as management of postoperative complications such as Atrial Fibrillation, Pulmonary Embolism, Hypertension Urgencies /Emergencies. The student will also be given the opportunity to be a part of the Rapid Response Team (RRT) with a pager. Upon being paged, the student is required to respond immediately to unstable patients/staff/visitors throughout the entire hospital, including inpatient setting, outpatient clinics, laboratory, radiology suites, pre/post-operative holding areas requiring immediate attention. This experience will prepare and enhance the student's critical thinking skills needed in internship when evaluating and treating unstable patients. Morning report, noon conferences, Grand Rounds, and board review will also be a required portion of this rotation.
This elective in Internal Medicine allows the 4th year medical student exposure to urgent care issues in cancer patients. The 4th year medical student will be working in the Direct Referral Center with midlevel professionals and an Internal Medicine attending. The student will have the opportunity to learn how to diagnose and treat urgent/emergent medical conditions. This rotation will enrich the students’ knowledge in the fundamentals of urgent care medicine and will provide an excellent opportunity for the student to develop their physical exam skills. Students will perform both history and physical exams and will be expected to develop differential diagnoses pertaining to each complaint. During this rotation, students will be exposed to all levels of care in cancer patients. Students will also be given the opportunity.
to be a part of the Rapid Response Team (RRT). This team provides immediate attention to unstable patients/staff/visitors throughout the entire hospital, including inpatient setting, outpatient clinics, laboratory, radiology suites, pre/post-operative holding areas and common areas. This experience will assist the student in preparation for their upcoming internship in both identifying unstable patients and learning the initial workup/treatment in various situations. During this rotation, students will be required to attend morning report, noon conferences and Grand rounds. No overnight call, evening shifts or weekend responsibilities.

**Objectives**

1. Introduce the student to urgent care medicine in cancer patients
2. Further the student’s education of Internal Medicine through clinical exposure to various patient presentations
3. Develop the student’s clinical skills by evaluating history and physical exams
4. Explore broad differential diagnoses for common symptoms
5. Diagnose and treat various medical problems in cancer patients

**Evaluation**
The student will be evaluated by the attending physician on service at the end of the rotation, based on the student's patient presentation, history and physical exams, and development of broad differential diagnoses. Grades are determined by: 50% clinical evaluations, 25% graded history and physical exams, and 25% oral case presentation.

| MEL 8953: Integrative Clinical Skills | 10,11 | BCC 7144 | BCC 7184 | 12@TGH | FT, 40 hr/wk | 4 |
| Drs. Cuc Mai, Erika Abel, Stephanie Pezzo, Candice Mateja, Peter Chang |
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 of topics such as writing orders, common overnight call issues, common procedures, reading EKG, CXR, and ABG's, 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.
Students will function as acting interns on the general ward teams at either Tampa General Hospital, Moffitt Cancer Center or at the James A. Haley VA Hospital. They will be given direct patient care clinical duties and responsibilities usually assigned to the first year house officer. The medical team residents and attending will closely supervise these clinical responsibilities. The level of clinical responsibilities will be distinctly above that of a third year clerkship rotation in internal medicine. Participating students will have an in-depth autonomous inpatient experience so they may confidently assume such care in their PGY1 year regardless of their career choice. Mandatory attendance, excluding patient emergencies, is expected at morning report, noon conference, and grand rounds. Students are also encouraged to participate in the monthly journal club and the M&M conferences.

Objectives
1. Introduce the student to hospital based care and management.
2. Students will learn how to perform adequate and thorough history and physical examinations.
3. Write appropriate progress notes and all orders for therapeutic and diagnostic intervention with appropriate counter signature.
4. Participate on night call every fifth night as scheduled with the assigned team.
5. Learn and participate in internal medicine procedures including: paracentesis, thoracentesis, lumbar puncture, central line placement.
6. Transition of patients from the Medical Intensive Care Unit.
7. Communicate inpatient management and outcomes with patient’s primary care physician.
8. Participate and learn appropriate discharge planning, utilization of system based care in the management of their patients and how to do discharge summaries.
9. Learn to interpret EKG's, radiographic studies, PFT’s and appropriate lab diagnostic studies.

As part of the Honors Medicine Acting Internship, students must either complete a research project (i.e. submit an abstract to a regional or national meeting), attend a Florida ACP meeting, or make an advocacy trip with the ACP.
**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 or 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.

**DIVISION OF HEMATOLOGY AND MEDICAL ONCOLOGY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tbody>
<tr>
<td>MEL 8308: Ambulatory Hematology Oncology</td>
<td>11</td>
<td>none</td>
<td>USF &amp; South Tampa</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
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<tr>
<td>Dr. Kenneth Zuckerma n and Faculty</td>
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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.
The objective of this elective is to attain a solid understanding of the pathophysiology, clinical manifestations, diagnostic studies and management of malignant hematological disorders, hematological complications of malignant diseases, and hematological 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.
The students also will 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.

| MEL 8345: Inpatient Medical Oncology Dr. Kenneth Zuckerma n and Faculty |
|-------------------------------------------------------------|-----------------|-----------------|
| Upon the completion of this elective, the student should understand the principles of diagnosis and management of a segment | 1,2,3,4,5,6,7,8,9,10,11 | BCC 7144 BCC 7184 |
| 1@MCC | FT, 44 hr wk | 2,4 |
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 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 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 conferences 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.

MEL 8366: Adult Bone Marrow Transplantation
Dr. Michael Nieder and Faculty

Objectives

1. Have an understanding of the process of bone marrow transplantation and the associated immunobiology of immune recovery after ablative therapy and
2. Identify the different types of transplantation (syngeneic, allogeneic, and autologous) and the diseases in which each type of transplantation may play a role
3. Identify common problems related to marrow transplantation such as cytopenias; infectious complications; nutrition and electrolyte imbalance; renal, card

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 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.

### DIVISION OF INFECTIOUS DISEASES AND INTERNATIONAL MEDICINE

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tbody>
<tr>
<td>MEL 8310: Infectious Diseases and International Medicine</td>
<td>1,2,3,4,5,6,8,9,10,11</td>
<td>BCC 7144, BCC 7184, 3@TGH, 2@TVAH, 2@MCC</td>
<td>FT, 44 hr wk</td>
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### 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 antimicrobial 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.

| MEL 8314: Tropical Medicine and Public Health Abroad | 1,2,3,4,5,6,7,8,9,10 | BCC 7144 | BCC 7164 | 2@USFMS | FT, 44 hr wk | 2,4 |

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.

Emergency medical insurance is required for all electives abroad.

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<thead>
<tr>
<th>Course Code</th>
<th>Instructor 1</th>
<th>Instructor 2</th>
<th>Instructor 3</th>
<th>Instructor 4</th>
<th>Instructor 5</th>
<th>Instructor 6</th>
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<th>Instructor 10</th>
<th>Instructor 11</th>
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<tbody>
<tr>
<td>MEL 8357</td>
<td>Infections in Transplant Medicine and Immunocompromised Hosts</td>
<td>Jose Montero</td>
<td>Todd Wills</td>
<td>Charurut Somboonwit</td>
<td>Beata Casanas</td>
<td>Sally Alrabaa</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
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Objectives
The goal of this rotation is to introduce the senior students to transplant medicine and its major complications specifically infections. The student will be able to see various viral, bacterial, fungal, and mycobacterial infections in various immunocompromised hosts and apply his/her basic knowledge of the immune system and its function to clinical practice. The student will develop skills in recognizing and diagnosing unique infections. Appropriate use of antimicrobial agents including knowledge of drug interactions between antimicrobials and immunosuppressive drugs will be demonstrated.

Evaluation
The evaluation process will be ongoing on a daily basis through constructive criticism to help students' perfect history taking, physical exam and guide them to use tests appropriately and formulate appropriate differential diagnosis. At the end of the rotation the attending physician will give an overall evaluation to the students as well students will be given the opportunity to give suggestions to help incorporate students' needs into future rotations through this service.
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 immunocompromised 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.

MEL 8363
Infections in the Intensive Care Unit
Drs. Jose Montero, Todd Wills, Charurut Somboonwit, and Beata Casanas, Sally Alrabaas

| 1,2,3,4,5,6,7,8,9,10,11 | BCC 7144 | BCC 7184 | 2@TGH | FT, 44 hr wk | 2,4 |
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.

| MEL 8365: Outpatient Care of the HIV Infected Patient | 1,2,3,4,5,6,7,8,9,10,11 | BCC 7144 | BCC 7184 | 1@HCHD | FT, 44 hr wk | 2,4 |
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 therapeutic agents 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.

<table>
<thead>
<tr>
<th>DIVISION OF MEDICAL ETHICS AND HUMANITIES AND PALLIATIVE MEDICINE</th>
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<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tbody>
<tr>
<td>MDE 8053: Selected Topics Such as Aging, Global Concerns, and Disabilities Dr. Lois Nixon</td>
<td>11</td>
<td>none</td>
<td>USF &amp; South Tampa</td>
<td>FT, 44 hr wk</td>
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</tbody>
</table>
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 interpretation s and critiques of works to fellow participants.

The course is scheduled to allow for co-participation by MD and Masters students. The on-line class extends over a 3-month period while the MD class adheres to the traditional one-month format.
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
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.
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.

Faculty will assist students in locating appropriate faculty members to supervise their independent study.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Meets</th>
<th>Schedule</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDE 8056:</td>
<td>11</td>
<td>none</td>
<td>no limit@USFMS</td>
<td>FT, 44 hr wk</td>
</tr>
<tr>
<td>Medical Humanities and Human Values Dr. Lois Nixon</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDE 8057:</td>
<td>9</td>
<td>none</td>
<td>6-20@USFMS</td>
<td></td>
</tr>
<tr>
<td>Medicine and the Arts: NYC Voices and Visions Dr. Lois Nixon</td>
<td></td>
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</tbody>
</table>
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.
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: MD 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.

**DIVISION OF NEPHROLOGY AND HYPERTENSION**

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEL 8313: Clinical Nephrology</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>BCC 7144 BCC 7184</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
</tr>
</tbody>
</table>
year medical student to the broad general principles of Clinical Nephrology. In essence, the student will be an acting intern who, 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.

DIVISION OF PULMONARY, CRITICAL CARE, AND SLEEP MEDICINE

<table>
<thead>
<tr>
<th>MEL 7388: Introduction to Sleep Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drs. William Anderson, Robert Geck, and Daniel Schwartz</td>
</tr>
</tbody>
</table>

This elective is designed to introduce students to the practice of sleep medicine in an outpatient and inpatient setting. Under the supervision of clinical faculty, students will have the opportunity to practice in a university or hospital clinic setting. Students will also round with the preceptors in the hospital. The student will have exposure to interpretation of sleep studies and observation of the overnight recordings.

Objectives

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slota</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>BCC 7144 BCC 7184</td>
<td>2@T-VAH 2@TGH 1@MCC</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
</tr>
</tbody>
</table>
1. List the clinical findings that address the concerns with high pressure told probably obstructive sleep apnea. Compare and contrast central from obstructive sleep apnea.

2. Evaluate the business models that are necessary for successful outcomes in the treatment of patients in #1 & #2 above.
4. Describe the various presentations of a patient that may be referred for the clinical evaluation of insomnia.
5. Compare and contrast behavioral versus medication treatment for insomnia.
6. List the most common abnormal behaviors that occur during sleep (parasomnias).
7. Compare and contrast jet lag and shift work sleep disorder with advanced and delayed sleep phase syndromes (circadian rhythm disorders) in adults and children.

Methods

The trainee will see patients at the USF, VA and TGH Sleep clinics as well as in-patient consults. Trainees will participate in the Sleep Medicine conferences during their rotations. Trainees will be provided with the introduction to scoring of a sleep study as well as direct observation of a nocturnal recording. Upon completion of this elective, the trainee will have an understanding of the various things that can go wrong with patient's sleep in the middle of the night. Furthermore, they will have a plan developed as to the diagnostic and therapeutic approach to each of these disorders.

Evaluation
The trainee will be evaluated by the course director or his designee, at the end of the course, based on the clinical evaluations completed by all fellows and faculty who work with them. An in-service exam will assess some of the ACGME six core competencies.

Grades are determined by: 75% clinical evaluations and 25% by final examination.
1. Learn to evaluate patients in the rheumatology clinic and perform an appropriate history and physical examination, design an appropriate differential diagnosis, and diagnostic and therapeutic plans for the more common systemic rheumatic and musculoskeletal diseases.

2. Acquiring in clinical, laboratory, and radiographic features of the more common rheumatologic and musculoskeletal diseases

3. Understand the pathophysiology of the common rheumatologic and musculoskeletal diagnoses

4. Learn to perform knee and shoulder aspiration injection on simulation models, and have the opportunity to perform on patients in a clinical setting.
Dialectics

Rheumatology Blackboard Website includes PowerPoints, links and interactive didactics for students, weekly Rheumatology conference with faculty and trainees, and Joint Injection Workshop with simulators.

Clinical Experience

The student will have the opportunity to rotate with a variety of rheumatology faculty at sites including: USF Morsani Medical Clinic, the James A. Haley VA Hospital Outpatient rheumatology clinic and inpatient rheumatology consult service, Tampa General Hospital rheumatology consult service, and 30th Street clinic. The students will be assigned to sites and faculty members in order to maximize the breadth of their clinical experience. The faculty will mentor the student during clinic sessions providing clinical teaching of rheumatologic differential diagnosis, evaluation, and management, and giving feedback on clinical skills. There are additional opportunities to have exposure to musculoskeletal ultrasound in the clinical setting.

Evaluation
The student will receive a final evaluation from the faculty preceptor with which they were assigned for the majority of their clinical experience. The student will also be evaluated on their PowerPoint presentation to faculty and trainees during the weekly rheumatology conference on a topic relevant to a patient seen in the clinical setting.

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

**Objectives**

1. Be able to perform a history and physical examination as it relates to pulmonary disease.
2. Know how to order and interpret basic labor
tory tests such as a chest x-ray, CT scan, arterial
blood gases, and pulmonary function tests

3. Have a fundamental understanding of the com-
mon 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 TVAH:** 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.

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**DIVISION OF RHEUMATOLOGY**

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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</thead>
<tbody>
<tr>
<td>MEL 8339: Rheumatology Clinical Elective</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>BCC 7144, BCC 7164</td>
<td>2@MORE/TGH/VA</td>
<td>FT, 44 hr wk</td>
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</tbody>
</table>
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
Be able to obtain history and perform the physical examination appropriate for rheumatic disease patients. Be able to order and interpret pertinent X-rays and laboratory studies. 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 conference 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.

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### Molecular Medicine

<table>
<thead>
<tr>
<th>Course</th>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 7260: Research in Molecular Medicine</td>
<td>1,2,3,4,5,6,7,8,9, 10,11</td>
<td>none</td>
<td>4@USFMS</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
</tr>
</tbody>
</table>
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**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Faculty</th>
<th>Hours</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEL 9999:</td>
<td>Independent Study in Molecular</td>
<td></td>
<td>none</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>Medicine</td>
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</table>

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 pathological 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...
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.

- **Molecular Pharmacology and Physiology**

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 7464: Research in Pharmacology</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>none</td>
<td>no limit @USFMS</td>
<td>FT, 44 hr wk 4 to 12 weeks</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Objective</th>
<th>BMS 7560: Research in Physiology</th>
<th>Course Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3,4,5,6,7,8,9,10,11,12</td>
<td>none</td>
<td>10@USFMS</td>
</tr>
<tr>
<td>8-12 weeks</td>
<td>FT, 44 hr wk</td>
<td>8-12</td>
</tr>
</tbody>
</table>
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.

| Objective | 1,2,3,4,5,6,7,8,9,10,11 | none | no limit @USFMS | FT, 44 hr wk | 2,4 |
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.
Evaluación
A written report will be required.

MEL 9999H: Independent Study in Physiology

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.

Evaluación
A written examination is required.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEL 7320N: Externship in Neurology</td>
<td>1,2,3,4,5,6,7</td>
<td>Year 4 status</td>
<td>no limit @EXT</td>
<td>FT, 44 hr wk</td>
<td>4</td>
</tr>
<tr>
<td>MEL 8359: Intro to Physical Med and Rehabilitation</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>None, Recommend: BCC 7110, BCC 7154</td>
<td>2@TVAH</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
</tr>
</tbody>
</table>

Neurology
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.

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 a neurosurgical history and examination.
2. Actively participate in discussing differential diagnoses.
3. Learn to create a comprehensive management plan.

4. Become familiar with neurological beyond the core requirements.

5. Gain more independence dealing with neurological patients.
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.
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.

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, including two to four 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
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
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

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.
### MEL 8674:
**Senior Elective in Headache and Pain Medicine**

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Objectives</th>
<th>Learning Outcomes</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>None, Recommend: BCC 7110, BCC 7154</td>
<td>Manage the chronicity of headaches and the development of migraines</td>
<td>Students will see patients at the Headache and Pain Clinics at the Tampa General Hospital Rehabilitation Building and the University of South Florida Medical Center.</td>
<td>Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations complete on patients.</td>
</tr>
<tr>
<td>Drs. Kavita Kalidas, Nina Tsakadze, A. Carvel Gipson, and Headache and Pain Fellows</td>
<td>Obtain a comprehensive medical and neurological history as well as a detailed examination</td>
<td>Students will see patients at the Headache and Pain Clinics at the Tampa General Hospital Rehabilitation Building and the University of South Florida Medical Center.</td>
<td>Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations complete on patients.</td>
</tr>
<tr>
<td></td>
<td>Differentiate a variety of elements implicated in headache management</td>
<td>Students will see patients at the Headache and Pain Clinics at the Tampa General Hospital Rehabilitation Building and the University of South Florida Medical Center.</td>
<td>Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations complete on patients.</td>
</tr>
<tr>
<td></td>
<td>Understand the role of neurotoxins, trigger point injections, and peripheral nerve blockade in the management of migraines</td>
<td>Students will see patients at the Headache and Pain Clinics at the Tampa General Hospital Rehabilitation Building and the University of South Florida Medical Center.</td>
<td>Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations complete on patients.</td>
</tr>
<tr>
<td></td>
<td>Understand the role of Neuromuscular Re-education/Biofeedback, physical therapy, occupational therapy, and psychological intervention plays in the treatment of headache and migraine</td>
<td>Students will see patients at the Headache and Pain Clinics at the Tampa General Hospital Rehabilitation Building and the University of South Florida Medical Center.</td>
<td>Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations complete on patients.</td>
</tr>
</tbody>
</table>

### MEL 8675:
**Senior Elective in Movement Disorders**

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Objectives</th>
<th>Learning Outcomes</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>None, Recommend: BCC 7110, BCC 7154</td>
<td>Manage the chronicity of headaches and the development of migraines</td>
<td>Students will see patients at the Headache and Pain Clinics at the Tampa General Hospital Rehabilitation Building and the University of South Florida Medical Center.</td>
<td>Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations complete on patients.</td>
</tr>
<tr>
<td>Drs. Theresa Zesiewicz, Robert Hauser, and Juan Sanchez-Ramos</td>
<td>Obtain a comprehensive medical and neurological history as well as a detailed examination</td>
<td>Students will see patients at the Headache and Pain Clinics at the Tampa General Hospital Rehabilitation Building and the University of South Florida Medical Center.</td>
<td>Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations complete on patients.</td>
</tr>
<tr>
<td></td>
<td>Differentiate a variety of elements implicated in headache management</td>
<td>Students will see patients at the Headache and Pain Clinics at the Tampa General Hospital Rehabilitation Building and the University of South Florida Medical Center.</td>
<td>Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations complete on patients.</td>
</tr>
<tr>
<td></td>
<td>Understand the role of neurotoxins, trigger point injections, and peripheral nerve blockade in the management of migraines</td>
<td>Students will see patients at the Headache and Pain Clinics at the Tampa General Hospital Rehabilitation Building and the University of South Florida Medical Center.</td>
<td>Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations complete on patients.</td>
</tr>
<tr>
<td></td>
<td>Understand the role of Neuromuscular Re-education/Biofeedback, physical therapy, occupational therapy, and psychological intervention plays in the treatment of headache and migraine</td>
<td>Students will see patients at the Headache and Pain Clinics at the Tampa General Hospital Rehabilitation Building and the University of South Florida Medical Center.</td>
<td>Students will be evaluated by the course director at the end of the course, based largely on clinical evaluations complete on patients.</td>
</tr>
</tbody>
</table>
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 Parkinsonism s, 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, akinesia, and Huntington's disease.
2. Experience in treating movement disorders, including gait abnormalities and other neuromotor impairments.

Observe various treatments and observe the improvement or deterioration of symptoms.
4. Provide opportunity for participation in clinical or basic science research in movement disorders

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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Instructor(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEL 8677</td>
<td>Outpatient Neurology</td>
<td>Drs. Theresa Zesiewicz, Charles Brock, Angel Cruz, Robert Hauser, A. Carvel Gipson, Juan Sanchez Ramos, Kavita Kalidas, Nina Tsakadze, Derrick Robertson, Rossitza Chichkova, Selm Benbadis, and Lara Katzin</td>
<td>Students 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.</td>
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</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Instructor(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>None, Recommend: BCC 7110, BCC 7154</td>
<td>2@USFMS 1@CCF</td>
<td>FT, 44 hr wk 2,4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Instructor(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None, Recommend: BCC 7110, BCC 7154</td>
<td>1@TGH</td>
<td>FT, 60 hr wk 2,4</td>
<td></td>
</tr>
</tbody>
</table>

None, Recommend: BCC 7110, BCC 7154 | 2@USFMS 1@CCF | FT, 44 hr wk 2,4 |
This elective is designed to give 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. Students will also get exposure to interventional neurology as it pertains to the management of ischemic stroke and subarachnoid hemorrhage and gain experience in critical care neurology as it pertains to the management of patients with ischemic stroke, intracerebral hemorrhage and subarachnoid hemorrhage.

Objectives
In trochu, the heterogonous stratum of stromics and bleble to differentiate them from non-stromatic micmics.
2. A play in place of endemic disease to cerv brovaral diagnosis and management.
3. Evaluate the proper use of laboratory and
necessary equipment against diseases caused by
various pathogens.
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 the 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.

MEL 8690: Research in Neurology

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

None. Recommend: BCC 7110, BCC 7154

2@USFMS

FT, 44 hr wk

2, 4

Drs. Charles Brock, Angell Cruz, Robert Hauser, Juan Sanchez Ramos, Maria-Carmen Wilson, Theresa Zesiewicz, Selim Benbadis, and Derrick Robertson.

This elective course is designed for the student who is interested in furthering his/her neurological knowledge by concen

Evaluation

Grades will be determined by faculty evaluation and resulting paper.
MEL 9999N: Independent Study in Neurology

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.

Neurosurgery

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCC 8122: Surgical Aspects of Neurological Disease</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>Year 4 status</td>
<td>4@TGH</td>
<td>FT, 40-50 hr wk</td>
</tr>
</tbody>
</table>

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 anc.

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. 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 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.

This elective is NOT available to visiting students.

MEL 9999V: Independent Study in Neurosurgery
Dr. Fernando Vale

This elective is NOT available to visiting students.

Obstetrics and Gynecology

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<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3,4,5,6,8,9,10,11</td>
<td>Year 4 status</td>
<td>No limit@USF-MS</td>
<td>FT, variable</td>
<td>2,4</td>
</tr>
</tbody>
</table>
MEL 73200:
Externship in Ob/Gyn
Dr. James Mayer

This elective is provided for USF fourth year medical students to have the opportunity to gain further training in an off-campus setting in an approved elective site. The elective course should be consistent with a knowledge base towards Women’s Healthcare. All externships must be pre-approved in writing by the Ob/Gyn Director at USF on the externship application form.

Evaluation

The student will be required to submit a brief summary of the experience and its relative content to the field of Ob/Gyn.
This elective is offered to fourth year medical students to obtain an advanced clinical exposure in the medical and surgical aspects of Obstetrics and Gynecology. Students will take an active role in all phases of patient care, diagnostics and management. This elective will cover both the inpatient and outpatient settings. This elective will be offered at Tampa General Hospital, Women’s Health Park at Genesis, USF Medical Clinics: South Tampa Center and Morsani Center for Advanced Healthcare.

**Evaluation**

The assigned faculty member and resident will be responsible for completing an evaluation on the student’s clinical performance.
### MEL 8420: Ob/Gyn Subspecialty and Senior Elective

| 1,2,3,4,5,9,10,11 | BCC 7184 | 1@TGH/MCAH | FT, 40 hr wk | 4 |

This elective is offered to introduce the fourth year medical students to a subspecialty within the field of Obstetrics and Gynecology. Students will be on scholarly concentration towards publication of a case report or on-going research in an Ob/Gyn subspecialty.

**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.

### MEL 8421: Ob/Gyn Acting Internship

| 1,2,3,4,5,6,7,8,9,10,11 | Year 4 status | 2@TGH (alternating Day/Night shift) | FT, 40-60 hr wk | 4 |

Drs. James Mayer and Jerome Yankowitz

**Evaluation**

The Ob/Gyn Acting Internship is a month long concentrated clinical experience at Tampa General Hospital in the Bayshore Obstetrics and Delivery Service. The acting intern will triage, admit, and deliver those patients to whom they have been assigned. The student will be supervised by USF Department of Ob/Gyn clinical faculty and residents that are part of the labor and delivery team. The student will be challenged to participate as an active member of the team, within the unique dynamics of labor and delivery.

**Objectives**

1. Advance and mature the knowledge base and clinical skills in the care of the obstetrical patient
2. Demonstrate the independence of developing an assessment and plan for patient care to be presented, reviewed, and agreed upon by the medical team
3. Acknowledge and demonstrate responsibility and professionalism to patients, team and staff
4. Actively participate in all patient care directly or indirectly, attempting to meet patient care and team needs at all times
5. Share knowledge, support, and compassion to patients, team, and staff
6. Reflect, study, read, and be prepared, demonstrating growth by the next shift
7. Ask for and appreciate constructive feedback
8. Have fun

**Evaluation**

Formal evaluation forms will be completed by the Labor and Delivery faculty and resident team members.

### MEL 9999O: Independent Study in Obstetrics and Gynecology

| 1,2,3,4,5,6,7,8,9,10,11 | Year 4 status | No Limit@USF-MS | FT, variable | 2,4 |

Dr. James Mayer and Faculty Preceptor

This elective is used to schedule individually tailored and approved activities not covered by other electives.

**NOTE:** Independent Study Application must be reviewed and signed by Dr. James Mayer before the start.

### Ophthalmology

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
</table>

| 1,2,3,4,5,6,7,8,9,10,11 | FT, 40 hr wk | 4 |

**NOTE:**

- Independent Study Application must be reviewed and signed by Dr. James Mayer before the start.
<table>
<thead>
<tr>
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<th>Course Title</th>
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<th>Year 4</th>
<th>Credits</th>
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<tr>
<td>MEL 7320E</td>
<td>Externship in Ophthalmology</td>
<td>1,2,3,4,5,6,7</td>
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<td>No Limit @EXT FT, 44 hr wk</td>
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<tr>
<td>MEL 8501</td>
<td>Medical Ophthalmology</td>
<td>Year 3: 7,8,9,10,11 Year 4: 3,4,5,6,7,8,9,10,11</td>
<td>none</td>
<td>2@USF-MS FT, 44 hr wk</td>
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<tr>
<td></td>
<td>Dr. Carla Bourne and departmental faculty</td>
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<tr>
<td></td>
<td>This course teaches the ophthalmic signs and symptoms of systemic medical disease through lectures and practical experiences.</td>
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<tr>
<td>MEL 8506</td>
<td>Cornea/External Disease</td>
<td>Year 3: 7,8,9,10,11 Year 4: 1,2,3,4,5,6,7,8,9,10,11</td>
<td>none</td>
<td>1@USF-MS FT, 44 hr wk</td>
</tr>
<tr>
<td></td>
<td>Drs. Edgar Espana, Craig Berger, and Lewis Groden</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>This course is designed for students interested in ophthalmology as a career. Students will participate in clinical rotations and lectures.</td>
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<tr>
<td>MEL 8507</td>
<td>Retinal Elective</td>
<td>Year 3: 7,8,9,10,11 Year 4: 1,2,3,4,5,6,7,8,9,10,11</td>
<td>none</td>
<td>1@USF-MS FT, 44 hr wk</td>
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<tr>
<td></td>
<td>Drs. Peter Reed Pavan and Brian Madow</td>
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<td></td>
<td>Students will evaluate patients with diabetic retinopathy, hypertensive retinopathy, senile macular degeneration, retinal detachment, intraocular tumors, and uveitis at the USF Eye Institute using direct and indirect ophthalmoscopy and slit lamp examination of the fundus. Students will learn the interpretation of fundus fluorescein angiography and ultrasonography. They will participate in argon and krypton laser treatments.</td>
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</table>
photocoagulation, intraocular injections, scleral buckles, vitrectomies, and radiation plaque therapy. 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. In the last week of the rotation, the student is required to present and discuss a patient they have evaluated during the course at the departmental case conference.

Evaluation
Evaluation will be determined by daily performance observed during the 4-week elective period. On the first day of the rotation, report to Stacy Parker DeRaps at the USF Eye Institute.
### MEL 8509: Glaucoma

Drs. David Richards, Lisa Gamell, and Carla Bourne.

This course is designed for students interested in ophthalmology as a career. Glaucoma is one of the most common clinical problems ophthalmologists encounter. Its diagnosis and treatment will be taught through participation in clinics and surgery. Attendance at departmental conferences is expected as is independent reading. Participation in a research project is encouraged. During the last week of the rotation, presentation of an interesting patient or the results of a research project at the departmental teaching conference is required. On the first day of the rotation, report to Stacy Parker DeRaps in the USF Eye Institute.

| Year 3: 7,8,9,10,11 | none | 1@USF-MS | FT, 40 hr wk | 2,4 |
### 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 Stacy Parker DeRaps in the USF Eye Institute.

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tbody>
<tr>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>none</td>
<td>No Limit@USF-MS</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
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### Orthopaedics

<table>
<thead>
<tr>
<th>MEL 7320U: Externship in Orthopaedics</th>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tbody>
<tr>
<td>Externship form required. Year 4 status</td>
<td>1,2,3,4,5,6,7,8,9</td>
<td>No limit@EXT</td>
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<table>
<thead>
<tr>
<th>MEL 7823: Orthopaedic Elective</th>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 3: 8,9,10,11 Year 4: 1,2,3,4,5,6,7,8,9,10,11</td>
<td>none</td>
<td>4@MCC/ TGH/TVAH/ MCAH</td>
<td>FT, 40 hr wk</td>
<td>4</td>
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</tbody>
</table>
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. Accurate diagnosis, properly managed, and appropriately consulted for common orthopedic conditions and emergencies.
3. Understand and recognize properly for recognition, and how to interpret them.

4. Demystify understanding and acknowledgment of perspective and in context, and how to

5. Understand and recognize properly for recognition, and how to interpret them.

6. Demystify understanding and acknowledgment of perspective and in context, and how to

7. Understand and recognize properly for recognition, and how to interpret them.

8. Demystify understanding and acknowledgment of perspective and in context, and how to

9. Understand and recognize properly for recognition, and how to interpret them.

10. Demystify understanding and acknowledgment of perspective and in context, and how to

11. Understand and recognize properly for recognition, and how to interpret them.

12. Demystify understanding and acknowledgment of perspective and in context, and how to

13. Understand and recognize properly for recognition, and how to interpret them.

14. Demystify understanding and acknowledgment of perspective and in context, and how to

15. Understand and recognize properly for recognition, and how to interpret them.

16. Demystify understanding and acknowledgment of perspective and in context, and how to

17. Understand and recognize properly for recognition, and how to interpret them.

18. Demystify understanding and acknowledgment of perspective and in context, and how to

19. Understand and recognize properly for recognition, and how to interpret them.

20. Demystify understanding and acknowledgment of perspective and in context, and how to

21. Understand and recognize properly for recognition, and how to interpret them.
Each element of the treatment of simulation and computer practice.
6. Demonstrate understanding of the management of complex tissue injuries as they relate to the musculoskeletal system.
Lear
ning 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.

**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.
### MEL 9999U: Independent Study in Orthopaedics

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.

<table>
<thead>
<tr>
<th>Year 4 status</th>
<th>No limit@USF-MS</th>
<th>FT, 44 hr wk</th>
<th>2,4</th>
</tr>
</thead>
</table>

### Otolaryngology

<table>
<thead>
<tr>
<th>MEL 7320T: Externship in Otolaryngology</th>
<th>Permits</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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</thead>
<tbody>
<tr>
<td><a href="#">Externship form required.</a></td>
<td>1,2,3,4,5,6,7,8</td>
<td>Year 4 status</td>
<td>No limit@EXT</td>
<td>FT, 44 hr wk</td>
<td>4</td>
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</table>

<table>
<thead>
<tr>
<th>MEL 7816: Otolaryngology Acting Internship /Head and Neck Surgery</th>
<th>Permits</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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</thead>
<tbody>
<tr>
<td><a href="#">Clinical preceptorship is designed to provide an in-depth experience in the</a></td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>Year 4 status</td>
<td>3@USF-MS</td>
<td>FT, 44 hr wk</td>
<td>Year 3: 2 Year 4: 4</td>
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</tbody>
</table>
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 to 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.
MEL 9999T: Independent Study Otolaryngology

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.

Pathology and Cell Biology

ANATOMY

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 8187: Advanced Human Anatomy Dr. Arslan and Faculty</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>No limit@USF-MS</td>
<td>FT, 44 hr wk</td>
<td>2,4</td>
</tr>
</tbody>
</table>
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 step-by-step 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 discussion 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.
Track

Required for Radiology
One of the options for Emergency Medicine, and Family Medicine

Note: This course is also listed under Internal Medicine.

MEL 9999A: Independent Study in Anatomy

Dr. Arslan and Faculty

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

Objectives

1,2,3,4,5,6,7,8,9,10,11

none

No limit@USF-MS

FT, variable

2,4
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 necessitates 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.
Students should contact Dr. Arslan to receive permission in advance and to insure proper coordination.

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

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<td>BMS 7663:</td>
<td>3,4,5,6,7,8,9,10,11</td>
<td>1@T-VAH 1@TGH</td>
<td>FT, 44 hr wk</td>
<td>2, 4</td>
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</table>

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 observe the daily activities of laboratory technicians and pathologists' assistants, attend autopsies, and examine surgical specimens under supervision. He/she will be expected to attend all Pathology Conferences and participate in microscopic sign-out sessions. Particular attention will be given to correlation between clinical information and pathologic findings.

**Evaluation**

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

For all pathology electives, please report by 8:00 AM on the first scheduled day. The James A. Haley VA Hospital can only accommodate one student per month, regardless of rotation.

MC: Pathology office 207 1J
When scheduling Pathology, students must contact the individuals below in advance to secure permission:

**USF-MS:**
- Linda Carr (813) 974-0510

**TGH:**
- Tanisha Battle (813) 974-6464

**TVAH:**
- William Buleke (813) 972-2000 ext. 3190
<table>
<thead>
<tr>
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<th>1,3,4,5,6,7,8,9,10,11</th>
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<th>1@T-VAH 1@MCC</th>
<th>FT, 44 hr wk</th>
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<tr>
<td><strong>BMS 7664:</strong></td>
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<tr>
<td><strong>Flexible Elective in Pathology</strong></td>
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<tr>
<td><strong>Objective</strong></td>
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</table>
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 flexibly designed to accommodate students wishing to have a combined anatomic and clinical pathology elective experience. The student will observe the daily activities of anatomic and clinical laboratory technologists, technicians and pathologists’ assistants, attend autopsies, and examine surgical specimens under supervision. He/she will be expected to attend all pathology conferences and participate in microscopic sign-out sessions. Particular attention will be given to correlation between clinical information and pathologic findings.

**Evaluation**

The staff pathologists will evaluate the student using a standardized student evaluation form.
For all pathology electives, please report by 8:00 AM on the first scheduled day. The James A. Haley VA Hospital can only accommodate one student per month, regardless of rotation.

MC C: Pathology office 207
1J

T-VA H: 1D-191

HC ME: Main Entrance

US F-MS: MD C 204 9 (unless prior arrangements have been made)

TG H: B232

FB S: Main Entrance

When scheduling Pathology, students must contact the individuals below in advance to secure permission:

US F-MS: Linda Car r (813) 974-0510
<table>
<thead>
<tr>
<th>Objective</th>
<th>Year 4 status</th>
<th>FT, 44 hr wk</th>
<th>2, 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>1@FBS</td>
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</tbody>
</table>
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 immunologic 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.

For all pathology electives, please report by 8:00 AM on the first scheduled day. The James A. Haley VA Hospital can only accommodate one student per month, regardless of rotation.

**MC:**
Pat hol ogy office -- 207 T

**TVAH:**
1D-191

**HCME:**
Main Entrance
When scheduling Pathology, students must contact the individuals below in advance to secure permission:

US F- MS: Linda Carr (813) 974-0510
TG H: Tanisha Battle (813) 974-8364
T-VA H: William Bulkeley MD (813) 972-2000 ext. 3190
| BMS 7666: Clinical Cytopathology Objective | 1,3,4,5,6,7,8,9,10,11 | Year 4 status | 1@MCC 1@T-VAH | FT, 44 hr wk | 2, 4 |
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. The student will observe the daily activities of laboratory technicians and technologists as they prepare cytologic specimens. There may be opportunities to observe procedures as well.

Evaluation

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

For all pathology electives, please report by 8:00 AM on the first scheduled day. The James A. Haley VA Hospital can only accommodate one student per month, regardless of rotation.
When scheduling Pathology, students must contact the individuals below in advance to secure permission:

**USF-MS:**
- Linda Carr
  - (813) 974-0510

**TGH:**
- Tanisha Battle
  - (813) 974-8364
T-VAH: Willam, Bulkely, MD (813) 972-2000 ext. 3190

MC: Ardeshir Hakam, MD and Prudence Smith, MD (813) 745-1874

HCME: Mary Maiwald, MD (813) 914-4500

FB: German LeParec, MD (727) 568-1161

BMS 7667: Elective in Laboratory Medicine

Objective

1,3,4,5,6,7,8,9,10,11

Year 4 status 1@T-VAH FT, 44 hr wk 2, 4
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.

For all pathology electives, please report by 8:00 AM on the first scheduled day. The James A. Haley VA Hospital can only accommodate one student per month, regardless of rotation.
When scheduling Pathology, students must contact the individuals below in advance to secure permission:

**USF-MS:**
- **Linda Carr**
  - (813) 974-0510

**TGH:**
- **Tanisha Battle**
  - (813) 974-8364
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,

Methods
• Assist with autopsies on the bodies of persons dead from suicide, accident, and natural disease by performing dissection and medical chart review under the supervision of staff pathologists.

• Review pertinent medical literature for selected cases.

• Accompany staff during testimony under oath at criminal and civil trials and at depositions.

• Accompany staff during death scene investigations (evening and night call-out optional).

• 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 conference weekly, and a fixed brain and heart cutting conference weekly.

• 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.

For all pathology electives, please report by 8:00 AM on the first scheduled day. The James A. Haley VA Hospital can only accommodate one student per month, regardless of rotation.

MC:
Pat hology office – 207 1J

T-VA:
H: 1D-191

HC:
ME: Main Entrance

US:
F: MD C 204 9

MS:
(unless prior arrangements have been made)

TG:
H: B232

FB:
S: Main Entrance

When scheduling Pathology, students must contact the individuals below in advance to secure permission:
USF-MS:
Linda Car
r (813)
974-0510

TG H:
Tanisha Batt
le (813)
974-8364

T-VAH:
William, Bul
key (MD)
(813)
972-2000 ext 3190

MC:
Ardo
ter Hak
am, MD
and Prudon
ce Smith
(MD)
(813)
745-1874

HCME:
Mary Mai
nard, MD
(813)
914-4500

BS:
German LeP
anc (MD)
(727)
568-1161

BMS #661:
Research in Pathology

1,2,3,4,5,6,8,9,10,11
none
1@T-VAH
1@USF-MS
FT, 44 hr wk

4
NOTE: Approval, dates, and duration of course must be arranged with a faculty mentor prior to registering.

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

- Monitoring the student's interest, initiative, and progress through daily interactions and at weekly research conferences
- Evaluating the student's problem solving ability and diligence in the performance of realistic research assignments
- 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 molecular techniques as well as animal models.

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

For all pathology electives, please report by 8:00 AM on the first scheduled day. The James A. Haley VA Hospital can only accommodate one student per month, regardless of rotation.

MC C:
Pat hol ogy offic e - 207

T. VA H: 1D-191

HC ME: Main Entrance

US F. MS: MD C 204
9 (uni less pri or ar ra nge me nts hav e bee n ma de)

TG H: 8232
When scheduling Pathology, students must contact the individuals below in advance to secure permission:

**USF-MS:**
Linda Carr
(813) 974-0510

**TGH:**
Tanisha Battle
(813) 974-8364

**TVAH:**
William Bulkeley, MD
(813) 972-2000 ext. 3190

**MC:**
Ardeshir Hakam, MD and Prudence Smith, MD
(813) 745-1874

**HC ME:**
Mary Mainland, MD
(813) 914-4800
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Prerequisites</th>
<th>Status</th>
<th>Workload</th>
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</thead>
<tbody>
<tr>
<td>MEL 7320P</td>
<td>Externship in Pathology</td>
<td>1,2,3,4,5,6,7,8</td>
<td>Year 4 status</td>
<td>FT, 44 hr wk</td>
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<td>No limit@EXT</td>
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<tr>
<td>MEL 9999P</td>
<td>Independent Study in Pathology</td>
<td>1,3,4,5,6,7,8,9,10,11</td>
<td>Year 4 status</td>
<td>FT, 44 hr wk</td>
</tr>
</tbody>
</table>
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. In order to register for this elective, an Independent Study Application must have signatures of the elective faculty preceptor that you have chosen, the fourth year elective director for Pathology and Cell Biology, and the Associate Dean for Undergraduate Medical Education. This form can be obtained from the Registrar’s office.

**Evaluation**

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

For all pathology electives, please report by 8:00 AM on the first scheduled day. The James A. Haley VA Hospital can only accommodate one student per month, regardless of rotation.

**MC:**
Patology office 207 1J
When scheduling Pathology, students must contact the individuals below in advance to secure permission:

**US F- MS:**
- Linda Car (813) 974-0510

**TG H:**
- Tanisha Battle (813) 974-8364

**T-VA H:**
- William Bulkeley (813) 972-2000 ext. 3190
### Pediatrics

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tbody>
<tr>
<td>MEL 7103:</td>
<td>Pediatric Cardiology</td>
<td>BCC 7144 or BCC 7184</td>
<td>FT, 44 hr wk</td>
<td>4</td>
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<tr>
<td></td>
<td>Drs. Crawford, Dadlani, Decker, Epstein, Miller, Nardell, Nguyen, Stapleton, Turpin, Wilmot</td>
<td>2@ACH</td>
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</table>
Cardiovascular disease may be congenital or acquired and may exist in a spectrum throughout life from the womb to adulthood. The All Children’s Heart Institute is a comprehensive group of sub-specialty cardiologists that cover this spectrum of disease through the practice of: general cardiology, non-invasive (echocardiography), perinatal cardiology, advanced cardiac imaging (3-D ECHO, MRI, CT), invasive cardiology, electrophysiology, heart failure transplant, pulmonary hypertension, preventative cardiology, and adult congenital heart disease. The goal of this rotation will be to teach core principles of cardiovascular disease and allow students exposure to the broad spectrum of cardiology sub-specialty care that occurs within the division. A board certified/eligible Pediatric Cardiologist will supervise patient care during the elective rotation. Clinical and/or basic research projects are also available for interested students.
1. Understand the evaluation and treatment of the armature, step, pin, pulleys, and syncopation for various forms.
Clinically these objectives will be achieved by the following tasks:

1. Outpatient clinics – continually evaluated

2. Hospital in St. Petersburg and multiple outpatient centers (Tampa, USF, Sarasota)
1.

Inpatient Services—Studies will parallel in work-up and care of patients in the ICU, ne...
2. On aC, and in particular on the general floor or wall.

Sub-specialty tasks—all studies will be at least some of the following:

opportunities.
t'surgery and anaesthetic techniques
by bypass surgery and anaesthesia, mediastinoscopy, endoscopic
physiology procedures, echocardiography, MR/CT scan, and expe
s, cardiology, cardiology.
<table>
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<tr>
<th>MEL 7320K: Externship in Pediatrics</th>
<th>1,2,3,4,5,6,7</th>
<th>Year 4 status</th>
<th>no limit @EXT</th>
<th>FT, 44 hr/wk</th>
<th>4</th>
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Externship form required.

| MEL 7551: Acting Internship: Inpatient Pediatrics | 1,2,3,4,5,6,7,8,9,10,11 | Year 4 status | 1@TGH | FT, 44 hr/wk | 4 |

Physician Contact:
Dr. Gul Dadlani (727) 385-4057 Gul Dadlani@allkids.org

Administrative Coordinator:
Debbie Reinthaler (727) 767-6483 Debora h. Reinthaler@allkids.org
The inpatient 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.

Objectives
The substance blue to color and depiction in comic and logical foundation and definition of the kid’s problem.
The studio hurdle is of the diagnostically and other auxiliary availing in pedigrees and be able to use them when appropriate to particular.
The student should develop a significant area in psychology and
work with their family.
The student should provide the information for additional care to the hospital for children with varicose and other unusual problems.

Physician Contact: Dr. Rodriguez
Contact Number: (813) 259-8752
<table>
<thead>
<tr>
<th>MEL 7563: Pediatric Nephrology</th>
<th>1,2,3,4,5,6,7,8,9,10,11</th>
<th>BCC 7144 or BCC 7184</th>
<th>1@TGH 1@ACH</th>
<th>FT, 44 hr/wk</th>
<th>2, 4</th>
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<tbody>
<tr>
<td>Drs. Campos, Panzarino, Flores, and Perlm</td>
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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: (813) 259-8725
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 providing 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) 844-3437 at least one week in advance to confirm your rotation. Contact Dr. Sutsko at (813) 844-8286 at 8 a.m. on the first day of the rotation if you need further information.

MEL 7596: Pediatric Diabetes and Metabolic Disease
Drs. Bollepalli, Rodriguez, and Shulman

This elective is designed to provide clinical exposure to children with insulin dependent diabetes as they appear in the clinic. The activity will be based at the USF Diabetes Center at the Carol and Frank Morsani Center for Advanced Healthcare on the USF campus. Special emphasis will be placed upon diabetes care management including insulin dose adjustment, nutrition, and psychosocial aspects of the disease and will be supervised by the Diabetes Center team including pediatric endocrinologists, nutritionist, psychologists, and others. The Diabetes Center staff will provide specific education about the techniques required for home management of type 1 diabetes.
Objectives

The objective is to provide clinical exposure to childhood diabetes and improve understanding of the basic clinical disorder and the problems associated with routine home management.

Interested students must contact the director, Dr. Rodriguez at (813) 396-2580, prior to selecting this elective. Those interested in more intense exposure to children with a chronic disease should contact Dr. Rodriguez to learn the dates of camp sessions for children with diabetes.

MEL 8554: Primary Care Pediatrics
General Pediatrics
Faculty and Staff

1,2,3,4,5,6,7,8,9,10,11

1@USF Pediatrics (Davis and Healthpark)

BCC 7144 or BCC 7184

FT, 44 hr wk

2, 4
This rotation allows the student to experience the broad range of primary pediatric care issues in the USF Health Pediatric Clinic, located at 17 Davis Pediatric Clinic. Students will sometimes also work at HealthPark Pediatrics. 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.

**Objective**

Improve knowledge of general outpatient pediatrics and improved skills in performing histories, physicals, assessments and developing appropriate management plans.

Please contact Dr. Sharon Dabrow via email at sdabrow@health.usf.edu at least four weeks prior to beginning this elective.
| MEL 8555: All Children's Hospital Acting Internship: In-patient Pediatrics  
Pediatric Hospitalists |
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<tbody>
<tr>
<td><strong>Objective</strong></td>
<td><strong>Evaluation</strong></td>
<td>2 @ ACH FT, 44 hr/wk</td>
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</tbody>
</table>

- 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.

- 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.
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, 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: 813-259-8725.

MEL 8556: Acquired Immunodeficiency Syndrome
Drs. Rodriguez, Lujan-Zibberman and Emmanuel

1,2,3,4,5,6,7,8,9,10,11 BCC 7144 or BCC 7184 1@ACH FT, 44 hr wk 4
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.
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 clinics 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.

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), Premier Community Healthcare Group (Dade City and Zephyrhills), Manatee County Rural Health Services (Bradenton), Community Health Centers of Pinellas (Saint Petersburg), and DeSoto County Health Department (Arcadia)

1,2,3,4,5,6,7,8,9,10,11
BCC 7144 or BCC 7184
1@CF
FT, 44 hr wk
4
PRIOR APPROVAL REQUIRED

Please contact Anne Maynard, MPH, CHES at amaynard@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 may provide housing.

**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.
### MEL 8567: Pediatric Practice Community 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 community physician directly or Dr. Sharon Dabrow to assist in organizing the rotation at sdabrow@health.usf.edu or 259-8752.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Department</th>
<th>Course Name</th>
<th>Faculty</th>
<th>Location</th>
<th>Hours/Week</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEL 8567</td>
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<tr>
<td>BCC 7144 or BCC 7184</td>
<td></td>
<td>1@USF-MS</td>
<td>FT, 44 hr wk</td>
<td>2, 4</td>
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### MEL 8568: Pediatric Hematology Oncology

Drs. Cameron Tebbi (TGH) and Nanette Grana (ACH)

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<tr>
<th>Course Code</th>
<th>Department</th>
<th>Course Name</th>
<th>Faculty</th>
<th>Location</th>
<th>Hours/Week</th>
<th>Notes</th>
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<tr>
<td>MEL 8568</td>
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<tr>
<td>BCC 7144 or BCC 7184</td>
<td></td>
<td>1@ACH 1@TGH</td>
<td>FT, 44 hr wk</td>
<td>2, 4</td>
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</table>
The student will be involved in the management of patients with pediatric hematology and oncology disorders, both in the inpatient and outpatient settings. For inpatient services, the student will participate in the AM rounds and assist with diagnostic procedures and therapy planning. Students are encouraged to study the basics of hematopoiesis and cancer chemotherapy. 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 newly referred and follow-up patients. The student will attend the weekly multidisciplinary patient care and teaching rounds and monthly tumor board. By the end of the period the student is expected to be able to know basics of work up and care for the pediatric hematology oncology patients.

**Objective**

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

**Contact Numbers:**

TGH (813) 259-8713; ACH 813-259-8725
Objective

The goal of this elective is to acquaint the student with genetic and metabolic disorders in pediatrics: diagnostic evaluation, differential diagnosis, inheritance, management and counseling. Students will typically attend Genetics/Metabolic Clinics Monday, Tuesday, and Thursday at CMS on campus and occasional outreach CMS clinics. Students will also participate in inpatient consultations. During the month, students may also have the opportunity for exposure to prenatal and cancer genetics cases. Students will be responsible for either the extensive work up of 1-2 new patients per clinic or see re-visits as scheduled. They will also be expected to give a 10-15 minute presentation at the end of the rotation on a selected topic.

Physician Contact: Dr. Prijoles
Phone: (813) 259-8772
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 didactics will provide teaching in the basic areas of normal, delayed, and disordered child development, including neurological and genetic disorders, intellectual disability, autism, and specific learning disabilities. This elective incorporates a wide variety of clinic environments, with exposure to NICU follow-up, age Birth-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. Mary Pavan at mpavan@health.usf.edu at least 4 weeks prior to the start of the elective.
Phone: (727) 767-8230

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Instructors</th>
<th>Hours per Week</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEL 8573:</td>
<td>Pediatric Allergy and Clinical Immunology</td>
<td>Drs. Perez, Dorsey, Sleasman, Sher, and Sriaroob</td>
<td>44 hr wk</td>
<td>2, 4</td>
</tr>
</tbody>
</table>
This elective is designed to give the student experience on both the outpatient and inpatient Pediatric Allergy and Immunology services of All Children's Hospital in St. Petersburg, Florida. 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, interpretation of immunology laboratory tests, and the treatment of allergic and immune disorders including autoimmunity. 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 current treatments of immunodeficiency disease.

Objective

Offer the student an intensive exposure to clinical allergy immunology through supervised responsibility for patient care.
The student should report to the Division of Allergy/Immunology, Children's Research Institute (Band-Aid Building) at 8:30 AM at ACH.

Contact Number: 813-259-8725

MEL 8574:
Pediatric Pulmonary Disease
Drs. Couluris, and Schnapf (TGH), Drs. Demissie, Ewig, Gondor and Kriseman (ACH)

TGH:

Objectives

1, 2, 3, 4, 5, 7, 8, 10, 11, 12

BCC 7144 or BCC 7184

1@TGH 2@ACH

FT, 44 hr wk 4
1. Obtaining a history and physical examination assessment to pulmonary disease in the infant, child, and adolescent.
2. Understand and interpret the results of the theoretical system and utilizing function testing.
Establish the level of competence in dignifying and maintaining children's rights by the NIH.
Possibilities and underestimated potential of polymer physics as it relates to computer pedestrian robotics.
5. Have a family with comradespirit in pediatrics in clinicking at carnegie and astrophysics.
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. Some of these disorders will include: cystic fibrosis, stridor, chronic lung disease of infancy, congenital malformations of the respiratory system, sleep-related disorders of breathing, upper airway problems, and management of the medically complex child with chronic respiratory problems such as having a tracheostomy tube or requiring supplemental oxygen at home. Pertinent literature will be discussed and will be available for review on the Moodle Pediatrics Learning Site.

Contact number at TGH is (813) 259-6767.

Contact physician: Dr. Schnapf
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.
The study will evaluate physical and psychological characteristics, laboratory data, and imaging studies.
2. The student will learn to incorporate accumulated data with critical thinking skills to both assess a patient's condition and outline a treatment plan.
3. The student will learn to appreciate the utility and usefulness of both invasive and non-invasive physiological monitoring and support.

Contact Number:
(727) 456-4250
**MEL 8577: Neonatology**  
Dr. Sosa and Faculty

<table>
<thead>
<tr>
<th>Objective</th>
<th>Introduce the student to intensive neonatology and provide in-depth clinical experience under close supervision</th>
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</thead>
</table>

Contact Number: 813-259-8725

| MEL 8577: Neonatology | 1,2,3,4,5,6,7,8,9,10, 11 | Year 4 status | 1@MCH | FT, 44 hr/wk | 4 |
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. McClenathan & Wilsey’s Group (ACH/Tampa Office).

**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 Kelly at 813-259-8725 prior to the first day of the rotation.
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) 627-5973 and (813) 627-5906
ACH Contact Number: 813-259-8725

MEL 8582: Pediatric Infectious Disease
Drs. Bergamo, Carr, Lujan-Zilbermann, Rodriguez, and Emmanuel (TGH) Drs. Dumois, Berman, and Messina (ACH)

| 2,3,4,5,6,7,8,9,10,11 | BCC 7144 or BCC 7184 | 2@ACH 1@SJH | FT, 44 hr wk | 2, 4 |
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. Microbiologic 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: 813-259-8725

<table>
<thead>
<tr>
<th>MEL 8583: Adolescent Medicine</th>
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<tbody>
<tr>
<td>Drs. Straub, Weiss, Puccio, Cimino and Staff</td>
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<tr>
<td>1,3,4,5,6,7,8,9,10,11</td>
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<tr>
<td>BCC 7144 or BCC 7184</td>
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<tr>
<td>1@TGH</td>
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<tr>
<td>FT, 44 hr wk</td>
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<td>2 or 4</td>
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This elective is designed to introduce senior medical students to the field of adolescent medicine. Students will be able to see and care for adolescents, ages 12 to 21 years, in a variety of outpatient settings. Adolescent clinics will afford students the opportunity to provide primary and specialty care to teenagers in a clinic setting. While students can also participate in adolescent health care in school-based clinics, at both high school and college settings. The experience will be supplemented with time spent at the Healthy Weight Clinic, learning about the care of teens with eating disorders; at the Hillsborough County Health Department and USF HIV clinic, learning about sexually transmitted infections; at various mental health sites, learning about mental health and substance abuse problems in adolescents; and at a variety of other settings, learning about sports medicine.

Objectives
1. A special emphasis on medical and health needs of the adolescent population.

2. In cases of forties communicating with teenagers, perform gaps psychological.
using the Hadassas, and providing protective gear for adolescents. Understand and the nominal quantities of psychological growth and development.
psychological development during puberty, and enable accurately stages of development. Stages in normal adolescent physical and emotional development...
4. Role of primary care in working with these patients and multidisciplinary healthcare professionals. 

Know the elements of upvisi...
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s.
Act as a support council for patients referred by bedside priority doctors, and communicate findings and plans of action back to the PCP.
nose and tract complexes, such as neck, dystrophy of (DU, among others), breast or disc(s) (fibrocytic breast...
diseases, gynecological disorders, STIs, and psychological problems.
reason, suddenly, 
and

sessions, sudden

resonance.

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surprisingly, 
and

reason, sudden

resonance.

sessions, sudden

resonance.
Reorganize the command problem of poroducce, and encourage active, responsive, productive characters' use.
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where their health care.
learn about the importance and how to assist in a successful transition to adulthood in the health care system and in adulthood.
Any interested student must contact either Dr. Straub or Dr. Weiss at least 6 weeks prior to the start of the elective.

Phone: (813) 259-8713
1. Learning to use ELISA and immune-based assays to quantify soluble proteins and cytokines
2. Application of flow cytometry analysis to measure immune cell activation and differentiation, intracellular cytokines, and immune response to specific antigens.
unsterilizing the compartment applications of meandering gene expression as well as cellular biology in the clinical setting
The student should report to the Division of Allergy/Immunology, Children's Research Institute (Band-Aid Building) at 8:30 AM at ACH.

**MEL 8587:**
Sports Medicine
Drs. Eaton and Gregan, Alex Atamirando, Scott Brickett, Andy Chasanoff, Kim Morris

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**

| 4,5,6,7,8,9,10,11 | BCC 7144 or BCC 7184 | 1@USFHealth | FT, 44 hr wk | 2, 4 |
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. Sport participation improves at a normal physical examination.
Evaluation, diagnosis, and mechanistic and household juiciest both in the field and in the clinical setting.
Family with a blue physical therapy and habilitation model
4. Participation in counseling about injury prevention education, nutrition, healthy lifestyle,adenoid, and anabolic steroid issues.
The schedule of this rotation is more varied, with educational opportunities occurring in the evening and weekends. This would allow for exposure to the variety of lectures and conferences offered by the USF Pediatrics residency, as well as for some weekdays completely free from clinical responsibilities.

Please contact Dr. Ronald Sutsko at (813) 844-8296 at least four weeks prior to beginning this elective.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Year Status</th>
<th>Status</th>
<th>Hours per Week</th>
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</thead>
<tbody>
<tr>
<td>MEL 8588</td>
<td>Honors in Pediatrics</td>
<td>1,2,3,4</td>
<td>4@USF-MS</td>
<td>FT, 44 hr</td>
</tr>
</tbody>
</table>
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. Sutsko 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
An evaluation form will be submitted by the preceptor with whom the student will work. Prior approval of this elective is required. Students should contact Dr. Sutsko at least four weeks prior to registering to discuss topics of interest and to identify a preceptor.

This elective is NOT available to visiting students.
This elective is designed to introduce senior medical students to the identification, evaluation, and treatment of children and adolescents with neurodevelopmental and psychiatric disorders. Under the supervision of Dr. Murphy and her faculty, students will be able to observe and participate in a comprehensive neuropsychiatric assessment, evidence-based medication management, and cognitive behavioral therapy. A multidisciplinary approach to assessment and treatment will be emphasized. This clinic is specialized as it serves children and adolescents with Obsessive-Compulsive disorder, Tourette syndrome, Trichotillomania, Separation anxiety, Phobias, Pediatric Autoimmune Neuropsychiatric Disorders associated with Streptococcal Infections (PANDAS), and Autism spectrum disorders. Students will have the opportunity to participate in Occupational and Physical therapy assessments for youth with developmental disorder. Students will also have the opportunity to participate in therapy sessions.
focusing on habit reversal for tics or exposure and response prevention for OCD treatment. In addition, this clinic has a number of clinical studies examining both psychopharmacology and therapeutic treatments for various diagnoses.

Objectives

1. Develop skills in evaluation, diagnosis, treatment, and management of child and adolescent patients with psychiatric disorder
1. Thorough assessment of patients' conditions as assessments and treatment for them
2. Recognizing the conditions and how to treat them
4.4.5. Proceed, counselors, historians, philosophers, psychologists, and the family
8. Learing educational, therapeutic, and counseling modalities for special needs learners.
Evaluat

Faculty observation and evaluation of student/patient interactions, case presentations, journal article discussions, and written assignments and written work.

Interested students must contact Dr. Murphy at least one month prior to the start of the elective.
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.

This elective is NOT available to visiting students.

### Psychiatry

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
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<tbody>
<tr>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>Year 4 status</td>
<td>1@T-VAH</td>
<td>FT, 40 hr wk</td>
<td>2</td>
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</table>
This elective gives the student the unique opportunity to participate in the evaluation, diagnosis, and the short-term treatment planning for patients in the JAHVA Emergency Room. Under close supervision by the faculty and staff of this service, the student gains experience in interviewing, diagnosing, and managing the acute psychiatric patient. The student sees a very wide range of pathology from adjustment disorders to frank psychoses to complex multisystem illnesses. Students work with the attending psychiatrists as well as the Director of the Service, Dr. Barbara Lubrano. Students will participate in the decision making process performing a risk assessment to determine if the patient requires inpatient admission or create a plan for outpatient care. Directed readings will be provided.

Objectives
1. A comprehensive assessment for dangerousness inclusive of suicide and violence risk
2. Use of the MoCHA to screen for cognitive deficits.
4. Differentiate problems which require further patient assessment and treatment versus outpatient care.

5. Appropriately utilize medications and recognize major side effects.
6. Demonstrate appropriate use of brief interventions exclusive of crisis interventions, chemical and physical restraint, etc.
Know and be able to list the elements required for conscientious voluntary hospitalization and surgically decision making under the Florida statutes and Mental Health Code.
B. Identify appropriate sources of collateral information to form the psychiatric evaluation (i.e., family, pharmacy, school, vocational education registry, etc.).
9. Demonstrate the ability to document a psychiatric history, mental status exam, and medical decision making to arrange psychiatric assessment.

Evaluation
- Direct observation by supervising faculty of interviewing and PE skills (at least weekly).
- Review of medical documentation by faculty supervising the rotation (daily).
- 10 minute oral presentation on a topic of interest.

The grade will be compromised of 75% clinical evaluation and 25% oral presentation on a topic.

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Year</th>
<th>Status</th>
<th>Hours/Week</th>
<th>Hours/Wk</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEL 7320Y</td>
<td>Externship in Psychiatry</td>
<td>1,2,3,4,5,6,7</td>
<td>no limit @EXT</td>
<td>FT, 44 hr wk</td>
<td>4</td>
</tr>
<tr>
<td>MEL 7613</td>
<td>Alcoholism and Substance Abuse</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>BCC 7154</td>
<td>1@T-VAH</td>
<td>FT, 44 hr wk</td>
</tr>
<tr>
<td>MEL 7613</td>
<td>Alcoholism and Substance Abuse</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>BCC 7154</td>
<td>1@T-VAH</td>
<td>FT, 44 hr wk</td>
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</table>
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
Endegenic kilns in medical and dental as sociocultural and pyciatric disorders
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.
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 James A. Haley Tampa VA Hospital. Specific experiences can include the Adult Evaluation Clinic, the Memory Disorders 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. Begin more intensive, intensive with present but medical and psychotherapeutic problems in various outpatient settings.
Development and understanding of psychology
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.

MEL 8602:
Child and Adolescent Psychiatry
Drs. M. Bengtson, Saundra Stock, Tanya Murphy, Karen Goldberg, Daniel Fallon 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

3,4,5,6,7,8,9,10,11 none 1@UPC FT, 44 hr wk 2,4
Learn how to evaluate and diagnose common childhood problems.
2. Lean management as a skill to address organizational and economic problems
3. Welcome family with community age appropriate childcare.

4. Become more family with the general practice of child psychiatry and bevioral problems.
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.

MEL 8608: Memory Disorders Clinic
Drs. J. Fils, M. Schoenberg, and Michelle Mattingly

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Instructor</th>
<th>Hours</th>
<th>Days</th>
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<tbody>
<tr>
<td>MEL 8608</td>
<td>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11</td>
<td>none</td>
<td>1@BYRD</td>
<td>FT, 44 hr wk</td>
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</table>
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 neuromaging 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 nursing home as relates to the geriatric population. Supervision and seminars will complement these clinical activities.

**Objectives**
3. Learn how to integrate psychological and medical aspects of the disorder.

4. Become familiar with visualization of community resources in the case of a daily
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.
MEL 8611: Acting Internship in Psychiatry: Advanced Adult Inpatient Psychiatry
Drs. J. White, D. Sanchez, C. Logan, 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 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, psychologic al 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.

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<tr>
<td>BCC 7144 BCC 7154</td>
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<tr>
<td>1@TGH 3@T-VAH 1@BP-VAH</td>
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<tr>
<td>FT, 40-44 hr wk</td>
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</table>
1. Development and understanding of psychology.

2. Become skilled in the use of psychological medication.
3. Gain greater familiarity with a variety of psychotherapy modalities including individual, group, and family psychotherapy.
4. Become more skilled in the interviewing of psychiatric 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.

MEL 8612: Geriatric Psychiatry
Drs. J. Fils, M. Schoenborg, J. Stewart, J. Hashimie, R. Velasco, and Medical Staff

1,2,3,4,5,6,7,8,9,10,11
none
1@T-VAH 1@UPC
FT, 44 hr wk
2,4
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 young and differentiating organic brain syndromes

3. Learn how to integrate psychiatric 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.
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 listening skills by performing in a non-threatening context and asking open-ended questions.
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.
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.
Family stored with multiple表决 methods for neural stimulation Idea if the psychiatric disorders which characterize decision spots by neural stimulation
3. Compare the two networks of neural stimulation to the other cerebral cortex.

4. Compare the two networks of neural stimulation to the other cerebral cortex.

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5. The two networks of neural stimulation to the other cerebral cortex.

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6. The two networks of neural stimulation to the other cerebral cortex.

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7. The two networks of neural stimulation to the other cerebral cortex.
5. Evaluate new patients for suitability for deep brain stimulation, transcranial magnetic stimulation, vagal nerve stimulation and electroconvulsive therapy.
6. Learning Outcomes
The trainee will see patients at the South Tampa Center Neurotherapies Clinic, Tampa General Hospital, and other related settings. Trainees will be provided with a training packet prior to the start of the elective pertaining to neurostimulation. Upon completion of these electives, 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.

| MEL 8627: Functional Psychiatric Neuroimaging Dr. Reed Murtagh | 1,2,3,4,5,6,7,8,9,10,11 | BCC 7144 BCC 7154 | 1@UDL | FT, 40 hr wk | 2,4 |
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 patient care skills by performing medical and psychological assessments.
3. Learn to be a part of a consultation 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.

MEL 8628: Seminar in Neuropsychology

1,2,3,4,5,6,7,8,9,10,11
none
2@TGH
FT, 40 hr wk
2,4
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 (MCI). Opportunities to publish in peer-reviewed journals can be made available.

Objectives

1. Become more skilled in the evaluation of patients with neurological and psychological dysfunction due to known or suspected disease.
2. Increased understanding

of the relationships between brain behavior and the science of brain behavior, by systematic clinical training and dedicated education.
5. Become involved in an understanding of collaborative, interdisciplinary research, understanding the basis for research methods and statistics and development.
5. This involvement (both biochemical and climatic) will, in turn, serve as a model for proof of carers.
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.

**MEL 8664:**
Psychiatric Research

Drs. F. Kozel, C. Santana, Y. Bannon, Brian Giunta, Jamie Fernandez, Gabriel de Erausquin, and Faculty

| Year 4 status | 1|@UPC 1@T-VAH | FT, 44 hr wk | 4 |
This elective is designed to enable the advanced student to become acquainted with the methodologies of behavioral medicine in basic neuroscience and their application in psychiatry and medicine. Opportunities exist in both basic science and clinical research areas including molecular genetics, neuroimmunology and cognitive medicine. 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
In a world of psychology and behavior in an area of particular interest to the student, become familiar with some...
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 (the Director of Undergraduate Education in psychiatry or Faculty supervisor for the rotation) PRIOR to scheduling this elective.

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**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.

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| 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. | none | No Limit@USF-MS | FT, 44 hr wk | 2,4 |

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**Radiology**
### BMS 8178: Human Cross-Sectional Anatomy

Drs. Summer Decker and Todd Hazelton

This elective is designed to provide students with a self study program in normal human cross sectional imaging with emphasis on anatomy as it relates to medical imaging techniques such as computed tomography and magnetic resonance imaging. Topics covered during the elective include cross-sectional imaging of the brain, head and neck, spine, upper and lower limbs, thorax, abdomen, and pelvis. With special approval by one of the course directors, students interested in focused learning of the cross sectional anatomy of a specific body region may select the two week elective. Any student interested in a focused self study program in a particular area of cross sectional anatomy must meet with one of the course co-directors at least one month prior to beginning of the elective to determine the course of study. Special approval is required for a 2 week version of this elective.

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3,4,5,6,8,9,10,11</td>
<td>Year 4 status</td>
<td>5@MCAH</td>
<td>FT, 40 hr wk</td>
<td>4</td>
</tr>
</tbody>
</table>
1. Identify important anatomical structures of the head, neck, brain, and spine across settings as well as on CT and MRI.

2. Identify important anatomical structures...
the musculoskeletal system of the upper and lower extremities as well as the chest, abdomen, and perineum, as well as sonic cross sections as well as on CT and MRI.
Identiﬁcation of anatomical structures within the chest, abdomen, and pelvis in groups as well as in CTA and MRI evaluation.
A midterm examination (50% of grade) will cover the cross sectional anatomy of the brain, head and neck, and spine, and a final examination (50% of grade) will cover the cross sectional anatomy of the upper and lower extremities, as well as the chest, abdomen, and pelvis.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Year Status</th>
<th>Year Status</th>
<th>Work Status</th>
<th>Work Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEL 7320R: Externship in Radiology</td>
<td>1,2,3,4,5,6,7</td>
<td>Year 4 status</td>
<td>FT, 44 hr wk</td>
<td>4</td>
</tr>
<tr>
<td>MEL 7701: Neuroradiology</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>Year 4 status</td>
<td>1@TGH</td>
<td>FT, 40 hr wk</td>
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</table>
Objectives

On this elective, the medical student will obtain:

1. An understanding of the indications for advanced neuroimaging (CT, MRI, CT, MR, CT, AMR, CT, A)

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M R
C T
M R
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A
2. A fundamental understanding of basic anatomy and understanding of normal anatomy and cross-sectional imaging.
The bibliography to categorize and organize aspects of our imaging as cerebral, neural, and functional, etc.
4. The biology to discuss the most common using pharmaceuticals.
Methods
The trainee will review neuroimaging studies with neuroimaging faculty and diagnostic radiology housestaff at the USF South Tampa Center for Advanced Healthcare and at Tampa General Hospital. The trainee will also participate in neuroimaging conferences during their elective period. The trainee will also have the opportunity to view neuroangiography and neurointerventional procedures at Tampa General Hospital. Upon completion of this elective, the training should understand the role of imaging in the diagnosis of neuropathology and have a basic understanding of imaging diagnosis of neuropathology on computed tomography, and magnetic resonance imaging.

Evaluation
The trainee will work closely with the attending neuroradiologists and housestaff who will provide the assessment of performance.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor</th>
<th>Year Status</th>
<th>Year Status</th>
<th>Hours per Week</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEL 7703</td>
<td>Vascular Radiology</td>
<td>Dr. Bruce Zwiebel</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>2@TGH</td>
<td>FT, 44 hr wk</td>
<td>4</td>
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<td>Diagnostic and therapeutic methods 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.</td>
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<tr>
<td>MEL 7710</td>
<td>Musculoskeletal Imaging</td>
<td>Dr. Neel Prakash</td>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>1@MCAH</td>
<td>FT, 40 hr wk</td>
<td>2,4</td>
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</table>
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. Understanding the indications for advanced musculoskeletal imaging (e.g., sound, CT, angiography, and MRI)
A fundamental understanding of the structure and properties of basic molecules is crucial in radiography.
The anatomy to categorize and organize microbes according to ramification, phyla, as well as microorganisms, functions, etc.
4. The study discusses the most common causes of a stillbirth in different regions.
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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.

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**MEL 8704: Diagnostic Radiology**

Dr. Todd Hazelton

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<thead>
<tr>
<th>Year 4 status</th>
<th>7@TGH</th>
<th>FT, 44 hr wk</th>
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</thead>
<tbody>
<tr>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
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</table>
This elective is designed to provide an introduction to diagnostic radiology for medical students to develop basic imaging interpretation skills for clinically important pathology and to provide a foundational knowledge of imaging algorithms for common clinical presentations.

**Objectives**

1. Students will develop a basic understanding of radiation safety and the risks of radiation exposure to patients, become
2. 
3. 
4. Studied blue to chose the radiologic technique that is most appropriate for the most common clinical presentations in medical practice. 

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The trainee will rotate through the following subspecialty areas of diagnostic radiology: body imaging, cardiopulmonary radiology, fluoroscopy, musculoskeletal radiology, interventional radiology, nuclear medicine, neuroradiology, and ultrasound. On these rotations, the student will review diagnostic imaging studies with radiology faculty and housestaff at Tampa General Hospital and at the USF Morsani Center for Advanced Healthcare. Didactic lectures covering major topics in diagnostic radiology will be provided. Through assigned readings, students will gain knowledge of basic radiology imaging strategies for common clinical presentations. A PowerPoint presentation by the student on a topic in diagnostic radiology will be required. Upon completion of this elective, the student should understand the role of imaging in medical diagnosis and have a basic understanding of the imaging diagnosis of pathology on radiography, computed tomography, and magnetic resonance imaging.

**Evaluation**
The trainee will work closely with attending diagnostic radiologists and housestaff who will provide assessment of performance. A final examination consisting of both written questions and images will cover the reading assignments, didactic lectures, and important imaging diagnoses.

MEL 8707: Cardiothoracic Radiology
Dr. Carlos Rojas

This elective is designed to introduce senior students to the practice of cardiac and pulmonary imaging, including radiography, computed tomography, magnetic resonance imaging, and interventional chest procedures. During this rotation, students will spend time with faculty and housestaff at Tampa General Hospital. This elective will provide students with a better understanding of the role of imaging and diagnostic procedures in disorders of the heart, mediastinum, pleura, airways and lungs.

Objectives

On this elective, the medical student will obtain:
1. Understanding the indications for advanced cardiac and thoracic imaging (HRCT of the lungs, CTA of the heart and lungs, cardiac MRI)
3. The authors discuss the most common pathologic entities of the chest.
4. A basic understanding of technique and education to illuminate guided surgery and damage procedures

Methods
The trainee will review cardiothoracic imaging studies with faculty and diagnostic radiology housestaff at Tampa General Hospital. The trainee will also have the opportunity to view thoracic interventional procedures at Tampa General Hospital. Upon completion of this elective, the training should understand the role of imaging in the diagnosis of chest pathology and have a basic understanding of imaging diagnosis of chest diseases on radiography, computed tomography, and magnetic resonance imaging. At the end of the elective, the trainee will give a 10-minute presentation on an interested case encountered during the rotation.

**Evaluation**

The trainee will work closely with the attending radiologists and housestaff who will provide the assessment of performance.

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**MEL 8711: Body Imaging**

Dr. Raj Kedar

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 Year 4 status 1@TGH 1 FT, 40 hr wk 2, 4
This elective is designed to introduce senior students to the practice of abdominal imaging, including ultrasound, computed tomography, magnetic resonance imaging, and interventional body procedures. During this rotation, students will spend time with faculty and housestaff at Tampa General Hospital. This elective will provide students with a better understanding of the role of cross-sectional imaging and diagnostic procedures in disorders of the abdomen and pelvis.

Objectives

On this elective, the senior medical student will obtain:

1. A basic technical understanding of ultrasound, CT, and MRI
An understanding of the inclusions for ultrasound and as well as the use of CT and MRI
3. A fundamental understanding of basic body imaging with respect to normal anatomy and cross-sectional imaging
4. The abdomen

discusses the most common pathological entities of the abdomen and pelvis.
Methods
The trainee will review body imaging studies with faculty and diagnostic radiology housestaff at Tampa General Hospital. The trainee will also have the opportunity to view body interventional procedures at Tampa General Hospital. Upon completion of this elective, the training should understand the role of imaging in the diagnosis of abdominal and pelvic pathology and have a basic understanding of imaging diagnosis of abdominal and pelvic diseases on ultrasound, computed tomography, and magnetic resonance imaging.

**Evaluation**

The trainee will work closely with the attending radiologists and housestaff who will provide the assessment of performance.

<table>
<thead>
<tr>
<th>MEL 9999R: Independent Study in Radiology</th>
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<tbody>
<tr>
<td>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.</td>
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<td>Year 4 status</td>
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<tr>
<th>Surgery</th>
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<tr>
<td>Periods</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>MDT 8600B</td>
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<tr>
<td>MEL 7320S</td>
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<tr>
<td>MEL 7803: Plastic Surgery Acting Internship</td>
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<tr>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Acting Internship: Drs. David Smith, Wayne Cruse, Deniz Daycoglu, Lisa Gould, Michael Harrington and Paul Smith</td>
</tr>
</tbody>
</table>

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 by the faculty in the intensive care unit, ward, operating room. Students also participate in the outpatient follow-up care of the patients. No night call is required.

### Evaluation

Evaluation will be completed by direct observation. There will be no examination.
**MEL 7805: Trauma Surgery Acting Internship**

Drs. David Ciesla, John Cha, David Lewis and John Armstrong

Students electing this course will work with the residents and faculty in the Division of Trauma in the surgical ICU, wards, ER and OR at TGH. Students will also see elective general surgery cases, attend clinic and participate in the urgent and emergent cases that are seen in consultation on the wards as well as in the ER. This includes patients with appendicitis, biliary disease, bowel obstruction GI bleeding. In addition students will participate in the care of patients that have blunt and penetrating trauma.

As a member of the trauma team, students will participate in all endeavors and become conversant in the initial assessment and resuscitation of the trauma patient as well as the critical care and post-operative aspects of the surgical patients. At least a 1-week rotation on nights will be required.

**Evaluation**

Students will be evaluated based on their clinical performance.

| MEL 7815: Advanced Surgical Skills: Surgical Intern Preparedness | Year 4 status | 15@USF-MS | FT, 60-70 hr/wk | 4 |
Dr. Steven Goldin and the General Surgical Faculty

This is a one-month intensive intern boot camp course designed to prepare students entering a surgical residency or career. The course will consist of a series of didactic sessions involving advanced surgical topics, include the entire Web Initiatives for Surgical Education Modules (Wise-MD), and involve multiple laboratory sessions where students learn a variety of procedures in a simulated environment. These simulated experiences include understanding ATLS/ACLS principles, implementing interventions for acute life threatening disorders, placement of central venous and pulmonary artery catheters, treatment of dysrhythmias, the Fundamentals in Laparoscopic Surgery Course (a requirement for the American Board of Surgery) that includes basic laparoscopic procedures including transferring, cutting, use of ligating loops, and intra and extra corporeal knot tying. Students will also learn to do various intern level surgical procedures including a laparoscopic cholecystectomy, colonoscopy, and upper endoscopy using virtual reality.
simulation and
demonstration procedures.
The skills gained in this
course will allow our
students to
have a clear
advantage
over other
students with
regards to
managing
patients on
the floor and
ICU as well
as better
preparing
them to work
in the
operating
room.

Objectives

1. Complet
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Objec
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   and proce
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2. Develop and understand the etiology, pathogenesis, and diagnostic staging of the entity used to diagnose genetic and treat genetic and acquired conditions.
3. Develop and advance understanding of surgical tactics, options, and alternates for surgical decision-making.
Evaluation
Students will be evaluated based on laboratory performance, a final simulation exam, and attendance. Students will receive feedback at the midpoint of the rotation in order to identify any areas at risk for failure and areas for improvement. At the end of the rotation, a summative evaluation will be submitted with each student’s grade.

This elective is NOT available to visiting students.
This elective will provide the student with the opportunity to function as a sub-intern. Students will assist with the work up, operative and postoperative management of a range of clinical problems involved in the practice of pediatric surgery. In addition, students will take direction from the attending and work closely with the general surgical residents rotating through the Pediatric Surgical Service. 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.

**Obje ctive**

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.

**Eval uation**
Students will be evaluated based on ward performance.

**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, which includes the identification, management and treatment of infections, and rejection complications.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Year 4 status</th>
<th>Status</th>
<th>Hours/Wk</th>
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</thead>
<tbody>
<tr>
<td>1,2,3,4,5,6,7,8,9,10,11</td>
<td>1@TGH</td>
<td>FT, 60-70 hr wk</td>
<td>4</td>
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</tbody>
</table>
Students will receive an overview of all aspects involved in liver and renal transplantation, from donor identification through clinical transplantion and long term follow up.

**Evaluation**

Students will be evaluated based on their ward performance.

**Objective**

This is a clinical rotation that includes graded responsibility, as well as regular formal instruction in techniques of management of critical surgical illness. Students selecting this course are assigned a full time, co-management role in the 11 bed Surgical Intensive Care Unit of the Bay Pines Veteran's Administration Hospital.
The objectives of the course are to develop an understanding of common surgical complications, preoperative preparation of the complex surgical patient, and practical application of hemodynamic monitoring. Students will learn about pulmonary artery catheterization, placement of central venous catheters, and modalities of parenteral and enteral nutrition. They will also gain an understanding of the acute phase response patients undergo with respect to their disease processes and surgical procedures with an emphasis on fluid and electrolyte balance.

**Evaluation**

Students will be evaluated based on their ward performance.

**MEL 7828:** Vascular Surgery Acting Internship

<table>
<thead>
<tr>
<th>Year 4 status</th>
<th>Dr. Karl Illig and Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1@TGH FT, 60-70 hr wk</td>
<td>Students will participate in clinical care involving the Vascular Surgery Service at Tampa General Hospital. The student...</td>
</tr>
</tbody>
</table>

**MEL 7884:** Vascular Surgery Research Elective

Drs. Karl Illig and Faculty

<table>
<thead>
<tr>
<th>BCC 7164</th>
<th>FT, 44 hr wk</th>
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<tbody>
<tr>
<td>1@USF-MS</td>
<td>4</td>
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</table>

Students will be evaluated based on their ward performance and oral examination.
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 that map arterial and venous flow fields, participate in surgical procedures, and analyze the outcome of arterial reconstructions. Vascular research experience provides further development of surgical techniques 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 data they generate that is published.

Evaluation
Students will be evaluated based on their laboratory performance and an oral presentation at the Vascular Surgery Conference.

**Pre-requisites**

BCC 7164 Surgical Care Clerkship

This elective is NOT available to visiting students.

**MEL 8811:**

General Surgery Acting Internship

Dr. Steven Goldin and General Surgery Faculty

Students may choose to participate on the Gold Surgery, Colorectal Surgery, JAHVA or BPVAH services. On these services, the student is expected to function as an intern in the role of "intern." Responsibility will vary with the ability of each student. The elective will afford the students an in depth experience in total patient management so that these responsibilities may be assumed with confidence in the internship year.
Attendance will be required at Grand Rounds, Morbidity, and Mortality Conference, and various other conferences. The student will perform histories and physical examinations, write all progress notes, and write 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 with appropriate supervision. Operating room experience will also be extensive.

Evaluation

Students will be evaluated based on their ward performance.

Pre-requisites

BCC 7164 Surgical Care Clerkship & BCC 7144 Integrated Internal Medicine-Pediatrics Clerkship
Objective

The objective of this course is to help the student understand the scientific basis and general principles of research in the field of surgery. Students are expected to read and participate in the research with effort rewarded by co-authorship on data published from their data.

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.

Pre-requisites

BCC 7164 Surgical Care Clerkship

This elective is NOT available to visiting students.

Urology

<table>
<thead>
<tr>
<th>Periods</th>
<th>Pre-requisite</th>
<th>Sites &amp; Slots</th>
<th>Hours</th>
<th>Weeks</th>
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<tbody>
<tr>
<td>3,4,5,6</td>
<td>BCC 7184</td>
<td>2@TGH/MCC</td>
<td>FT, 50 hr/wk</td>
<td>4</td>
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</tbody>
</table>
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 Moffit 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.