

# **ELECTIVES**

for Visiting Students 2025-2026

> Office of the Registrar Medical Sciences Building MSB B-640

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# **ELECTIVES SCHEDULE - Visiting Students**

# THESE ARE THE ONLY DATES OFFERED TO VISITING STUDENTS. STUDENTS MUST ADHERE TO NJMS ROTATION DATES; THERE WILL BE NO EXCEPTIONS.

# **ACADEMIC YEAR 2025 - 2026**

	CALEN	BROCHURE DESIGNATION		
2025	June 2	to	June 27	June
	June 30	to	July 25	July
	July 28	to	August 22	August
	August 25	to	September 19	September
	September 22	to	October 17	October
	October 20	to	November 14	November

The elective offerings listed in this brochure are the ONLY electives that are offered to non-NJMS students.

#### DEPARTMENT OF ANESTHESIOLOGY

#### **ANES 9000 - GENERAL ANESTHESIA**

DIRECTOR: Dr. Olga Martins

LOCATION: University Hospital

WHEN OFFERED: September and October only

PREREQUISITE: General Surgery

DESCRIPTION OF ELECTIVE: Students will have an opportunity to review the fundamentals of basic and clinical sciences in pharmacology and physiology as they relate to anesthesia. They will be involved in preoperative preparation, administration of anesthesia and postoperative follow-up of the patient. Application of cardiac, respiratory, metabolic, renal, and fluid/electrolyte physiology to clinical conditions is emphasized. The basic skills of tracheal intubation and airway maintenance are learned in the operating room. The student will also be exposed to the fundamentals of regional and conduction anesthesia. All anesthetic procedures are done under the supervision of faculty anesthesiologists. Opportunities for anesthetics for such specialties as cardiothoracic surgery, neurosurgery, and obstetrics exist for the well-motivated student. Fourth year students competing a 4-week rotation also have the option to select one week in the CTICU/SICU West.

All students will receive a list of topics to be covered during their rotation. For each day in the OR, the student should initiate the discussion of those topics with his/her resident or attending. The anesthesia provider will initial the form, which the student should submit to the course director at the end of the rotation. All students participate in a formal examination process, depending on the length of elective and medical student year. The 2-week elective examination is a 15-25 question multiple choice exam. Students scheduled for the 4-week elective will be given a 60-question exam on the last day of the rotation.

Evaluation: The student's grade is based upon clinical performance (majority) and examination results (minority).

REPORTING INSTRUCTIONS: Student should report to Dr. MSB E-545 at 6:30 a.m. on the first day of the elective. All materials will be emailed by Steve Demas in advance of the rotation.

#### DEPARTMENT OF EMERGENCY MEDICINE

#### **EMED 9151 - PEDIATRIC EMERGENCY MEDICINE**

DIRECTOR: Kei Wong, MD (kw410@njms.rutgers.edu)

LOCATION: University Hospital

WHEN OFFERED: June, July, August, September, October

DESCRIPTION OF ELECTIVE: This rotation is designed to familiarize the student with the evaluation and management of common pediatric emergencies that present to a children's Emergency Department. This will be done in a direct patient care environment, where the student will see patients on their own in a supervised setting as part of a team of residents and faculty and present these cases to the supervising physicians. The focus will be on history-taking, examination of children of all ages, and witnessing or performance of common Emergency Department procedures such as phlebotomy, I.V. insertions, arterial blood gas sampling, bladder catheterization, lumbar puncture, suturing and wound management, and splinting of simple fractures. The student will also learn some basics of radiologic interpretation as it pertains to common pediatric emergencies (e.g., chest x-ray, orthopedic films).

#### LEARNING OUTCOMES & EVALUATION METHODS:

While on this rotation, the student will work a mix of days, nights and weekends. The student schedule will be made available prior to the beginning of the rotation. Students will participate in the management of pediatric trauma patients in conjunction with the Emergency Department residents and faculty. Students will have the opportunity to attend emergency medicine departmental conferences, morning reports and grand rounds. There will be an opportunity to discuss and learn about child abuse evaluation and DCPP policies or referrals.

Evaluation is based on assessment of knowledge, proficiency in history-taking and physical examination, clinical judgment, presentations, professionalism, and interpersonal skills. This elective is graded Honors/High Pass/Pass per NJMS grading policy.

REPORTING INSTRUCTIONS: Students must contact Dr. Wong via e-mail two weeks prior to the start of the rotation (kw410@njms.rutgers.edu).

#### **EMED 9245 - EMERGENCY MEDICINE**

Elective Director: Dr. Samantha Lleras

lleras@njms.rutgers.edu

Course Coordinator: Ms. Tiffany Thompson

MSB E 609, tt388@njms.rutgers.edu, 973-972-5886

LOCATION: University Hospital, Department of Emergency Medicine

DURATION: 4 weeks

WHEN OFFERED: June, July, August, September

PREREQUISITES: Completion of all third year required clerkships, VSLO application.

DESCRIPTION OF COURSE: This course is a four-week clinical rotation in the Emergency Department (ED)

at University Hospital. The course is offered only to fourth-year medical students, who will act as interns during their clinical shifts.

Requirements include:

- 1) Fourteen 8-hour shifts per 4-week rotation.
- 2) Many evenings, night, and weekend shifts in our busy ED
- 3) Attendance at Wednesday resident conferences
- 4) 5-minute power-point presentation at end of block

Students will see patients with a wide range of presenting signs and symptoms that include trauma, chest pain, acute gynecologic and abdominal complaints, respiratory failure, and other acute and acute-on-chronic presentations. Students are also assigned a resident/faculty mentor based on their interests and are expected to meet with them throughout the clerkship.

Students are encouraged to perform any necessary diagnostic, resuscitative and/or therapeutic procedures under direct supervision of the ED attending physician.

- 1. Students will be evaluated at the intern level. Specifically, we expect:
- 2. Absolute professionalism, including dress and timeliness
- 3. Efficient and timely interview/examination
- 4. Efficient and timely presentation of a tailored, substantive HPI and plan to attending /senior resident
- 5. Rigorous follow-up on any diagnostic studies for the patients under the student's care
- 6. Appropriate actions to make patients more comfortable and move them efficiently through the ED

Students will be graded on their clinical performance via evaluations by the ED attending physicians and senior residents. Mid-rotation feedback regarding clinical performance is provided. This elective is graded on a fail/pass/high pass/honors scale. Attendance at all required shifts, lectures, didactics, and procedural workshops is required to pass this elective.

REPORTING INSTRUCTIONS: Generally, we meet at 8AM on first day remotely through Zoom/Webex. Please email Ms. Tiffany Thompson <a href="mailto:tt388@njms.rutgers.edu">tt388@njms.rutgers.edu</a> for further instructions. Any changes/updates will be emailed on acceptance to the rotation via VSLO.

#### EMED 9260 - COMBINED CLINICAL EMERGENCY MEDICINE SUBSPECIALTIES

Elective Director: Dr. Samantha Lleras

<u>lleras@njms.rutgers.edu</u>

LOCATION: University Hospital, Department of Emergency Medicine

DURATION: 4 weeks

WHEN OFFERED: June, July, August, September

PREREQUISITES: Completion of all third year required clerkships, VSLO application.

DESCRIPTION OF COURSE: This four-week elective offers visiting 4th year medical students a combined experience in our busy, urban emergency department, as well as exposure to various subspecialties. within Emergency Medicine (EM). This course is designed to cultivate individuals' specific interests within the field of emergency medicine. The rotation entails two weeks of dedicated clinical shifts in the Emergency Department at University Hospital, during which students act as interns. Visiting medical students will add to their clinical EM experience with two additional weeks divided between up to 2 subspecialties within the Department of Emergency Medicine at Rutgers NJMS. A variety of subspecialty options are available for visiting medical students to choose from, including Bedside Emergency Ultrasound, Medical Toxicology,

Emergency Medical Services (EMS), Administration in Emergency Medicine, or Pediatric Emergency Medicine. Students are offered this rotation with an individualized schedule based on their interests and availability.

COURSE OBJECTIVES: By the completion of the elective, the student will have acquired basic knowledge and skills specific to the field of EM:

- Identify and prioritize patients requiring urgent attention
- Master early assessment and stabilization of the critically ill patient
- Develop a differential diagnosis and initial management plan
- Adapt your presentation style to a wide variety of situations and listeners
- Communicate effectively and empathetically with patients and their families
- Manage your time and your patients' time efficiently
- Be an engaged and active participant in patient care
- Recognize social and economic factors that affect patients' health and healthcare
- Document clearly and thoroughly
- Master procedures such as phlebotomy, IV catheter placement, simple suturing

#### Key responsibilities of the student while on elective:

- 1. On shift, students will be expected to work at the level of a sub-intern: do a history and physical exam on patients, present patients to the attending and resident, and follow those patients during the shift.
- 2. Attend resident conferences every Wednesday
- 3. Students will select up to two subspecialties that are offered within the Department of Emergency Medicine at Rutgers NJMS. Responsibilities will vary based on the students' individualized subspecialty schedule.

Students will be graded on their clinical performance via evaluations by the ED attending physicians. Mid-rotation feedback regarding clinical performance is provided. Upon completion of the course, students' clinical proficiency will be assessed through a Standard Letter of Evaluation (SLOE).

REPORTING INSTRUCTIONS: Students should email Ms. Tiffany Thompson and Dr. Lleras prior to the rotation for reporting instructions. Generally, we meet at 8am on the first day of the rotation via Zoom.

### **DEPARTMENT OF MEDICINE**

#### MED 9008 - LIVER DISEASE AND HEPATITIS C

DIRECTOR: Name: Paul J Gaglio, MD

Title: Division Director: Hepatology and Transplant Hepatology

Phone: 973-972-5252

Email pjg47@njms.rutgers.edu

LOCATION: University Hospital

WHEN OFFERED: June, July, August, September, October

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The course is designed to provide education to fourth year medical students related to the care of patients with all varieties of Liver Disease. The focus will be education related to the spectrum of liver diseases seen in both a non-transplant and transplant setting. Students will gain knowledge in the clinical evaluation of patients with various liver diseases including physical assessment, identification of clinical problems, formulating a differential diagnosis, utilizing appropriate diagnostic tools and providing management decisions in these patients. In addition, students will learn best practices for managing patients both before and after liver transplantation.

#### Format:

- 1. Ambulatory evaluation and treatment of patients with all variety of liver diseases
- 2. Inpatient rounds (week 1-2) and outpatient clinic sessions (week 3-4)
- 3. Participation in pre and post Transplant outpatient clinic

**Key responsibilities of the student while on elective:** The student will be expected to see at least two patients in the clinical setting and present findings to clinical faculty on a daily basis during morning rounds. The student will write notes on the patients he/she sees. While on hospital rounds, the student will be expected to review patient's charts prior to rounds. The student is expected to review current literature on selected topics as directed by the Hepatology Faculty.

While in outpatient clinic, the student will see patients along with the Faculty, and will be expected to participate in decisions related to pre and post Liver Transplantation patient care

First day reporting instructions: Student should report to University Hospital D yellow at 8 AM on the first day of the elective while on inpatient, and to the ACC D level Transplant clinic at 8 AM while on outpatient rotation Questions: please call 973-972-5252 or contact Administrative Coordinator Julia Torres <a href="mailto:imt303@njms.rutgers.edu">imt303@njms.rutgers.edu</a>

#### **MED 9070 - ENDOCRINOLOGY**

DIRECTOR: David Bleich, M.D.

bleichda@njms.rutgers.edu

LOCATION: University Hospital and MSB I-588, (973) 972-3479

WHEN OFFERED: June, July, August, September, October

PREREQUISITE: Medicine Clerkship

DESCRIPTION OF ELECTIVE: The rotation is based at the University Hospital and East Orange VA Medical Center (EOVA) and supervised by full time faculty at University Hospital. Students will participate in outpatient clinics and inpatient consultations. Weekly case conferences, didactic sessions, and journal club are integral components of the educational program, which is designed to fulfill the following objectives:

- a. Obtain further knowledge of pathophysiology and additional experience in proper diagnosis and treatment of: diabetes mellitus, thyroid diseases, disorders of calcium metabolism (PTH, Vitamin D), neuroendocrine problems (pituitary tumors, hypopituitarism), disorders of steroid hormone production or metabolism (adrenal insufficiency, hypercortisolism, virilization and hirsutism), reproductive disturbances (hypogonadism, amenorrhea), hypolipoproteinemia's. Students will become members of the Endocrine consultative team including senior medical residents, fellows and attending endocrinologist and will spend time examining patients and consulting with faculty interpreting historical, physical, pathophysiological, analytical and therapeutic information.
- b. Acquire expertise in interpreting endocrine/metabolic laboratory data including hormone measurements (chemical and radioimmunoassay), radiotracer scans, radiologic studies, and stimulation/suppression tests used in the evaluation of endocrine disorders.
- c. Acquire technical skill in obtaining and interpreting signs of endocrine disease on history and physical examination.
- d. Promote an understanding of radioimmunoassay and other analytic techniques applicable to clinical and investigative problems in Endocrinology and Metabolism.

REPORTING INSTRUCTIONS: On the first day of the elective the student(s) should report to EOVA Medical Center (Tremont Avenue, East Orange, NJ) at 8:00 a.m. for the Endocrine Clinic under the supervision of Dr. John Shin (347) 351-6770. Following our Endocrine Clinic, the student(s) should then report back to the Endocrine Office. If there are problems, students can page our Senior Endocrine fellow at (973) 312-3923. The Weekly Endocrine Schedule will be emailed to students prior to the start of the rotation.

Please note that students will be excused for one residency interview under certain circumstances during their Endocrine elective rotation, but only on Tuesday or Friday. Students who miss elective activities on Monday, Wednesday, or Thursday will not receive credit for the elective.

#### **MED 9170 - NEPHROLOGY**

DIRECTOR: Dr. Julius Gardin

jg1326@njms.rutgers.edu

LOCATION: University Hospital and Department of Veterans Affairs Medical Center in East Orange.

WHEN OFFERED: June, July, August, September, October

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Assignments to University Hospital or an affiliated hospital are made by the program director on the basis of the student's choice and his educational requirements. The following objectives should be fulfilled:

a. Obtain further knowledge of pathophysiology and experience in proper diagnosis and treatment of acute and chronic renal failure, disorders of hydration, glomerulonephritis, renal calculi, electrolyte

and acid-base disturbances, hypertensive emergencies, and urinary tract infections. A fourth-year student must work up at least three patients with renal disease each week and keep an account of the diagnosis and other pertinent data for review at the end of the rotation.

- b. Acquire expertise in interpreting laboratory data including electrolyte and acid base parameters, urograms, renal scans, urine sediments, renal clearance tests, and kidney biopsies.
- c. The student may elect to participate in ongoing clinical or basic research in nephrology. He/she may participate in the activity of the peritoneal dialysis or hemodialysis units to become familiar with the clinical and mechanical problems occurring in this setting.
- d. The student will be encouraged to develop technical skills as an assistant in initiating acute hemodialysis and peritoneal dialysis. This will include femoral vein insertion.

REPORTING INSTRUCTIONS: On the first day of the elective, students should report to MSB, I-524.

#### **DEPARTMENT OF NEUROLOGICAL SURGERY**

#### **NSUR 9000 - ACTING INTERNSHIP IN NEUROLOGICAL SURGERY**

DIRECTOR: Dr. P.K. Agarwalla, <a href="mailto:pk.agarwalla@rutgers.edu">pk.agarwalla@rutgers.edu</a>

LOCATION: University Hospital

WHEN OFFERED: June, July, August, September, October

DESCRIPTION OF ELECTIVE: Students act as members of the neurosurgical team and are responsible for the work-up and care of neurosurgical patients; they are involved in operative procedures. Students will scrub on cases, take some night calls with the residents, and will be asked to prepare and present conferences. The elective is rigorous and demanding; it is designed to preview an intern-level rotation for those students actively considering and applying for a neurosurgical residency position.

#### COURSE OBJECTIVES:

- 1. By the completion of the elective, the medical student will have a basic understanding of the expectations and duties of a Neurosurgical Intern.
- 2. The Acting Intern (AI) should be able to interview and examine a neurosurgical patient independently.
- 3. The AI will participate in surgical procedures in the OR and at the bedside under the direct supervision of a Senior Resident or Attending Physician.
- 4. By the conclusion of the AI rotation, students should have in development at least one research project.
- 5. Students will be expected to give at least one presentation of their choosing during the rotation. This presentation may be a case presentation, research presentation, or grand rounds talk geared to a level commensurate with their education.
- 6. Most importantly, the goal of this rotation is to equip the student with the tools necessary to succeed in a neurosurgical residency.

EVALUATIONS: Your performance will be evaluated in a "360-degree" manner by all interactions while on service including with faculty, nursing, residents, and staff. Evaluation will be based on professionalism, fund of knowledge, attendance, and evidence of learning during the rotation. Faculty will evaluate you based on their interactions in teaching sessions and in the operating room.

#### **DEPARTMENT OF NEUROSCIENCES**

#### **NEUR 9010 - NEUROLOGY ACTING INTERNSHIP**

DIRECTORS: Dr. Erin Feinstein

LOCATION: University Hospital

WHEN OFFERED: June, August, September, October

DESCRIPTION OF ELECTIVE: Taken after the Neurology Clerkship, this elective gives the student who is interested in obtaining further neurological training the opportunity to function as a house officer in neurology with direct patient responsibility under close supervision.

REPORTING INSTRUCTIONS: The student should contact Dr. Feinstein (<a href="feinstein">feinstein@njms.rutgers.edu</a>) one week prior to the start of the course for reporting instructions.

#### **NEUR 9020 - PEDIATRIC NEUROLOGY**

DIRECTOR: Dr. Caroline Hayes-Rosen

LOCATION: University Hospital

WHEN OFFERED: June, July, August, September, October

PREREQUISITES: Pediatrics and Neurology

DESCRIPTION OF ELECTIVE: Students participate on the clinical service which includes both inpatient and outpatient experiences. They are given supervised responsibility for patients. Students participate in consults, teaching rounds, lectures, and clinics. Students can expect to see a wide variety of patients including such disorders as autism, ADHD, learning disabilities, cerebral palsy, seizures, neuromuscular disorders, headaches, and metabolic disorders. Neurodiagnostic techniques such as CT scan, EEG, and MRI will be taught. Customization of clinic schedule is available for students with specific interests.

# DEPARTMENT OF OBSTETRICS, GYNECOLOGY, AND WOMEN'S HEALTH

#### OBG 9071 - OBSTETRICAL IN-PATIENT LABOR AND DELIVERY SERVICE

DIRECTOR: Dr. Talicia Jackson

LOCATION: University Hospital

WHEN OFFERED: June, July, August, September, October

PREREQUISITE: Obstetrics and Gynecology Core Clerkship

DESCRIPTION OF ELECTIVE: This elective is designed to provide exposure to the Labor and Delivery and Postpartum units. The student will be an integral part of the team, acting as subintern while working with junior and senior residents to provide direct patient care. Students will participate in the management of obstetrical patients from admission to post delivery. They will be expected to independently see patients under the supervision of the faculty and residents, directly participate in obtaining patient history and performing key portions of the physical exams and outline initial assessment and plans for patient management. Students will be involved in daily rounds and will be expected to present detailed summaries (i.e. antenatal records, delivery history, neonatal status and labor course) of the patients they are following. The student will also be involved in educational conferences and will be required to give a short presentation on a pertinent topic such as hypertension, labor curve analysis, fetal heart rate monitoring.

This elective is not open to international medical students.

REPORTING INSTRUCTIONS: Students should report to University Hospital, Labor and Delivery, F Level, University Hospital. Phone numbers: (973) 972-5838 or 5839.

#### OBG 9081 - REPRODUCTIVE ENDOCRINOLOGY/INFERTILITY

DIRECTOR: Dr. Sara Morelli

Ext. 2-5554

LOCATION: University Reproductive Associates

214 Terrace Avenue, Hasbrouck Heights, NJ

(201) 288-6330

WHEN OFFERED: June, July, October

PREREQUISITE: Obstetrics and Gynecology

DESCRIPTION OF ELECTIVE: The student will follow, with the REI Attending physician, patients in the in vitro fertilization program, as well as in- and out-patients with gynecological endocrine or infertility problems. The student will be given topics and patient cases to review, analyze and present to the Attending physician. The student is required to prepare a presentation on an REI topic to REI Division Faculty and Fellows at the conclusion of their rotation.

This elective is not open to international medical students.

REPORTING INSTRUCTIONS: Students should report to the address above at 8:00 a.m. on the first day of the rotation.

#### DEPARTMENT OF OPHTHALMOLOGY

#### **OPH 9000 - OPHTHALMOLOGY**

DIRECTOR: Dr. Suqin Guo

OTHER DIRECTORS: Drs. N. Bhagat, A. Cohen, D. Chu, L. Frohman, P. Hersh, A. Khouri,

P. Langer, R. Rescigno, M. Roy, R. Turbin, M. Zarbin

CONTACT PERSON: James Jackson 973-972-2063

LOCATION: The Institute of Ophthalmology and Visual Science, Doctors Office Center, Suite 6100, Newark

WHEN OFFERED: June, July, August, September, October

DESCRIPTION OF ELECTIVE: Students work along with residents in the General Eye Clinic and various subspecialty clinics offered within the Institute of Ophthalmology and Visual Science. These include Pediatric ophthalmology, neuro-ophthalmology, Cornea and external diseases, Vitreoretinal, glaucoma, Oculoplastic and Uveitis. They learn how to use a direct-ophthalmoscope, slit lamp and other specialized instruments as well as how to perform general ophthalmology examinations. They are allowed to observe surgical procedures. Students attend the lectures on CD leveled to medical students and conferences for the eye residents.

## **Goals and Objectives**

The Ophthalmology Clerkship seeks to provide the student with:

- **a.** An understanding of the visual apparatus, its functions, dysfunctions and diseases, especially as related to other systemic conditions
- b. An opportunity for direct observation of the effects of aging and disease on the eye
- c. The information necessary for the diagnosis of many significant ophthalmic diseases
- **d.** The skills and disciplines required in the field of ophthalmology Specifically, students are expected to familiarize the information and techniques in the following areas as indicated:

#### **Visual Acuity**

Measurement and recording of visual acuity and color vision and the determination of whether reduced visual acuity is due to uncorrected refractive error or to a pathologic condition.

#### **Ophthalmoscopy**

Differentiating a normal from an abnormal fundus (optic nerve/retina), describing the appearance of an abnormality and the indication of its relationship to ocular, neurologic or systemic disease.

#### Slit Lamp Exam and Red eve

Familiarizing anterior segment ocular exam with slit lamp and determining whether a red-eye disorder requires the prompt attention of an ophthalmologist or whether a primary-care physician might appropriately treat the condition.

# **Injuries**

Evaluating the problems of common ocular and orbital injuries and whether such injuries require the prompt attention of an ophthalmologist or whether a primary-care physician can treat the condition.

# **Ophthalmology-subspecialties**

Students work along with residents in the General Eye Clinic and various sub-specialty clinics offered within the Institute of Ophthalmology and Visual Science. These include Pediatric ophthalmology, neuro-ophthalmology, Cornea and external diseases, Vitreoretinal, glaucoma, Oculoplastic and Uveitis.

**STUDENT EVALUATION:** Each student is evaluated on the basis of fund of information and comprehension, skills (history-taking and patient examination), problem-solving, industry and reliability, judgment, interpersonal

relations (with peers, staff, and patients), motivation, and house officer potential. A written test (multiple choice) will be given on the last Friday of the rotation. Evaluation will be sent to Registrar's Office at the completion of the rotation.

REPORTING INSTRUCTIONS: The students are to report to the 6th floor, Suite 6100 in the Doctor's Office Center (DOC) Building at 8:30 a.m. on the first day of their elective. They are to bring their ophthalmoscopes with them. The students will receive email instructions prior to their ophthalmology rotation.

#### **OPH 9002 - RESEARCH IN OPHTHALMOLOGY**

DIRECTOR: Dr. Marco Zarbin

LOCATION: NJMS

WHEN OFFERED: June, July, August, September, October

DESCRIPTION OF ELECTIVE: This elective is designed to allow students the opportunity to perform clinical research in ophthalmology. Under the supervision of a faculty mentor, the student will have the opportunity to identify a topic for experimental study, formulate a research proposal, perform a literature review, and then design and implement the proper study to further research his/her topic of interest. The elective will provide the student with an understanding of how clinical studies are designed and performed and will further provide the student with valuable experience in experimental design, implementation, and trouble- shooting.

During this elective, the student will be expected to:

- 1. Identify a topic or clinical case of interest for further study and write a research proposal.
- 2. Independently conduct a primary literature review and write a research proposal for submission to a faculty mentor.
- 3. Meet with his/her faculty mentor regularly to present and summarize relevant literature and inform the faculty member of his/her progress. The student's faculty mentor will provide mid-elective feedback and provide the student with suggestions for improvement.
- 4. Gather clinical data over the remainder of the elective and meet with his/her faculty mentor in order to produce a relevant clinical hypothesis.
- 5. Time permitting, synthesize the gathered information into an original and coherent research paper by the end of the elective for possible submission for peer reviewed publication.
- 6. Submit a one-page essay detailing how this research experience accomplished the objectives for this elective.

#### DEPARTMENT OF ORTHOPAEDICS

#### **ORPS 9116 - ACTING INTERNSHIP IN ORTHOPAEDICS**

DIRECTOR: Dr. Neil Kaushal

ADMINSTRATIVE CONTACT: Ms. Monique Smith (973) 972-3860

LOCATION: University Hospital and Doctors Office Center

WHEN OFFERED: August, September, October

PREREQUISITES: General Surgery

DESCRIPTION OF ELECTIVE: This elective is designed for the medical student contemplating a career in Orthopaedic Surgery. The elective is designed to give the best exposure possible with various members of the Orthopaedic Department and provide a broad overview of orthopaedic surgery at New Jersey Medical School and its affiliates.

Exposure includes, but is not limited to, orthopaedic trauma, reconstructive surgery, pediatrics, hand, foot, ankle, oncology, spine, arthroscopy, shoulder surgery, and sports medicine. The interaction with faculty and residents is designed to be clinically oriented. This means that a large portion of the students' orthopaedic education will arise from facing orthopaedic problems with the residents and faculty in the emergency room, orthopaedic clinics, private physicians' offices, and operating room. During the rotation, all students will have the opportunity to have interchanges with all full-time members of the faculty and will have extensive opportunities to demonstrate their baseline knowledge of anatomy and developing skills in orthopaedic examination in daily presentations of patient conditions and monthly formal diagnostic reviews. Overnight orthopaedic call is strongly encouraged in this rotation in order to allow the medical students to have a closer working interaction with the orthopaedic resident and provide better opportunities for the student to learn and demonstrate orthopaedic and manual dexterity skills.

REPORTING INSTRUCTIONS: On the first day of the rotation students should attend morning report at 6:45 a.m. at UH E-349 and identify themselves to the orthopaedic resident. The should also contact Dr. Kaushal at <a href="mailto:kaushank@njms.rutgers.edu">kaushank@njms.rutgers.edu</a> for their service assignments the week prior to starting the rotation.

#### DEPARTMENT OF OTOLARYNGOLOGY

#### OTOL 9140 - OTOLARYNGOLOGY-HEAD AND NECK SURGERY, ACTING INTERNSHIP

DIRECTOR: Dr. Evelyne Kalyoussef and Dr. Dylan Roden

LOCATION: University Hospital

WHEN OFFERED: June, July, August, September, October

DESCRIPTION OF ELECTIVE: The student becomes part of the team managing the patients on the outpatient and inpatient Otolaryngology services. Acquisition of basic otolaryngologic history taking and physical examination skills will be emphasized. The student will have the opportunity to observe and assist in the operating room as well as in the clinic. He/she will be exposed to the various subspecialty areas in otolaryngology, including otology-neurotology, head and neck surgery, laryngology, facial plastic and reconstructive surgery, rhinology and pediatric otolaryngology. Students will also attend and participate in rounds and departmental conferences. Students are expected to give a presentation at the Departmental Grand Rounds at the end of their rotation.

REPORTING INSTRUCTIONS: Students should contact the Otolaryngology–Head and Neck Surgery academic office at (973) 972-4588 prior to the first day of the elective for reporting instructions.

#### **OTOL 9151 - OTOLARYNGOLOGY RESEARCH**

DIRECTORS: Dr. Jean Anderson Eloy

LOCATION: University Hospital

WHEN OFFERED: June, July, August, September, October

PREREQUISITES: Permission of the Course Director, Completion of online CITI course on Human Subjects Protection (link available through IRB website)

DESCRIPTION OF ELECTIVE: A research elective month in the Department of Otolaryngology-Head and Neck Surgery at University Hospital. Students will participate in ongoing research with members of the Department. This is primarily for students interested in entering the field of Otolaryngology-Head and Neck Surgery; however, other students will be considered on an individual basis.

# DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE

#### PATH 9001 - SURGICAL AND AUTOPSY PATHOLOGY

DIRECTORS: Dr. David Suster

LOCATION: Pathology Department, University Hospital

WHEN OFFERED: June, July, August, September, October

PREREQUISITE: None

DESCRIPTION OF ELECTIVE: This elective is designed to introduce students to a hospital-based anatomic pathology department through experience in the sub-disciplines of surgical and autopsy pathology. Students will have an opportunity to review and learn new basic pathological concepts as they relate to the management of patients as well as observe how pathologists function as members of the health care team.

During the elective, it is expected that the student will become familiar with recognizing the pathological manifestations of a variety of diseases and be able to apply this information to the management of the patient. The clinical faculty will provide appropriate feedback. The student will prepare a short powerpoint presentation for the faculty and residents summarizing the clinical features and pathological manifestations of one disease observed during the rotation.

Key responsibilities of the student while on elective:

- 1. Students will be expected to sit in on the daily surgical pathology signout sessions held both in the morning and afternoon. The student will take notes on the cases reviewed and be expected to answer questions or do literature searches about the diseases being discussed.
- 2. Students will be expected to shadow the pathology residents and observe the gross examinations of specimens in the Surgical Pathology Laboratory (E-level) as well as any autopsies performed in the Autopsy suite (C-level).
- 3. Students may be asked to review patient's records on selected cases.
- 4. Students will be expected to attend all intradepartmental and selected interdepartmental conferences.
- 5. There is no required night or weekend call although students may elect to be called on weekend days (8-5) to observe any autopsies that are performed by the residents.
- 6. Students will be expected to prepare a 10-15 minute PowerPoint clinical and pathological presentation on a case of their choosing observed during the elective on the next to last day(Thursday) of the elective.

Evaluation: The student's PowerPoint presentation will be graded H/HP/P/F as will their performance in asking questions during the sign-out sessions. A student cannot pass this elective without submitting a copy of their PowerPoint presentation. This elective is graded H/HP/P/F as per NJMS policy.

REPORTING INSTRUCTIONS: Students should report to room E-155, University Hospital at 10:00 AM on the first day of the rotation.

#### **DEPARTMENT OF PEDIATRICS**

#### PEDS 9015 - MEDICINE AND PEDIATRICS

DIRECTORS: Dr. Kristin Wong

LOCATION: University Hospital, ACC F-Level

WHEN OFFERED: June and October only

PREREQUISITE: Pediatrics and Medicine clerkships

DESCRIPTION OF ELECTIVE: In this elective, medical students will be exposed to the combined field of Internal Medicine and Pediatrics by working with the Med-Peds faculty. Discussions will be based on patient encounters and include the most common conditions presenting in adults and children. The students will spend most of their time in the ambulatory practice but may have the chance to round inpatient with a Med-Peds attending.

At the conclusion of this elective the student will be able to

- Obtain further knowledge of pathophysiology and experience in the proper diagnosis and treatment of disease in patients of all ages.
- Identify, summarize, and develop a differential diagnosis of illnesses in both pediatric and adult patients: fever, vomiting, headache, chest pain, abdominal pain, wheezing, joint pain, backache.
- Obtain communication skills in counseling patients and families: anticipatory guidance, nutrition, school issues, smoking cessation, diabetes, depression, asthma, COPD and hypertension.
- Describe indications for consultation and referral for the most common diseases affecting adult and pediatric patients.
- Describe indications/criteria for admissions to the inpatient setting for adults and pediatric patients.
- Evaluate the business management of an urban ambulatory practice such as healthcare coverage, managed care, proper billing/coding, and reimbursements.

REPORTING INSTRUCTIONS: Students should email Dr. Wong prior to the start of the elective for instructions on when to report on the first day of the elective. Dr. Wong can be reached at kgw22@njms.rutgers.edu or office phone (973) 972-4736, or pager (973) 203-4774.

# DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION

#### REHB 9000 - ACTING INTERNSHIP IN PHYSICAL MEDICINE AND REHABILITATION

DIRECTOR: Dr. Steven Kirshblum

LOCATIONS: University Hospital and/or Doctors Office Center (Newark campus); Kessler Institute for

Rehabilitation - (West Orange, Saddlebrook and Chester); private physicians' offices

WHEN OFFERED: June, July, August, September, November

DESCRIPTION OF ELECTIVE: Exposure to the field of physical medicine and rehabilitation (PM&R) is offered at any of the above-stated locations. The student becomes part of the team, taking histories and performing physical examinations of patients with neurological and musculoskeletal conditions. The individual patients are then followed by the student through the different treatment areas, and the student is involved actively in the diagnosis and treatment planning of his/her patients, as well as the comprehensive social and psychological evaluation and treatment and discharge planning. This includes the care and treatment of patients with spinal cord injury, traumatic brain injury, amputation, stroke, orthopedic, trauma, or general rehabilitation admitted for comprehensive care.

Depending on the student's interest and the facility, he/she will have the opportunity to be exposed to the wide array of therapeutic armamentarium used by the physiatrist, including pharmacologic management, injection treatments (motor point blocks, nerve blocks, trigger point injection, bursal/intraarticular injection), physical agents, including electrotherapy, therapeutic exercise, ADL training, orthotics/prosthetics, speech therapy and disability counseling.

This elective presents the student with problems in internal medicine, including rheumatology and neurology, as well as in neurosurgery and orthopaedics. Unusual diagnostic problems are seen more frequently in the rehabilitation center; either inpatient or outpatient services are included depending on the placement.

Students are evaluated on the basis of their overall involvement in the program, attendance at conferences and clinics, and the ability to carry out patient-care programs.

REPORTING INSTRUCTIONS: Approximately 1-2 weeks prior to the start of the student's rotation, PM&R department staff will provide the student with placement instructions via email.

#### **REHB 9001 - PEDIATRIC PHYSICAL MEDICINE AND REHABILITATION**

DIRECTOR: Dr. Kate Bentley

LOCATION: Children's Specialized Hospital and affiliates (Mountainside, Clifton, southern NJ if preferred)

WHEN OFFERED: June, July, August, September

DESCRIPTION OF ELECTIVE: Two-to-four weeks will be spent at Children's Specialized Hospital, a pediatric rehabilitation facility in Mountainside, N.J. Time will be spent in outpatient services, giving the student the opportunity to evaluate and follow the management of children with neuromuscular, musculoskeletal and developmental disorders including cerebral palsy, hypotonia, spina bifida, and muscular dystrophy. The student will have the opportunity to attend specialty clinics in orthopaedics and neurology, as well as observe the performance of diagnostic and management techniques unique to the field of rehabilitation medicine, including electrodiagnosis and peripheral nerve blocks. Students may also have the opportunity to attend clinics at special needs schools. This elective would be of particular interest to students thinking of careers in

either Physical Medicine and Rehabilitation or Pediatrics. Evaluation will be based on overall interest, enthusiasm and clinical performance.

There are limited 2-week blocks offered at the Children's Specialized Hospital Inpatient site in New Brunswick, New Jersey. There students can shadow attendings in our 60 bed acute rehabilitation facility to observe both the medical and therapy management of children age one month to 21 years with a multitude of diagnosis. These include multi-trauma, post-op orthopedic care, traumatic brain injury, spinal cord injury, infants with congenital anomalies and neuromuscular disorders.

REPORTING INSTRUCTIONS: Approximately 1-2 weeks prior to the start of the student's rotation, PM&R department staff will provide the student with placement instructions via email.

#### **REHB 9003 - RESEARCH IN PHYSICAL MEDICINE AND REHABILITATION**

DIRECTORS: Dr. John Bach

LOCATIONS: University Hospital; Kessler Institute - West, Saddlebrook, and Kessler Foundation Research

Center

WHEN OFFERED: June, July, August, September

DESCRIPTION OF ELECTIVE: There is an active research program in the physiological, psychological, behavioral and engineering aspects of rehabilitation in the Department of Physical Medicine and Rehabilitation, as well as a number of collaborative projects with other departments at Rutgers New Jersey Medical School. Research programs are currently underway to improve the functional abilities of persons with disabilities resulting from spinal cord injury, head injury, stroke, neuromuscular disease, pulmonary disease, and amputations. Projects cover such areas as functional electrical stimulation, advanced electromyography, prosthetic design, sympathetic nervous system function in spinal cord injured patients, geriatrics, fatigue, treatment of depression, sexuality, family training, and others.

REPORTING INSTRUCTIONS: Approximately 1-2 weeks prior to the start of the student's rotation, PM&R department staff will provide the student with placement instructions via email.

# REHB 9004 - MUSCULOSKELETAL (MSK) SPORTS MEDICINE CLINICAL ROTATION

DIRECTORS: Dr. Steven Kirshblum. Attendings include Drs. Patrick Foye, Roger Luo, Zivya Petrin, Benjamin Levy, Kathy Chou, Peter Tumminelli and Todd Stitik

LOCATION: University Hospital, Doctor's Office Center, Kessler Institute for Rehabilitation (West Orange); and private physicians' offices (northern NJ)

WHEN OFFERED: June, July, August, September

DESCRIPTION OF ELECTIVE: To learn how to diagnose and non-surgically treat a variety of sports-related and other musculoskeletal conditions and injuries. Emphasis will be on developing a differential diagnosis, learning and practicing musculoskeletal physical exam skills, assessing biomechanics and mechanisms of injury, and initiating appropriate rehabilitation treatment programs. Students will also be encouraged to observe and participate in a variety of joint and soft tissue injection procedures. Students are expected to have a basic understanding of musculoskeletal anatomy and peripheral neuro-anatomy. Students will attend educational programs and may have the option of attending medically-covered athletic events during the time

of their rotation. This is predominantly a clinical (patient care) rotation, but, additionally, clinical research exposure/participation may be available.

REPORTING INSTRUCTIONS: Approximately 1-2 weeks prior to the start of the student's rotation, PM&R department staff will provide the student with placement instructions via email.

#### **REHB 9100 - GERIATRIC REHABILITATION**

DIRECTOR: Drs. Uri Adler and Steven Kirshblum

LOCATION: Kessler Institute for Rehabilitation (West Orange and Saddlebrook)

WHEN OFFERED: June, July, August, September

DESCRIPTION OF ELECTIVE: Objectives: The medical student participating in this elective will acquire the following skills: geriatric assessment and functional evaluation for the rehabilitation of patients with CVA; joint replacements; fractures; neurological disorders (Parkinson's, GBS, encephalopathies, dementia, peripheral neuropathies); arthritis and connective tissue disorders; musculoskeletal spasms and injuries; and coronary artery disease. He/she will have a knowledge of the complications with each of the above, the role of rehabilitation and potential for functional recovery, and an understanding of an interdisciplinary team approach in the management of the geriatric patient.

Format: The medical student will be assigned to an attending physiatrist. A resident may also be involved in mentoring the student. Specific duties will be assigned by the attending. Students will be required to follow the syllabus and guidelines, with physicians' responsibilities as defined.

Evaluation: Evaluation will consist of a written exam based on the syllabus at the end of the rotation and ongoing evaluation during the rotation.

REPORTING INSTRUCTIONS: Approximately 1-2 weeks prior to the start of the student's rotation, PM&R department staff will provide the student with placement instructions via email.

#### **REHB 9200 - SPINAL CORD INJURY**

DIRECTORS: Drs. Jeremiah Nieves, Steven Kirshblum, and Carol Gill

LOCATIONS: Kessler Institute for Rehabilitation (West Orange)

WHEN OFFERED: June, July, August, September

DESCRIPTION OF ELECTIVE: Objectives: (1) Learn how to evaluate and classify spinal cord injury patients according to international standards criteria. (2) Learn to determine functional potential of spinal cord injury patients. (3) Learn appropriate acute medical management and rehabilitation of spinal cord injury patients (4) Will also see patients with spasticity and be involved in management of spasticity, including injections.

Format: Students will rotate on an inpatient spinal cord injury service, following admitted patients. Students will also see chronic spinal cord injury patients during their outpatient appointments.

REPORTING INSTRUCTIONS: Approximately 1-2 weeks prior to the start of the student's rotation, PM&R department staff will provide the student with placement instructions via email.

#### REHB 9300 - NEUROMUSCULAR AND PULMONARY REHABILITATION

DIRECTOR: Dr. John Bach

LOCATION: Doctors Office Center and University Hospital (Newark campus)

WHEN OFFERED: June, July, August, September

DESCRIPTION OF ELECTIVE: This elective is designed to introduce students to the practice of neuromuscular, musculoskeletal, and rehabilitation medicine. Under the supervision of clinical faculty, students will learn differential diagnosis of neuromuscular disease and musculoskeletal disorders and both the medical and physical medicine treatment options. They will learn cardiopulmonary, orthopaedic, nutrition and other therapeutic interventions and equipment that affect survival and quality of life as well as manage common musculoskeletal syndromes. Students will round with the preceptors in University Hospital to observe the use of noninvasive physical medicine aids in extubation and decannulation of patients with ventilator failure due to musculoskeletal conditions and perform inpatient rehabilitation consultations with the PM&R residents.

Objectives: At the conclusion of this rotation the student will:

- 1. Describe the differential diagnosis of the floppy newborn.
- 2. Describe the differential diagnosis of children and adults presenting with generalized muscle weakness.
- 3. Understand the pathokinesiology of limb contracture development
- 4. List the therapeutic options in preventing limb contractures and scoliosis.
- 5. Analyze strategies for prolonging ambulation despite neuromuscular weakness.
- 6. Describe the noninvasive physical medicine aids.
- 7. Explain strategies for preventing respiratory failure and invasive ventilation for patients with the following conditions: post-polio, muscular dystrophy, spinal muscular atrophy, amyotrophic lateral sclerosis.
- 8. Describe the important elements of rehabilitation consultation for inpatient medical/pediatric services.

Format: The student will attend and play an active role in the Muscular Dystrophy Association clinic.

REPORTING INSTRUCTIONS: Approximately 1-2 weeks prior to the start of the student's rotation, PM&R department staff will provide the student with placement instructions via email.

#### **REHB 9400 - BRAIN INJURY REHABILITATION**

DIRECTOR: Drs. Neil Jasey, Kirk Lercher, Peter Yonclas, Arline Edmond, and Jennifer Russo

LOCATION: University Hospital (Newark campus) and Kessler Institute for Rehabilitation (West Orange)

WHEN OFFERED: June, July, August, September

DESCRIPTION OF ELECTIVE: Objectives: Upon completion of the rotation, the student should be able to: 1) understand the rehabilitation process following brain injury; 2) demonstrate proficiency in history-taking and performing a complete physical and neurologic examination of individuals with brain injury; 3) formulate differential diagnoses and rehabilitation problem list; 4) describe diagnostic and therapeutic options for the medical, neurological, musculoskeletal, and neurobehavioral complications of brain injury; and 5) discuss the impact of brain injury on the patient, his/her family and the community.

Format/Activities: daily patient rounds; rehabilitation meetings; behavioral management rounds; outpatient clinic; lectures and other educational programs.

Evaluation: Attendance and participation in activities; clinical histories; evaluation of bedside clinical skills.

REPORTING INSTRUCTIONS: Approximately 1-2 weeks prior to the start of the student's rotation, PM&R department staff will provide the student with placement instructions via email.

#### **REHB 9401 - REHABILITATION IN PRIVATE PRACTICE**

DIRECTORS: Drs. Thomas Agesen, Jay Bowen, Boqing Chen, Brett Gerstman, Robert Vrablik, and Ian Wendel

LOCATIONS: Physicians' offices in the northern NJ area

WHEN OFFERED: June, July, August, September

DESCRIPTION OF ELECTIVE: Objectives: Upon completion of the rotation, the student should demonstrate an ability to perform the following in caring for patients with a wide variety of rehabilitation diagnoses: 1) Perform a history and physical exam appropriate for the patient presentation, including neurological, musculoskeletal and functional assessments; 2) formulate differential diagnoses and a rehabilitation problem list; 3) discuss diagnostic and treatment options; 4) develop realistic functional goals, individualized for each patient; and 5) understand when to consult PM&R and which clinical problems benefit from a PM&R consultation.

Format/activities: Daily patient care involvement in an outpatient private practice setting, with potential for involvement with the practice's inpatient care as well. Students are encouraged to attend lectures with the PM&R residents for a half-day each week.

Evaluation: Students are evaluated on attendance, participation, enthusiasm, and clinical performance.

REPORTING INSTRUCTIONS: Approximately 1-2 weeks prior to the start of the student's rotation, PM&R department staff will provide the student with placement instructions via email.

# **DEPARTMENT OF PSYCHIATRY**

#### **PSYC 9010 - PSYCHIATRIC EMERGENCY SERVICES**

DIRECTOR: Dr. Eric Jarmon

LOCATION: University Hospital

WHEN OFFERED: June, July, August, September, October

DESCRIPTION OF ELECTIVE: This elective is designed to introduce 4th year students to the practice of medicine in a tertiary care academic medical center urban Psychiatric Emergency Department and appreciate the continuum of care of Psychiatric patients. Under the supervision of clinical faculty and Resident Psychiatrists, students will function as a sub-intern and perform all non-essential parts of the evaluation, treatment and disposition. Students will work closely with and observe other team members in their interdisciplinary role. Students will assist in coordinating all aspects of care. This elective will expand student understanding of the most vulnerable patients on the health care spectrum and what legal, Medical, psychiatric, biological social, economic, political forces impact the course of a case and its outcome.

During this elective, it is expected that a student with conduct patient interviews and physical exams and present findings to clinical faculty on a daily basis. Clinical faculty will provide mid-elective feedback to the student. The student will be required to submit one case report and a one-page essay summarizing his/her experience on the elective. The essay must reference elective objectives and one other professional source.

OBJECTIVES: At the conclusion of the elective, students will be able to 1) compare and contrast the health needs and problems encountered by psychiatric patients, learn how the state system of mental health care works and understand the physician's role in the legal aspects of commitment to those patients; 2) explain cross-cultural issues in emergency psychiatric cases; 3) describe indications for consultation and referral of the most common psychiatric emergencies and the opportunities available within the community and the hospital system by understanding the continuum care from family care, to community-based outpatient care and outreach through partial and day hospital, to the inpatient continuum.

REPORTING INSTRUCTIONS: On the first day of the elective, the student should report to UH C-224, Psychiatric Emergency Services, at 09:00 a.m. The student must wear his/her white coat and bring his/her ID, stethoscope, reflex hammer and have computer access to EMR.

#### **PSYC 9030 - CONSULTATION-LIAISON**

DIRECTOR: Dr. Eric Jarmon

LOCATION: University Hospital

WHEN OFFERED: June, July, August

DESCRIPTION OF ELECTIVE: Students will perform psychiatric evaluations of medical/surgical patients as part of the Consultation/Liaison Service. Students will also make daily rounds with the resident and attending physician. There will be exposure to the legal process of competency determinations, training in evaluation of dementia, training in the impact of illness on the psyche and on coping with illness.

REPORTING INSTRUCTIONS: Students will report to the Consultation/liaison Service team by 09:15 am in Room G300, outside G Yellow inpatient unit UH on the first day of the elective.

#### **DEPARTMENT OF RADIOLOGY**

#### **RAD 9010 - DIAGNOSTIC RADIOLOGY**

DIRECTORS: Dr. Andrzej Jedynak

LOCATION: University Hospital

WHEN OFFERED: June, July, August, September, October

DESCRIPTION OF ELECTIVE: Students rotate through general radiology, neuroradiology, mammography, diagnostic ultrasound, nuclear medicine, musculoskeletal radiology, thoracic radiology, and interventional radiology. Mornings are spent in the clinical areas. There are daily teaching sessions for the medical students with the residents and faculty. Teaching sessions where the medical students present interesting cases are also incorporated. The students are expected to attend departmental conferences. The recommended text is "Learning Radiology: Recognizing the Basics" by William Herring 4th Ed., 2020) which is freely available as an e-book from the NJMS Library. The objective of the program is to provide the student with the skills necessary to analyze common radiographic studies. Emphasis is on chest, abdomen, bone and gastrointestinal studies as well as emergency radiological evaluation. For exposure to ER radiology students are encouraged to observe in the ER reading area with the assigned physician. Computed tomography, nuclear medicine, magnetic resonance and ultrasound evaluations are essential elements in the program. A better understanding of the imaging modalities, their limitations, advantages and costs will also emerge from the experience. Student evaluation is based upon participation in the conferences, attendance, presentation of cases, and a written and practical examination. Scores from presentations, assignments, examinations and optional projects are added to determine the overall grade for the course. An optional project (case report, preparation of an educational exhibit or review paper on a contemporary radiology issue) can be submitted for extra credit.

REPORTING INSTRUCTIONS: Students should report to MSB, F-506 to Pietro Antonelli at 9:00 a.m. on the first day of the rotation.

#### **RAD 9020 - INTERVENTIONAL AND VASCULAR RADIOLOGY**

DIRECTOR: Dr. Abhishek Kumar

LOCATION: University Hospital

WHEN OFFERED: July, August, September, October

DESCRIPTION OF ELECTIVE: An elective in interventional and vascular radiology involves the participation in pre-treatment evaluation, treatment planning and post-treatment follow-up of patients that need an interventional or vascular procedure. The student is present during film reading sessions, and observes the various special procedures that are done every day.

The student will become aware of the role of interventional radiology in clinical practice. The various types of procedures along with their indications and the advantages and disadvantages of each procedure and examination will be discussed. At the conclusion of the elective, the student will be expected to give a 15-minute presentation to the interventional radiology faculty on a topic to be determined at the start of the rotation and prepare an approximately 250-word write-up on a case that was particularly interesting to the student during that rotation.

REPORTING INSTRUCTIONS: Students should report to UH, C-318 on the first day of the rotation. The IR Suite is located on C-level, room 235.

# **DEPARTMENT OF SURGERY**

#### **SURG 9020 - ADULT CARDIOTHORACIC SURGERY**

DIRECTOR: Dr. Huzaifa Shakir (shakirhu@njms.rutgers.edu)

ADDITIONAL FACULTY: Dr. Justin Sambol

LOCATION: University Hospital, F-4

WHEN OFFERED: June, July, August, September, October

DESCRIPTION OF ELECTIVE: The Adult Cardiothoracic Program includes cardiac, thoracic and esophageal surgery and will include working with the cardiac and thoracic attendings. The student will participate in Cardiothoracic conferences in which cardiac catheterization data, X-rays, angiography and other pertinent clinical data are discussed. He/she will participate in decision-making in regard to the necessity for, and types of, surgery done. Pre-operatively, the patient will be evaluated and both during the time of surgery and in the postoperative course, the student may become an essential member of the team. The goals and objectives are for the medical student to become familiar with both cardiac and thoracic diseases and types of surgical therapy offered. At times during the rotation, there will also be opportunities for research work in this field.

Required reading: Cardiac Surgery in the Adult 5<sup>th</sup> edition (Cohn, Adams), Surgery of the Chest (Sabiston and Spencer)

REPORTING INSTRUCTIONS: Students should page 973-421-0690 for reporting information. Contact phone: Marie Baptiste NP, 973 9726810

#### SURG 9050 - ACTING INTERNSHIP / UNIVERSITY HOSPITAL

DIRECTOR: Dr. Michael Shapiro

LOCATION: University Hospital

WHEN OFFERED: June, September, October

PREREQUISITES: Medicine, General Surgery

DESCRIPTION OF ELECTIVE: The student is an active member of one of the general surgical teams. This elective is designed to teach each student the principles of clinical surgery, focused on pre-operative evaluation, selection of operations, and post-operative care. Graded responsibility in the care of surgical patients is encouraged.

REPORTING INSTRUCTIONS: Students should contact Dr. Shapiro's office (973-972-6639, <a href="mailto:mes362@njms.rutgers.edu">mes362@njms.rutgers.edu</a>) the week prior to the start of the rotation to confirm the team assignment, and which Chief Resident to meet with on the Monday of the rotation, followed by MSB B-624 for registration by Ms. Deyse Ribau (<a href="mailto:ribaudd@njms.rutgers.edu">ribaudd@njms.rutgers.edu</a>).

#### **SURG 9181 - PLASTIC SURGERY**

DIRECTOR: Dr. Edward Lee

ADMININSTRATOR: Amy Stolar

LOCATION: Ambulatory Care Center, E-1620

WHEN OFFERED: June, July, August, September, October

DESCRIPTION OF ELECTIVE: The elective is designed to introduce students to the field of plastic surgery. Its emphasis is directed towards the understanding of wound healing, skin physiology, grafts and flaps, reconstructive surgery of the head and neck, extremities and chest, treatment of both acute and reconstructive hand injuries and cosmetic surgery. In addition, there will be an emphasis on microvascular surgery and its application in plastic surgery. The student will attend all plastic surgery academic conferences and will participate in ward rounds, clinic and surgery. The student will be expected to present a clinical case with discussion at plastic surgery grand rounds at the end of the rotation.

This elective is recommended for students interested in general or plastic surgery. This course is required for all applicants to a plastic surgery residency.

RECOMMENDED TEXT: Grabb and Smith, "Plastic Surgery" Lippincott Raven. Required reading: Chapters 1 and 2 of Grabb and Smith.

REPORTING INSTRUCTIONS: Students should contact Ms. Stolar at 973-972-5377 prior to the first day of the rotation. Monday morning conference starts at 7:00 a.m. in ACC E1635/E1620. Ms. Stolar will provide you with additional contact information for the residents and attendings on service.

#### **SURG 9232 - TRAUMA TEAM ACTING INTERNSHIP**

DIRECTOR: Dr. Amy Gore

LOCATION: New Jersey Trauma Center at University Hospital

WHEN OFFERED: June and October only

PREREQUISITE: General Surgery

DESCRIPTION OF ELECTIVE: In this elective, students will serve as members of the Trauma Team at the New Jersey State Trauma Center. The schedule, including days off, is in compliance with the 80-hour work week. They will participate in the initial assessment of trauma victims in the Emergency Room and in the subsequent pre-operative, operative and post-operative management. In addition, there are conferences, didactic lectures and daily rounds which allow for expansion of the interests of the student. There is opportunity for participation in research protocols and pursuit of research interests as well. Students will also gain exposure to EMS pre-hospital patient care activities with ground and aeromedical transports.

Evaluations will be made by Dr. Gore and the Trauma Faculty, the Trauma Fellows, and the Chief Resident, based upon presentations, observed skills, judgment and clinical performance.

REPORTING INSTRUCTIONS: Students should report to UH E-349 on Monday at 7:00 a.m. for Morning Report/Rounds, followed by MSB B-624 for registration by Ms. Deyse Ribau (<a href="mailto:ribaudd@njms.rutgers.edu">ribaudd@njms.rutgers.edu</a>).

#### **SURG 9233 - SURGICAL INTENSIVE CARE UNIT**

DIRECTOR: Dr. Nina Glass

ADMINISTRATOR: Rimi Dhar rd966@njms.rutgers.edu

LOCATION: University Hospital, E Green Surgical ICU

WHEN OFFERED: June and October only

DESCRIPTION OF ELECTIVE: The student will become an integral part of the team managing critically ill patients. Each student will function as a subintern and be responsible for performing history and physical exam assessments on patients each day and then presenting them during rounds (beginning with 1-2 patients and advancing as they become more comfortable with the systems-based approach to caring for critically ill patients). Teaching rounds will be made daily with the full team including students, residents, fellows, and attending staff. On rounds, discussions will focus on the pathophysiology of each of the problems presented. Students will be given selected readings in critical care and we will try to get them to present in journal club during their month on service. Students will also participate in bedside procedures with the team including insertion of central lines and arterial lines for monitoring, bedside tracheostomy and percutaneous endoscopic gastrostomy placement, as well as ventilator management, and resuscitation. They will take call with a resident team approximately every 3 days

REPORTING INSTRUCTIONS: Students will get email from Ms. Dhar ahead of their start date (or can reach out if they have not) and should plan to report to UH E-349 on Monday at 7:30 a.m. for Morning Report/Rounds, followed by MSB B-624 for registration by Ms. Deyse Ribau (<a href="mailto:ribaudd@njms.rutgers.edu">ribaudd@njms.rutgers.edu</a>). We will also do a brief orientation and debrief with the course director during the first and last weeks respectively.

#### **SURG 9253 - UROLOGY - ACTING INTERNSHIP**

DIRECTOR: Dr. Robert Weiss

weissre@cinj.rutgers.edu

ADMINISTRATOR: Shaniqua Mitchell, mitches1@njms.rutgers.edu

LOCATION: University Hospital

WHEN OFFERED: August, September, October

DESCRIPTION OF ELECTIVE: Students participating in this elective officiate as acting interns under the supervision of the chief of urology. They work closely with the urology residents and eight to ten urology attendings. Students are exposed clinically to all patients on the urology service.

REPORTING INSTRUCTIONS: Students should report to ACC G-1680, at 8:30 a.m. for location assignment. Phone number: (973) 972-4418 (ask for Shaniqua).

This elective is not open to international visiting medical students.

#### SURG 9266 - ACTING INTERNSHIP IN VASCULAR AND ENDOVASCULAR SURGERY

COURSE DIRECTOR: Joe Huang, MD

Associate Professor of Surgery Division of Vascular Surgery

Rutgers - New Jersey Medical School

Phone: 973-972-6295

Email: joe.huang.md@njms.rutgers.edu

Coordinator: Tina Surrency-Scioscia

Phone: 973-972-6295

Email <u>tbs40@njms.rutgers.edu</u>

LOCATION: University Hospital, Newark, NJ

WHEN OFFERED: June, September, October

DESCRIPTION OF ELECTIVE: Students interested in surgery or vascular surgery will work with attendings, vascular fellows, and residents, while functioning as a sub-intern on the University Hospital Vascular Surgery Service.

The student will be exposed to the field of vascular and endovascular surgery by learning about the pathophysiology and management of peripheral arterial and venous diseases. Pathologies encountered will include aortic aneurysms, carotid occlusive disease, lower extremity arterial disease, venous disease, and dialysis access needs. By following pre- and post-op patients, evaluating consults, and seeing patients in the office, the student will become familiar with the evaluation and diagnostic testing modalities for these conditions. Through office procedures, endovascular suite interventions, and operating room cases, the student will learn about the medical, endovascular, and open methods of treat these patients.

Students will also attend weekly pre-operative conferences, monthly journal clubs, and monthly morbidity & mortality conferences.

REPORTING INSTRUCTIONS: Prior to the start of the elective, students should contact the Division of Vascular Surgery Coordinator to find out where to report.