

ELECTIVES

for Visiting Students 2021-2022

> 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 2021 - 2022

	CALEN	BROCHURE DESIGNATION		
2021	July 26	to	August 20	August
	August 23	to	September 17	September
	September 20	to	October 15	October
	October 18	to	November 12	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. Lawrence Chinn

LOCATION: University Hospital

WHEN OFFERED: September and October

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.

A lecture series designed specifically for the medical student will enhance the knowledge gained from "hands on" experience in the operating room. A typed, one-page write-up on an interesting case or a reflection of the rotation is required of all 4-week students. 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.

DEPARTMENT OF EMERGENCY MEDICINE

EMED 9151 - PEDIATRIC EMERGENCY MEDICINE

DIRECTOR: Dr. Virteeka Sinha, MD (vs533@njms.rutgers.edu)

LOCATION: University Hospital

WHEN OFFERED: 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 tertiary 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 and 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).

While on this rotation, the student will work approximately 36 hours per week (includes some nights and weekends). The student schedule will be made available prior to the beginning of the rotation. S/he will participate in the management of pediatric trauma patients in conjunction with the Emergency Department residents and faculty, and possibly pediatric psychiatric emergencies. There will be an opportunity to discuss and learn about child abuse evaluation and referral and DYFS policies and procedures. Students will have the opportunity to attend emergency medicine departmental conferences, morning report and grand rounds. Students will be given an opportunity to write up and discuss an interesting case.

Evaluations will be based on fund of knowledge, patient workups, interest level, lecture presentation and procedural skills (faculty and residents will participate in the evaluation process).

EMED 9245 - EMERGENCY MEDICINE

Elective Director: Shannon Moffett, MD

MSB E 501

shannon.moffett@rutgers.edu

Course Coordinator: Ms. Tiffany Thompson

MSB E 609

tt388@nims.rutgers.edu

973-972-5886

LOCATION: University Hospital, Department of Emergency Medicine

WHEN OFFERED: August, September, October

PREREQUISITE: Please carefully review VSAS course description for additional essay requirement.

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:

- Fourteen 8-hour shifts per 4-week rotation.
- Many evenings, night, and weekend shifts in our busy ED
- Attendance at our Emergency Medicine conferences Wednesdays from 8am-1pm (MSB E609)
- Attendance at all didactics for our core clerkship students
- One morning spent in the New Jersey Poison Information and Education System Center
- Participation in our Social Determinants of Health Curriculum
- 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 encouraged to perform any necessary diagnostic, resuscitative and/or therapeutic procedures under direct supervision of the ED attending physician.

- Students will be evaluated at the intern level. Specifically, we expect:
- Absolute professionalism, including dress and timeliness
- Efficient and timely interview/examination
- Efficient and timely presentation of a tailored, substantive HPI and plan to attending /senior resident
- Rigorous follow-up on any diagnostic studies for the patients under the student's care
- 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 8:AM on first day of the block in MSB E609. Any changes/updates will be emailed on acceptance to the rotation via VSAS.

DEPARTMENT OF MEDICINE

MED 9106 - ACTING INTERNSHIP IN INTERNAL MEDICINE

DIRECTOR: Alla Fayngersh, M.D.

fayngeal@njms.rutgers.edu

LOCATION: University Hospital, Department of Veterans Affairs New Jersey Health Care System in East

Orange, and Hackensack University Medical Center.

WHEN OFFERED: September and October

DESCRIPTION OF ELECTIVE: The Director of the Fourth Year program assigns students to University Hospital or an affiliated hospital. The program is identical to the mandatory acting internship required for fourth year students. The acting intern is assigned to a medical team consisting of a faculty attending, residents and junior medical students. He/she has responsibilities comparable to those of a PGY-1 resident. They include: (a) working up new hospital admissions using the problem-oriented record. This is done under the supervision of a PGY-2 or PGY-3 resident and an attending physician; (b) presenting patients worked up in the hospital to senior residents and faculty; (c) recording patient data for review by the team leader at the end of the rotation; (d) outlining diagnostic and therapeutic plans for patients worked up; and (e) working with the medical team in implementing the agreed to plan and monitoring the results of treatment. The acting intern presents patients at morning reports and conference rounds. He/she is expected to have a thorough understanding of the basic and clinical information pertinent to proper diagnosis and treatment, as well as concepts available in current literature. The acting intern is expected to achieve proficiency in the following areas:

- History taking.
- Complete physical examination.
- Mastery of the body of knowledge required for proper problem-solving in common medical disorders: cardiac, digestive, endocrinologic, genetic, hematologic, infectious, nutritional, oncologic, pulmonary, renal, and rheumatologic diseases.
- Expertise in interpreting laboratory values, including radiographs, pulmonary function tests, liver function tests, joint fluid analysis, electrocardiograms, spinal fluid analysis, endocrinologic studies, microbiologic studies, and toxicologic studies.

The acting intern interacts with specialty residents and faculty so that there is up-to-date information on both the state of the art and scientific knowledge of a wide variety of medical disorders.

Acting interns are required to attend the following teaching conferences when assigned to University Hospital:

- Morning report, where patients hospitalized during the previous twenty-four hours are reviewed.
- Noonday conferences which include a clinical case conference, bi-monthly literature reviews, scheduled special research conferences, scheduled primary care conferences, and scheduled basic-clinical science conferences at University Hospital.
- Departmental grand rounds in the Medical Sciences Building, Tuesdays, 8:00 A.M.
- Subspecialty conferences in which the patients they have worked up are presented and discussed.

DEPARTMENT OF NEUROLOGICAL SURGERY

NSUR 9000 - ACTING INTERNSHIP IN NEUROLOGICAL SURGERY

DIRECTOR: Dr. P.K. Agarwalla, pk.agarwalla@rutgers.edu

LOCATION: University Hospital

WHEN OFFERED: 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.

NSUR 9050 – RESEARCH IN NEUROLOGICAL SURGERY

DIRECTOR: Dr. P.K. Agarwalla, pk.agarwalla@rutgers.edu

LOCATION: NJMS

WHEN OFFERED: August, September, October

COURSE DESCRIPTION: This elective is designed to enhance the student's ability to conduct research and apply principles of statistical analyses to the field of Neurological Surgery. 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.

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

1. Integrate pertinent scientific background to design experimental and observational studies in the field of Neurological surgery.

- 2. Use statistical methods to organize, analyze and report collected data.
- 3. Formulate a specific hypothesis and determine an appropriate study design and analysis method.
- 4. Design and implement data collection systems for Neurological surgery research.
- 5. Review and critique statistical methods and interpretations presented in published research in the Neurological surgery literature.
- 6. Communicate and preset study findings through submission of original research for publication in a Neurological surgery journal or poster presentation.
- 7. Participate and assist in common neurological procedures, if applicable.

Learning outcomes & evaluation methods:

During this elective it is expected that a student will design and implement an original research project. The student is expected to review the relevant literature pertaining to an original project and gather data necessary for completion of the project. The student will communicate research ideas, design, and methodology throughout the elective and receive constructive feedback to enhance the research process. The student will submit a finalized project to an academic journal upon approval by the attending. The student will also have the opportunity to interact and observe Neurological surgery cases in the operating room at the discretion of the attending.

DEPARTMENT OF NEUROSCIENCES

NEUR 9010 - NEUROLOGY ACTING INTERNSHIP

DIRECTORS: Dr. Erin Feinstein

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

WHEN OFFERED: 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 (<u>feinster@njms.rutgers.edu</u>) 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: August, September, October

PREREQUISITES: Pediatrics or 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 9003 - ACTING INTERNSHIP IN OBSTETRICS AND GYNECOLOGY

DIRECTOR: Dr. Lisa Pompeo

LOCATION: University Hospital

WHEN OFFERED: October

DESCRIPTION OF COURSE: The Acting Internship in Obstetrics and Gynecology seeks to enhance the skills acquired during the third-year clerkship and provide the student the opportunity to function as a first-year OB/Gyn resident. The student will be responsible to junior and senior residents in the Labor and Delivery Suite and function as the subintern, alternating with the first year resident on labor patients. The student will be assigned pertinent topics such as hypertension, labor curve analysis, fetal heart rate monitoring, and obstetrical analgesia. The student will also follow all patients during a week and report analysis thereof on a weekly basis to the Attending physician. In addition, the student will be expected to present detailed summaries (from antenatal records, labor, deliveries, and neonatal status) of a few cases weekly to the Attending physician. Students will also attend high risk clinic, gaining the skill of accurate diagnosis and management of common high risk obstetrical complications. At the end of the rotation student will have in depth understanding of diagnosis and obstetrical and gynecological problems.

Key responsibilities of the student while on elective:

- 1. The student will be expected to participate in inpatient and outpatient assessments.
- The student will be expected to participate in operative cases.
- The student will be expected to round and document in the medical records daily progress notes for patients under the care of the Ob/Gyn service, including consultations from other services.
- The student will be expected to participate in all rounds and conferences, including preparation of materials used during conference as assigned by the attending.

Learning outcomes & evaluation methods: The elective will be graded Honors/High Pass/Pass/Fail. Students are evaluated by the senior resident, chief resident and team attending. Evaluation is based on subjective assessment of knowledge, proficiency in history-taking and physical examination, clinical judgment, presentations, record-keeping and interpersonal skills, using an evaluation form designed by the medical school for elective evaluations.

As Acting Interns are integral members of the patient care team, regular attendance and participation are essential. Unexcused absences are not allowed.

FIRST DAY REPORTING INSTRUCTIONS: Students are oriented on the first day in Labor and Delivery by the Chief Resident on Obstetrics and the student will function on the obstetrics services team at University Hospital comprised of a chief resident, a senior resident, an intermediate level resident and 1 or 2 first year residents, third year medical students and a faculty attending. The duties and responsibilities of acting interns are identical to those of the PGY-1 residents.

OBG 9010 - WOMEN'S HEALTH AMBULATORY CARE

DIRECTOR: Dr. Lisa Pompeo

LOCATION: University Hospital

WHEN OFFERED: August and September

PREREQUISITE: Obstetrics and Gynecology 3rd year clerkship

DESCRIPTION OF ELECTIVE: This elective is designed to provide exposure to a range of ambulatory care activities and issues in obstetrics, gynecology and women's health and will emphasize direct patient care and contact. Students will participate in the Ob/Gyn outpatient clinics at University Hospital and the primary focus will be the provision of ambulatory care services to adult and adolescent women with particular emphasis on prenatal and postpartum care, routine gynecologic care, and primary and preventative care for women along the age continuum. Students will be assigned to specific clinics and will be expected to independently see patients under the supervision of faculty and residents. Students will directly participate in obtaining patient histories and performing physical exams and will be expected to outline the initial workup of patients and formulate appropriate assessment/plans for patient management.

OBG 9020 - GYNECOLOGIC ONCOLOGY

DIRECTOR: Dr. Bernadette Cracchiolo

LOCATION: University Hospital and Ambulatory Care Center

WHEN OFFERED: September

PREREQUISITE: Obstetrics and Gynecology, Medicine, Surgery clerkships

DESCRIPTION OF ELECTIVE: Students will develop a deeper understanding of cancer care for gynecologic malignancies by participating in clinic, assisting in OR and performing supervised floor care. They will function as part of the gynecologic oncology team. Students will participate in twice weekly clinic sessions, daily rounds, surgical cases, work rounds, tumor board and pathology conference. They will be required to give a short oral presentation on a mutually agreed upon topic.

OBG 9051 - PRENATAL DIAGNOSIS

DIRECTOR: Dr. Joseph Apuzzio and Dr. Shauna Williams and Dr. Lisa Gittens-Williams

Department of Obstetrics, Gynecology & Women's Health

Medical Science Building E-506 973-972-5557 (Aquinetta)

Email joseph.apuzzio@njms.rutgers.edu

LOCATION: University Hospital and Ambulatory Care Center,

140 Bergen Street, C-Level Newark, New Jersey 07103

Obstetrics and Gynecology Ultrasound Area

WHEN OFFERED: August and September

PREREQUISITE: Obstetrics and Gynecology 3rd year clerkship

DESCRIPTION OF ELECTIVE: The student will spend the first week with basic obstetric and gynecologic ultrasound examinations, starting at 9:00 a.m. in the Ambulatory Care Center, C-level Obstetrics and Gynecology Suite. The student should ask for Ms. Tatiana Hernandez who is the technologist for the obstetric/gynecologic sonography unit. During the month, the student will observe and review ultrasound examinations of pregnant patients referred for dating of pregnancies, suspected genetic or structural problems and others. The student will be asked to present one or more topics per week to the Maternal Fetal Medicine group on Monday afternoons at 3 p.m. Obstetrical Rounds located in University Hospital, F-Green dayroom.

OBG 9071 - OBSTETRICAL IN-PATIENT LABOR AND DELIVERY SERVICE

DIRECTOR: Dr. Lisa Pompeo

LOCATION: University Hospital

WHEN OFFERED: August

PREREQUISITE: Obstetrics and Gynecology

DESCRIPTION OF ELECTIVE: The student will be responsible to junior and senior Residents in the Labor and Delivery Suite and act as subintern alternating with the first year resident on labor patients. The student will be assigned pertinent topics such as hypertension, labor curve analysis, fetal heart rate monitoring, and obstetrical analgesia. The student will also follow all patients during a week and report analysis thereof on a weekly basis to the Attending physician. In addition, the student will be expected to present detailed summaries (from antenatal records, labor, deliveries, and neonatal status) of a few cases weekly to the Attending physician. During the first week, the student will spend mornings in ultrasound instruction.

This elective is not open to international medical students.

REPORTING INSTRUCTIONS: Students should report to Room F-246/247, University Hospital, or, if closed, to Labor and Delivery, F Level, University Hospital. Phone numbers: (973) 972-5838 or 5839.

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: Susan Niedzinski (sn445@njms.rutgers.edu) 973-972-2063

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

WHEN OFFERED: 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 eye

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.

OPH 9002 – RESEARCH IN OPHTHALMOLOGY

DIRECTOR: Dr. Marco Zarbin

LOCATION: NJMS

WHEN OFFERED: 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 and Dr. Kathleen Beebe

ADMINSTRATIVE CONTACT: Ms. Patricia Jones (973) 972-9047

LOCATION: University Hospital and Doctors Office Center

WHEN OFFERED: August, September, October

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.

DEPARTMENT OF OTOLARYNGOLOGY

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

DIRECTOR: Dr. Chan (Richard) Park and Dr. Evelyne Kalyoussef

LOCATION: 2 weeks at University Hospital & 2 weeks at St. Barnabas Medical Center

WHEN OFFERED: 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 also have the opportunity to observe and assist in the operating room. He/she will be exposed to the various subspecialty areas in otolaryngology, including otologyneurotology, head and neck surgery, facial plastic and reconstructive surgery, rhinology and pediatric otolaryngology. Students will also attend and participate in rounds and departmental conferences. The elective can be modified to accommodate the student's interest in a given aspect of otolaryngology.

OTOL 9151 - OTOLARYNGOLOGY RESEARCH

DIRECTORS: Dr. Jean Anderson Eloy

LOCATION: University Hospital

WHEN OFFERED: August, September, October

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 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); Department of VA New Jersey Healthcare System - (East Orange and Lyon's); private physicians' offices

WHEN OFFERED: October and 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 orthopaedic problems. 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.

REHB 9001 - PEDIATRIC PHYSICAL MEDICINE AND REHABILITATION

DIRECTOR: Dr. Michael Armento

LOCATION: Children's Specialized Hospital (Mountainside, NJ)

WHEN OFFERED: October and November

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.

REHB 9003 - RESEARCH IN PHYSICAL MEDICINE AND REHABILITATION

DIRECTORS: Dr. John Bach

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

Center; Department of VA New Jersey Healthcare System - East Orange

WHEN OFFERED: October and November

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.

REHB 9004 - MUSCULOSKELETAL (MSK) SPORTS MEDICINE CLINICAL ROTATION

DIRECTORS: Drs. Patrick Foye, Humaira Ashraf, Roger Luo, Ziya Petrin, Benjamin Levy and Todd Stitik

LOCATION: Doctor's Office Center, Newark.

WHEN OFFERED: October and November

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.

REHB 9005 MUSCULOSKELETAL (MSK) SPORTS MEDICINE RESEARCH

DIRECTORS: Drs. Patrick Foye, Humaira Ashraf, Roger Luo, Ziya Petrin, Benjamin Levy and Todd Stitik

LOCATION: Doctor's Office Center, Newark.

WHEN OFFERED: October and November

DESCRIPTION OF ELECTIVE: Students within this elective will actively participate in research projects related to topics in non-surgical musculoskeletal medicine. The outpatient division of the PM&R department is actively involved in a variety of research projects, including non-surgical treatment of coccydynia, osteoarthritis, back

pain, and a variety of other musculoskeletal conditions. Also, depending on the timing of the elective there are often additional academic projects for medical publication (review articles, online medical materials, etc.) which the students may actively participate in. Students should contact the course director in advance of the start date to make arrangements for which projects the students will be involved in. There is no clinical component to this rotation.

REHB 9100 - GERIATRIC REHABILITATION

DIRECTOR: Dr. Uri Adler

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

WHEN OFFERED: October and November

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.

REHB 9200 - SPINAL CORD INJURY

DIRECTORS: Dr. Jeremiah Nieves and Dr. Carol Gill

LOCATIONS: Kessler Institute for Rehabilitation (West Orange) and/or VA NJ Healthcare System (East Orange)

WHEN OFFERED: October and November

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.

Evaluation: Oral exam to be given at the end of four-week rotation, based on the listed objectives.

REHB 9300 - NEUROMUSCULAR AND PULMONARY REHABILITATION

DIRECTOR: Dr. John Bach

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

WHEN OFFERED: October and November

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. The 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. Define paradigm paralysis and how this hinders medical advances.
- 9. Describe the important elements of rehabilitation consultation for inpatient medical/pediatric services.

Format: The student will attend and play an active role in the Jerry Lewis Muscular Dystrophy Association clinic which is held weekly in the DOC.

REHB 9400 - BRAIN INJURY REHABILITATION

DIRECTOR: Drs. Neil Jasey, Ondrea McKay, and Peter Yonclas

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

WHEN OFFERED: October and November

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.

REHB 9401 - REHABILITATION IN PRIVATE PRACTICE

DIRECTORS: Drs. Thomas Agesen, Jay Bowen, Boging Chen, Brett Gerstman, Gerard Malanga, Robert

Vrablik, and Ian Wendel

LOCATIONS: Physicians' offices in the northern NJ area

WHEN OFFERED: October and November

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.

DEPARTMENT OF PSYCHIATRY

PSYC 9000 - SUBINTERNSHIP IN PSYCHIATRY (INPATIENT UNIT)

DIRECTOR: Dr. Najeeb Hussain, Behavioral Health Sciences Building, Room E-1447

LOCATION: University Hospital

WHEN OFFERED: August, September, October

DESCRIPTION OF ELECTIVE: The elective student will be involved as a team member on the University Hospital inpatient psychiatric unit. Students are expected to perform as an intern, therefore taking responsibility for patient care. Each student will be assigned to a team with an attending for guidance and supervision. There may also be a resident on the team.

PSYC 9010 – PSYCHIATRIC EMERGENCY SERVICES

DIRECTOR: Dr. Cheryl Ann Kennedy

LOCATION: University Hospital

WHEN OFFERED: 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.

PSYC 9015 - INTEGRITY HOUSE

DIRECTOR: Dr. Cheryl Ann Kennedy

LOCATION: Integrity House

WHEN OFFERED: August, September, October

DESCRIPTION OF ELECTIVE: Integrity House is a comprehensive residential and outpatient drug treatment center in Newark, New Jersey, for patients who suffer from substance use disorders and co-occurring mental illness. Under direct supervision of senior New Jersey Medical School psychiatry residents and clinical faculty, students will be introduced to the Therapeutic Community model in addiction medicine and have the opportunity to observe and participate in the treatment of individuals from diverse backgrounds in various stages of recovery. Students will work with an interdisciplinary and inter-professional health care team and develop skills in clinical assessment and diagnosis, motivational interviewing, individual and group psychotherapy, family counseling, pharmacotherapy, patient education, and transitional support.

OBJECTIVES:

- -To familiarize students with integrated care for individuals with co-occuring substance use and mental health disorders.
- -To develop skills in evaluating and treating individuals with dual diagnoses.
- -To develop skills in motivational interviewing, psychotherapy, family counseling, patient education, and recovery support.

PSYC 9020 - CHILD AND ADOLESCENT PSYCHIATRY

DIRECTOR: Cheryl A Kennedy, MD

LOCATION: University Hospital

WHEN OFFERED: August, September, October

DESCRIPTION OF ELECTIVE: This elective is designed for medical students with a particular interest in child psychiatry and psychosocial aspects of comprehensive health care. This rotation provides a broad exposure to child psychiatry, including emergency and crisis evaluation and treatment and consultation to medically ill youth. The clinical consultation is augmented by inclusion of the medical student in scheduled teaching activities for the child psychiatry residents as well as clinical supervision of the medical student by the child psychiatry residents and child psychiatry faculty. In addition, residents and faculty may support the education of the student through recommendation of specific readings and videotapes, as indicated. Special interests will be discussed and accommodated, if possible and feasible. This should be discussed with the Clerkship director prior to beginning the rotation. Students are expected to see patients in University Hospital Psychiatric Emergency Services and inpatient Consultation Services for Children and Adolescents and provide an encounter note in EPIC and report to elective director so patient can be discussed with the Child Attending on duty.

GOALS: The goal of the medical student elective in Child and Adolescent Psychiatry is to 1) familiarize the student with what a child and adolescent psychiatrist does, 2) to teach the student about the psychosocial aspects of health care, 3) to acquaint the student with diagnosis and treatment of the emotionally and behaviorally disturbed child/adolescent, and, 4) to improve understanding of the underlying problems via the biopsychosocial model. Students will be introduced to the health disparities and social determinants of health through the lens of children and adolescents.

OBJECTIVES: Students will develop their skills in evaluating children/adolescents, become proficient in child psychiatric assessment and have a beginning knowledge of differential diagnosis, treatment formulation, familiarity with commonly utilized treatment modalities, and appropriate medication choice.

PSYC 9025 – ADDICTION MEDICINE

DIRECTOR: Dr. Erin Zerbo

LOCATION: Behavioral Health Sciences Building, F-Level, and UH Psychiatry Consultation-Liaison Service

WHEN OFFERED: August, September, October

DESCRIPTION OF ELECTIVE: This elective focuses on the assessment and treatment of patients with opioid use disorder in an interdisciplinary outpatient setting. Students will spend the majority of their time in the outpatient Buprenorphine Clinic on the F-Level in the BHSB building, where Dr. Erin Zerbo will serve as faculty preceptor. They will see patients in a preceptorship model: they will reside in their own office, see patients independently, and then present to the faculty preceptor. The preceptor will then see the patient along with the student and help the student write prescriptions, schedule a follow-up appointment, and provide relevant patient education. Students will also participate in individual and group therapy sessions under supervision of the clinic social worker, Josh Taffet. If interested, students are encouraged to schedule individual therapy sessions with outpatients and/or work on refining a contingency management program or other clinical incentive programs with the social worker.

Approximately 1-2 days per week, students will join Dr. Zerbo on the UH Psychiatry Consultation-Liaison Service and perform addiction consults; there will be an emphasis on beginning medication-assisted treatment for opioid use disorders and bridging hospitalized patients to outpatient care.

Finally, students will also choose a clinical question, review relevant medical literature, and provide a brief presentation to clinic staff in the last week of their elective.

OBJECTIVES:

- 1) To develop comfort with both inpatient and outpatient evaluation and follow-up visits focused on substance use issues
- 2) To improve the ability to develop a rapport with substance-using patients and demonstrate qualities of empathy and non-judgment
- 3) To review the medical literature to answer a focused clinical question and provide the results in an informal, brief presentation (with potential expansion to a poster or article)

PSYC 9030 - CONSULTATION-LIAISON

DIRECTOR: Dr. Rashi Aggarwal, BHSB E-level (aggarwra@njms.rutgers.edu)

LOCATION: University Hospital

WHEN OFFERED: August, September, October

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.

DEPARTMENT OF RADIOLOGY

RAD 9010 - DIAGNOSTIC RADIOLOGY

DIRECTORS: Dr. Pierre Maldjian

LOCATION: University Hospital

WHEN OFFERED: 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 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. Students may also write an optional case report or review a paper on a contemporary radiology issue for extra credit.

RAD 9020 - INTERVENTIONAL AND VASCULAR RADIOLOGY

DIRECTOR: Dr. Abhishek Kumar

LOCATION: University Hospital

WHEN OFFERED: 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.

DEPARTMENT OF SURGERY

SURG 9012 - SURGICAL ETHICS

DIRECTOR: Dr. Michael Shapiro

LOCATION: University Hospital

WHEN OFFERED: August and October

DESCRIPTION OF COURSE: This elective is designed to build upon prior knowledge of Bioethics gained in the first three years with particular emphasis on ethical questions related to the surgical care of the patient. Students will participate in surgical rounds and the operating room on General Surgery/Surgical Oncology, and using those patient experiences, examine ethical questions such as informed consent, shared decision-making, intrinsic bias, futility, organ donation and allocation of scarce resources, management of complications and disclosure of error, the role played by biopsychosocial factors in treatment decisions, etc. Students will round with the resident team as well as the course instructor, and in the Surgical ICU as appropriate. Students will meet with the instructor to discuss ethical issues arising in the care of the patients, and prepare at least two presentations of topics of mutual interest. Students will also attend the monthly UH Bioethics Committee meeting.

Key responsibilities of the student while on elective:

- 1. The student will be expected to round with the resident team, attend cases in the OR, and present to clinical faculty on a daily basis.
- 2. The student is expected to read the pertinent surgical and ethics literature concerning the cases they see.
- 3. At least two written presentations discussing an ethical issue presented by a patient is required.
- 4. An ethics discussion, suitable for submission for an abstract or publication, will be considered if appropriate based on the case presentations.

SURG 9020 - ADULT CARDIOTHORACIC SURGERY

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

LOCATION: University Hospital

WHEN OFFERED: 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.

SURG 9050 - ACTING INTERNSHIP / UNIVERSITY HOSPITAL

DIRECTORS: Dr. Michael Shapiro

LOCATION: University Hospital

WHEN OFFERED: August, September, October

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, mes362@njms.rutgers.edu) 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 (ribaudd@njms.rutgers.edu).

SURG 9181 - PLASTIC SURGERY

DIRECTOR: Dr. Edward Lee

ADMININSTRATOR: Amy Stolar

LOCATION: Ambulatory Care Center, E-1620

WHEN OFFERED: 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.

SURG 9232 - TRAUMA TEAM ACTING INTERNSHIP

DIRECTOR: Dr. David H. Livingston

LOCATION: New Jersey Trauma Center at University Hospital

WHEN OFFERED: August, September, October

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. Livingston 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. Devse Ribau (ribaudd@njms.rutgers.edu).

SURG 9233 - SURGICAL INTENSIVE CARE UNIT

DIRECTOR: Dr. Nina Glass

LOCATION: University Hospital

WHEN OFFERED: August, September, October

DESCRIPTION OF ELECTIVE: The student will become an integral part of the team managing critically ill patients. Rounds will be made daily with the attending staff. Each student will function as a subintern and be responsible for presentation of one patient each day. On rounds, discussion will focus on the pathophysiology of each of the problems presented. Students will be given selected readings in critical care medicine. Students will also participate in insertion of central lines and arterial lines for monitoring, ventilator management, and resuscitation.

REPORTING INSTRUCTIONS: Students should 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 (ribaudd@njms.rutgers.edu).

SURG 9253 - UROLOGY - ACTING INTERNSHIP

DIRECTOR: Dr. Robert Weiss

weissre@cinj.rutgers.edu

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

LOCATION: University Hospital and Department of Veterans Affairs Medical Center

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.

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: Cynthia Soto Phone: 973-972-6295

Email cs1284@njms.rutgers.edu

LOCATION: University Hospital, Newark, NJ

WHEN OFFERED: August, 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.