



**NEW JERSEY
MEDICAL SCHOOL**

University of Medicine & Dentistry of New Jersey



TWO-WEEK ELECTIVES

*for
Third Year Students
2006-2007*

Supplement to the Elective Brochure for Third and Fourth Year Students 2006-2007

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

FOREWORD

This brochure describes the electives offered to third year students at New Jersey Medical School. The elective program augments the required clerkships and is designed to assist students in career planning and complement future training. An extensive selection of courses is offered in both the basic sciences and clinical disciplines and in settings that include acute care hospitals, ambulatory clinics, private offices, and research laboratories.

Students are encouraged to consult their Advisors, Department Chairs, Clerkship Coordinators, and Student Affairs Dean for assistance in planning their elective programs.

Best wishes for a rewarding and enjoyable year.

Julie E. Ferguson, MPA
Assistant Dean for Student Affairs/Registrar
B-640 Medical Sciences Building

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ELECTIVES SCHEDULE – Third Year Students

ACADEMIC YEAR 2006-2007

	CALENDAR DATES			BROCHURE DESIGNATION
2006	July 17	to	July 28	July
	September 11	to	September 22	September
	November 6	to	November 17	November
	November 27	to	December 8	December
2007	January 29	to	February 9	February
	March 26	to	April 5	April
	May 21	to	June 1	June

All third year electives are graded PASS/FAIL.

You must pass your third year electives to be promoted to fourth year.

DEPARTMENT OF ANESTHESIOLOGY

EVALUATION: The majority of the student's grade is based upon clinical performance. A ten question assignment (narrative format) is given at the start of the two-week elective, to be completed by the last day of the elective utilizing lecture material, clinical experience, and resource materials.

ANES 9000 - GENERAL ANESTHESIA

DIRECTOR: Dr. Jyotsna Rimal

EDUCATION COORDINATOR: Ms. Sharon Venino

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: August - June

NUMBER OF STUDENTS PER ROTATION: 3

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.

Students have the option of rotating through Hackensack University Medical Center for a portion of their elective. Students interested in this option should contact Dr. Rimal to customize a schedule to fit their needs.

REPORTING INSTRUCTIONS: Student should report to MSB E-545 at 7:00 a.m. on the first day of the elective.

ANES 9002 - MANAGEMENT OF CHRONIC PAIN SYNDROMES

DIRECTOR: Dr. Andrew Kaufman

EDUCATION COORDINATOR: Ms. Sharon Venino

LOCATION: Pain Center, DOC Suite 3400

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: Permission of the Program Director

DESCRIPTION OF ELECTIVE: During this rotation, students will be exposed to a wide variety of chronic pain conditions including central and peripheral neuropathies, cancer related pain, and a wide variety of chronic spinal conditions. Students will review all relevant tests, i.e. MRI, CT, EMG/Nerve Conduction, Plain films and help to formulate treatment plans. Treatments include pharmacologic interventions as well as nerve blocks, epidural injections, facet joint injections, radiofrequency ablative techniques and trials of spinal cord stimulator.

In addition, the student will be involved with the University Hospital consultative service. Rounds are made every morning beginning at 7:15 a.m. with the team of the pain attending, second year anesthesiology resident, and nurse practitioner. There will be daily didactic sessions and case presentations.

REPORTING INSTRUCTIONS: Students should contact Ms. White at 972-2085 on the day prior to the start of the rotation.

DEPARTMENT OF CELL BIOLOGY AND MOLECULAR MEDICINE

ANAT 9003 - SURGICAL ANATOMY

DIRECTOR: Dr. Anthony Boccabella

LOCATION: ADMC Building 14 & MSB Gross Laboratory

DURATION: 2 weeks

WHEN OFFERED: March - April only

NUMBER OF STUDENTS PER ROTATION: 6

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: This course provides an in-depth review of selected areas of the human body. The areas covered will emphasize the student's specific interest of study. Dissection, prosection and lectures will emphasize the clinical and surgical importance of the region under consideration.

Evaluation will be based on quality of dissection, active participation and demonstration of in-depth knowledge in conference sessions.

REPORTING INSTRUCTIONS: Dr. Boccabella is located in the ADMC Building #14, room 1411. On the first day of the elective we will meet in Building 14 Conference Room. Lectures will be held in Building 14 and the afternoon sessions will be held in the MSB Gross Anatomy Laboratory.

DEPARTMENT OF FAMILY MEDICINE

All electives must be pre-approved by Norma Hernandez (973) 972-3188

FMED 9010 - AMBULATORY FAMILY PRACTICE

DIRECTORS: **Drs. Chantal Brazeau** and Richard Cirello

LOCATION: Mountainside Family Practice Associates or other affiliated Family Practice Units

DURATION: 2 weeks

WHEN OFFERED: September - June (subject to approval of Department)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The clerkship is designed to acquaint the student with the work of a family physician in a setting which allows the student responsibility appropriate to his or her level of knowledge and skills. The goals of this rotation are to: (a) familiarize the student with that portion (about 90%) of medical problems which never reach the hospital, with an emphasis on their diagnosis and management by the family physician; (b) provide the student with an opportunity to see medical problems in an undifferentiated form and to develop an understanding as to management by the primary physician; (c) provide the student with an appreciation of family care and, in particular, the ramifications of interpersonal relationships in health and disease; (d) demonstrate the integration of the psychiatric and medical models; (e) allow the student to appreciate the use of community resources by the family physician and the management of problem patients and families; (f) demonstrate to the student the effective and appropriate utilization of the community hospital by the family physician; and (g) introduce the concepts of office management, record-keeping, finances, practice analysis, etc.

FMED 9012 - AMBULATORY PRIMARY CARE

DIRECTOR: Dr. Chantal Brazeau

LOCATION: Variable

DURATION: 2 weeks

WHEN OFFERED: July - August, November - December, January - March (Subject to Approval of Department)

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITE: Medicine or Pediatrics

DESCRIPTION OF ELECTIVE: This rotation offers the opportunity to experience community-based internal medicine or pediatrics practice. In this arena the student will work with role models (preceptors) who can demonstrate continuity of physician-patient

relationships, out-patient management and utilization of community resources.

Objectives: (1) to provide training for competency in ambulatory primary care (2) to provide exposure to the practice of quality ambulatory primary care for community-based patients.

Format: This elective consists of full time work with preceptor. The grade is determined (100%) by the preceptor's evaluation.

FMED 9020 - AMBULATORY FAMILY PRACTICE

DIRECTORS: **Drs. Chantal Brazeau** and E. Thomas Holland

LOCATION: Overlook Hospital Family Practice Residency Program and Affiliates

DURATION: 2 weeks

WHEN OFFERED: August - June (subject to approval of Department)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: This elective is designed to provide the medical student contact with a variety of ambulatory family practice teaching experiences. The majority of the students' time will be spent in two ambulatory care sites under the supervision of senior family practice residents and faculty. Additionally, the student will participate in a variety of other medical activities including attending local elementary schools as "school physician", participating in the obstetrical clinic of the family practice residency program, attending morning report, joining in rounds at the nursing home with the family practice interdisciplinary geriatric team and accompanying them on a home visit, spending a half day at The Center for Addictive Illnesses, and working with community family physicians in their private office practices. The student will also have the opportunity to spend one day each with a senior family practice resident on his/her medicine and pediatric rotations to observe how family physicians effectively manage patients in a community hospital setting.

FMED 9080 - FAMILY MEDICINE IN THE COMMUNITY

DIRECTOR: Dr. Cynthia Paige

DURATION: 2 weeks

LOCATION: Medical Sciences Building

WHEN OFFERED: Variable (subject to approval of the Department)

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: None

DESCRIPTION OF ELECTIVE: This elective offers students the opportunity to participate in a special project related to COPC (Community Oriented Primary Care). These projects may relate to Community 2000, Student Family Health Care Center, or other community oriented activities. The goal of the course is to identify a specific problem and identify and

implement a plan, solution or product to address it. This elective must be discussed in advance with the course director(s) and an acceptable outcome agreed upon.

DEPARTMENT OF MEDICINE

Please Note: Electives in the Department of Medicine are not open to international medical students.

MED 9004 - END-OF-LIFE CARE

DIRECTOR: Patricia Murphy, PhD, APN, FAAN
Department of Surgery

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout academic year with permission from Dr. Murphy

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: A clinical experience, potentially covering the entire hospital, with the multidisciplinary University Hospital Family Support Team. The overall aim is to develop competence in caring for patients and families facing life-threatening illness and death.

Objectives include:

1. Developing personal comfort and professional confidence in the presence of dying patients and acutely grieving family members.
2. Discussing the complementary contributions of various members of interdisciplinary palliative care team.
3. Identifying key principles and core literature of palliative medicine.
4. Assessing and devising treatment for a variety of pain syndromes and common non-pain symptoms, encompassing both pharmacological and complementary modalities.
5. Distinguishing pain from suffering and identifying appropriate interventions for each.
6. With supervision, providing first-level bereavement support to patients and their families.
7. Participating in discussions about withdrawing or withholding potentially life-sustaining treatment.
8. Demonstrating communication skills appropriate to the care of dying and grieving persons.

Hours are flexible and may include occasional night or weekend options.

REPORTING INSTRUCTIONS: Student should contact Dr. Murphy at (973) 972-7251 or email murphy@umdnj.edu.

MED 9006 – RHEUMATOLOGY

DIRECTORS: Petros Efthimiou, M.D. and Leonard Bielory, M.D.

LOCATION: Doctors Office Center

DURATION: 2 weeks

WHEN OFFERED: Throughout the 2006-2007 academic year by arrangement

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: Permission from course director

DESCRIPTION OF ELECTIVE: Undergraduate students are exposed to the following areas in which observation or active participation is required to obtain clinical competence:

This includes but is not limited to:

- Autoimmune disorders, rheumatoid arthritis, systemic lupus erythematosus, vasculitides, myositis, scleroderma
- Spondyloarthropathies including psoriatic arthritis, reactive arthritis, colitic arthritis, ankylosing spondylitis, adult onset Still's disease
- Crystal induced arthropathies including gout and pseudo gout
- Infectious arthritis including those caused by bacteria, viruses, TB, fungi, Lyme spirochetes
- Musculoskeletal trauma and traumatic arthritis.
- Osteoarthritis
- Metabolic bone disorders including osteoporosis, osteomalacia, renal osteodystrophy
- Fibromyalgia
- Dermatologic disorders associated with musculoskeletal and autoimmune disorders

COURSE OBJECTIVES:

1. Students are expected to attend and participate in weekly clinics, inpatient consultation rounds, conferences, divisional Grand Rounds, and Immunology Journal Club. In addition, students may also participate in ongoing research projects in the field of Rheumatology. During the 2 week rotation, students will be encouraged and assisted in completing a review paper dealing with a rheumatological disorder.
2. Students may also partake in ongoing research projects in the field of Rheumatology. During the 2 week rotation students will be encouraged and assisted in completing a review paper dealing with a rheumatological disorder.

REPORTING INSTRUCTIONS: On the first day of the elective students should report to the Doctors Office Center (DOC), Suite 4700, at 9:00 AM. The phone number for the office is (973) 972-2762.

MED 9010 – ASTHMA, ALLERGY & IMMUNOLOGY

DIRECTOR: Leonard Bielory, M.D.

LOCATION: Doctors Office Center, Suite 4700

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year by arrangement with Dr. Bielory

NUMBER OF STUDENTS: 4

PREREQUISITE: Medicine or Pediatrics

DESCRIPTION OF ELECTIVE: Undergraduate medical students working in Asthma, Allergy & Immunology are exposed to the following areas in which observation or active participation is required to obtain clinical competence:

- a. Management of allergic, asthmatic, autoimmune, and immunologic diseases;
- b. Physiology of organ systems prone to develop allergic and immunologic disease, e.g. respiratory tract, muscles and joints, skin, eyes, and gastrointestinal tract;
- c. The immunologic mechanisms operative in: (1) asthma, (2) allergies, (3) immuno-ophthalmology, (4) autoimmune disorders, (5) eosinophilia, (6) vasculitis, (7) immunodeficiencies, (8) immunodermatology;
- d. The performance and interpretation of laboratory immunologic procedures helpful to the clinician in diagnosis and management of allergic, asthmatic, autoimmune and immunologic disease.
- e. The use of medical informatics (i.e. reference manager) in the evaluation of evidence based medicine related to the elective.

Students are expected to attend and participate in weekly clinics, conferences, Journal Club, and literature review. Students may also undertake a research project in conjunction with on-going research activities in the Division of Allergy & Immunology and Rheumatology (see Med 9011). During this 2 week rotation students will be encouraged to complete a review paper dealing with a specific topic.

In the past completed review papers have been successfully submitted (nearly 100% acceptance) to national peer reviewed journals.

Students will receive a free licensed copy of Endnote (Version 9) as part of their rotation for the use of searching the literature and developing their evaluation of patients seen during the elective.

REPORTING INSTRUCTIONS: On the first day of the electives, students should report to the Doctors Office Center (DOC), Suite 4700, at 8:00 a.m. The phone number for the office is (973) 972-2762.

MED 9050 - CRITICAL CARE MEDICINE

DIRECTORS: **Drs. Zaza Cohen** and Matthew Marin

LOCATION: University Hospital

DURATION: 2

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: Medicine

DESCRIPTION OF ELECTIVE: This is an in-depth inpatient program in critical care medicine. It provides a concentrated experience in critical care aspects of internal medicine and is recommended for persons planning a career in internal medicine, surgery and its subspecialties, obstetrics and gynecology, or anesthesiology.

The focus will be on practical experience in evaluation and treatment of critically ill patients. The student will participate actively in the clinical management of critically ill patients under the direct supervision of faculty experts to ensure experience in diagnosis and management of the following common medical emergencies: (a) digestive diseases: upper GI hemorrhage, acute abdominal pain, severe diarrhea, acute liver failure; (b) endocrinology: diabetic ketoacidosis, hyperosmolar states; (c) hematology: generalized bleeding tendency, severe anemia; (d) nephrology: acute renal insufficiency, electrolyte disorders; (e) infectious diseases: septicemia, meningitis, fulminant infection; (f) oncology: sepsis, hypercalcemia; (g) pulmonary: acute respiratory failure, adult respiratory distress syndrome, pulmonary embolus, status asthmaticus; and (h) vascular: hypotensive states; (i) critical care pharmacology; (j) ethics; and (k) others: delirium tremens, drug or alcohol overdose. Additionally, students receive an extensive exposure to imaging at daily radiology rounds.

REPORTING INSTRUCTIONS: Students should report to I-Yellow (MICU) at 8:30 a.m. on the first day of the rotation.

MED 9060 - DERMATOLOGY

DIRECTOR: Dr. Robert A. Schwartz

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

DURATION: 2 weeks by special permission only

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

DESCRIPTION OF ELECTIVE: In this program, the student is assigned to work with the faculty in dermatology. The program is arranged to provide in-depth experience in the prevention, diagnosis and treatment of dermatologic disorders. Attention is focused on an understanding of dermal physiology, pathology and pharmacology as well as experience in clinical dermatology. This is obtained at inpatient and outpatient services at the University Hospital, and at the Department of Veterans Affairs Medical Center in East Orange. The student receives an appropriate examination on various facets of dermatology at the end of the rotation. The following objectives should be fulfilled by the student: obtain additional knowledge of common skin lesions, correlate clinical skin lesions with skin biopsies, acquire further experience in diagnosis and treatment of common skin disorders.

MED 9070 - ENDOCRINOLOGY

DIRECTOR: David Bleich, M.D.
bleichda@umdnj.edu

ADMINISTRATIVE CONTACT: Marsha Taylor, taylorm2@umdnj.edu

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

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: Medicine Clerkship

DESCRIPTION OF ELECTIVE: The rotation is based at the University Hospital 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), hyperlipoproteinemias. 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.

MED 9140 - EMERGENCY MEDICINE RESEARCH

DIRECTOR: Dr. Richard Shih

MEDICAL STUDENT COORDINATOR/CONTACT: Colleen Mayer (973) 971-5044 x3

LOCATION: Morristown Memorial Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year (with permission from Colleen Mayer)

NUMBER OF STUDENTS PER ROTATION: 3

PREREQUISITE: Colleen Mayer must clear registrants prior to acceptance to the program.

DESCRIPTION OF ELECTIVE: The Research elective offers medical students a challenging experience at Morristown Memorial Hospital. Morristown Memorial Hospital has

one of the two accredited Emergency Medicine Residency Programs in Northern New Jersey, and all of the attending physicians are board certified in Emergency Medicine. The Emergency Department sees approximately 70,000 patients per year.

Learning experience:

- Structured one-on-one discussion and participation in on-going research projects and/or the genesis of new projects.
- Statistics reading and discussion.
- Research methodology, seminar - 4 lectures given, 2 per week.

Goal and Objective: To learn the basics of emergency medicine research.

Evaluation: One project will be critiqued and a formal written evaluation for the elective will be given.

PLEASE NOTE: The first day of the elective, students are to report to Colleen Mayer in the Department of Emergency Medicine at Morristown Memorial Hospital located on Franklin D. When you enter the front of the hospital, go to the Franklin Elevators and go to level D. Follow signs to the Emergency Room. At the end of the first hall, make a left and enter the first door on the left which says "Emergency Medicine Administrative Offices." After meeting Colleen Mayer, you will meet with Jennifer DiLauri in Medical Education.

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316 jennifer.dilauri@hsys.org

MED 9150 - INFECTIOUS DISEASES

DIRECTOR: Dr. Lisa Dever

DIVISION CHIEF: Dr. David Alland

PROGRAM COORDINATOR: Adriana Sanchez
Phone: (973) 972-9834, Fax: (973) 972-1141

LOCATION: University Hospital, VA New Jersey Health Care System (East Orange), and Hackensack University Medical Center

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 6

PREREQUISITE: Medicine

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

- a. Obtain further knowledge of pathophysiology, diagnosis and treatment of infectious diseases due to bacteria, mycobacteria, fungi, viruses, rickettsia and parasites. The student is required to comprehensively evaluate and follow a minimum of 5 patients per week and to keep an account of appropriate data and diagnosis for review at the end of the rotation. Patients will be seen by the student in the hospital, ambulatory setting, and emergency department.

- b. Acquire expertise in interpreting clinical microbiological data including smears, stains, cultures, and molecular and serologic studies. The student will also gain experience with the use and interpretation of a variety of imaging studies to diagnosis infectious diseases and increase their knowledge of the pharmacokinetics, toxicity, and spectrum of activity of antimicrobial agents used to treat infections.
- c. The student may elect to participate in ongoing basic or clinical research in infectious diseases.
- d. Attendance at all conferences sponsored by the Division is mandatory.

MED 9190 - MEDICAL ONCOLOGY

DIRECTOR: Dr. Mark Levin

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The following objectives should be fulfilled:

- a. Obtain an overview of the clinical presentation, methods of diagnosis, staging and treatment of major neoplastic diseases including lymphomas and solid tumors.
- b. Understand basic principles of oncology, including radiation therapy, chemotherapy and surgery, as well as multimodality treatment.
- c. Acquire basic knowledge of tumor epidemiology, tumor biology, clinical pharmacology, clinical immunology, tumor markers and paraneoplastic syndromes.
- d. Be exposed to ongoing clinical research such as early clinical trials of new anti-cancer agents (Phase I, Phase II and multicenter Oncology Group trials).

An elective in Medical Oncology will expose the student to this multidisciplinary subspecialty. The student will work closely with the attending seeing patients in the clinic, private office and the hospital. Emphasis will be placed on the comprehensive approach to the cancer patient, including: diagnosis, staging, surgical management, radiation, chemotherapy, psychological implication of cancer, death and dying, pain control and hospice. It is expected that this elective will demystify cancer and cancer patients and expose the student to an exciting, challenging and rewarding subspecialty.

The student will attend all divisional conferences including the weekly Tumor Board, G.I., Sarcoma, Breast, Lung and Head and Neck conferences. Discussion groups are held to introduce the student to newer clinical and research aspects of neoplastic diseases. The student will be evaluated at the end of the rotation by his/her assigned Attending according to input in daily patient assessment, case presentations, and medical knowledge. We also offer "mini-electives" in hospice, radiation and surgical oncology.

REPORTING INSTRUCTIONS: Call (973) 972-6257 prior to beginning of elective to ascertain location of where to report on the first day of the rotation.

MED 9195 - OCCUPATIONAL MEDICINE / Morristown

DIRECTORS: **Dr. Rachel Leib** and Dr. Jan Schwarz-Miller

LOCATION: Morristown Memorial Hospital

DURATION: 2 weeks

WHEN OFFERED: July, September - June

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Medicine. Candidates must use their own car for this elective.

DESCRIPTION OF ELECTIVE: Medical students are invited to participate in a two week elective in occupational medicine at Morristown Memorial Hospital. At the completion of the elective, the medical student will have an understanding of the general concepts in occupational medicine and how to apply these concepts in a number of varied settings.

Learning experience: The medical student's time will be divided into four components. They will include didactic sessions with a physician who specializes in occupational medicine, clinical experience at the hospital's Occupational Medicine Service, the completion of a small research project, and the opportunity to visit professionals in the field of occupational medicine at their job site.

Goals and Objectives:

- Provide an understanding of the general concepts in occupational medicine
- Gain the ability to apply these concepts in a number of varied settings

Feedback/Evaluation: By the attending preceptor.

PLEASE NOTE: The first day of the elective, students are to report at 8:15 AM to the Medical Education Department of Morristown Memorial Hospital located on Simon 3. Go through Simon lobby to first set of elevators - take to 3rd floor and follow sign to Medical Education.

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316
jennifer.dilauri@ahsys.org

MED 9210 - PULMONARY DISEASES

DIRECTOR: Dr. Matthew Marin

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

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITE: Medicine

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

- a. Obtain further knowledge of pathophysiology and additional experience in proper diagnosis and treatment of: chronic obstructive lung disease, chronic bronchitis, emphysema, asthma, tuberculosis, lung abscess, pneumonia. The student will work up patients with pulmonary diseases 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 pulmonary function tests, chest X-rays, bronchoscopic studies, lung biopsy sections, sputum smears.
- c. The student may elect to participate in ongoing clinical and basic research in pulmonary diseases.

MED 9241 - NATIONAL TUBERCULOSIS CENTER

DIRECTORS: **Drs. Reynard McDonald**, Bonita Mangura, and Lee B. Reichman

LOCATION: New Jersey Medical School National Tuberculosis Center, Lattimore TB Clinic and University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The following objectives must be fulfilled:

- a. Acquire expertise in the obtaining of a TB focused history and the conducting of a physical examination.
- b. Obtain further skills in the diagnostic methods for TB including testing procedures and radiographic examination.
- c. Obtain further knowledge of the method for screening patient contacts and in the treatment regimens for TB infection and disease.
- d. Obtain further knowledge of the disease control and public health issues relative to treating TB patients in Newark.

The course will introduce students to the interdisciplinary approach necessary for TB control and encompass various educational activities in the areas of TB clinical management, research, patient education and disease control. Students accompany our Attending Physician in the mornings for clinic rotation and in the afternoons for rounds with the inpatient service. Applying the Students' Patient-Oriented Journal Article Club

(SPOJAC) system, students review and present a current journal article at our faculty and clinic staff meetings. In addition, students attend our TB Case Conference in which difficult cases are discussed among our multidisciplinary clinic staff.

Students follow a Directly Observed Therapy Outreach Worker for two and a half hours each week to learn about the various methods of therapy administration and issues in patient care such as poverty, substance abuse and homelessness.

A staff person from the TB Control Program at the Department of Health will be available to meet with students interested in statewide control activities. In addition, upon request students will have the opportunity to meet for a morning with our Mycobacteriologist in her Molecular Biology Laboratory to learn about basic research in molecular mechanisms of drug resistance in mycobacteria.

Students will be evaluated on the basis of their attendance (30%), their journal article presentation (40%) and by the Attending Physician's assessment of students' ability to obtain a TB focused history and identifying a testing and treatment plan (30%).

MED 9245 – EMERGENCY MEDICINE

DIRECTORS: Karen Onufer, M.D. (contact to schedule meeting time and place, onuferk@aol.com or 973-972-9263) and Sandra Scott, M.D.

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the 2006-2007 academic year only

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITES: None

DESCRIPTION OF COURSE: Students will work three 12-hour shifts per week in the Emergency Department and attend our Wednesday lecture series.

COURSES GOALS: To provide the student with the clinical skills and ability to interpret data required for the appropriate diagnosis and management of patients requiring emergency care.

COURSE OBJECTIVES: To identify and solve diagnostic and therapeutic problems associated with commonly encountered emergencies.

METHOD OF STUDENT ASSESSMENT: 1 case write up/clinical evaluation by preceptor

DEPARTMENT OF NEUROLOGICAL SURGERY

NSUR 9100 – INTRODUCTION TO NEUROLOGICAL SURGERY

DIRECTOR: Allen Maniker, M.D.

LOCATION: DOC, 8th Floor

DURATION: 2 weeks

WHEN OFFERED: Throughout the 2006-2007 academic year only

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITE: None

DESCRIPTION OF ELECTIVE: A 2-week elective where the student is introduced to the care and treatment of the patient with diseases requiring treatment by the Neurosurgeon. The student will be able to follow patients through admission to the hospital operative care, post operative care and discharge. Time will be spent in observation of Neurosurgical procedures in the operating room, conducting a neurological exam, reading of diagnostic studies including CT scans and MRI scans, performing consultations and delivering critical care. The student will be exposed to Neurosurgical critical care that encompasses patients with brain tumors, cerebrovascular disease, neurotrauma, spine, peripheral nerve and pediatric related issues.

The student will attend daily morning rounds in the Neuro ICU, attend operative procedures and attend a series of lectures given by the Attendings covering all aspects of Neurological Surgery. They will attend the Grand Rounds proceedings and the educational conferences scheduled weekly as well as participate in the clinical evaluation of patients.

COURSE GOALS: To familiarize the student with all aspects of the care of the Neurosurgical patient.

COURSE OBJECTIVES:

1. Perform an accurate neurological exam
2. Be familiar with CT and MRI scans
3. Understand and recognize a neurological emergency
4. Understand the role that neurosurgery plays in the care of a patient

METHODS OF ASSESSMENT: Attendance, patient write up, faculty and resident evaluations.

DEPARTMENT OF NEUROSCIENCES

All grades in Neurosciences electives are determined by evaluation of students based on the following: attendance, carrying out of assigned duties, fund of knowledge of subject material as determined by preceptor evaluation on a daily basis, judgment and attitude.

NEUR 9012 - NEUROLOGY PRECEPTORSHIP

DIRECTOR: Dr. Stephen S. Kamin

LOCATION: Private offices and hospitals of participating neurologists.

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year (Must be arranged at least 3 months in advance)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Neurology

DESCRIPTION OF ELECTIVE: Taken after the Neurology Clerkship, this elective gives the student interested in further neurological training the opportunity to participate in a closely supervised experience by the clinical faculty in the private practice of neurology.

REPORTING INSTRUCTIONS: The student should arrange directly with the participating neurologist the time and location of the first meeting after first discussing the rotation with Dr. Kamin.

NEUR 9020 – PEDIATRIC NEUROLOGY

DIRECTOR: Rosario Trifiletti, M.D., Ph.D.

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the 2006-2007 academic year only

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: Pediatrics suggested

DESCRIPTION OF ELECTIVE: Students will become part of a team that evaluates children with known or suspected neurological disorders. They will be seeing such children in an inpatients service as well as several outpatient clinics. Children with behavioral problems, seizures, autism, cerebral palsy as well as many other less common conditions are likely to be encountered. The experience is supplemented with ad hoc bedside and formal teaching sessions. The rotation is most valuable to students that have done either General Pediatrics and/or Clinical Neuroscience.

COURSE GOALS: Introduce students to the diagnosis and management of neurological disorders in children. Familiarize students with basic tools of neurological diagnosis, including EEG and brain MRI.

METHOD OF STUDENT ASSESSMENT: Evaluation of clinical skills, case presentations.

NEW JERSEY MEDICAL SCHOOL LIVER CENTER AND SAMMY DAVIS, JR. NATIONAL LIVER INSTITUTE

LIVC 9000 - LIVER DISEASE AND HEPATITIS C

DIRECTOR: Dr. Carroll M. Leevy (Hepatology)

ASSOCIATE: Dr. Carroll B. Leevy

LOCATION: University Hospital and Sammy Davis, Jr. National Liver Institute

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITES: None

DESCRIPTION OF ELECTIVE:

a) Objectives: This elective exposes third year medical students to the Liver program at the New Jersey Medical School and Sammy Davis, Jr. National Liver Institute. It will focus on the current approach to viral hepatitis C and other liver diseases including its differential diagnosis and treatment. Hepatitis C is the most common cause of chronic liver disease world-wide with involvement of 2000 New Jerseyans. Academic perspective developed at the Sammy Davis, Jr. National Liver Institute indicates instruction focused on hepatitis C provides the insight needed to obtain basic views required for pursuit of all other diseases of the liver; accordingly the student obtains needed overviews of liver disease using the NJMS approach. The course is designed to give medical students hands-on experience in prevention, detection and treatment of this and other liver disorders and their complications including cirrhosis, cancer and fulminant liver failure. Attention will be focused on reversibility of clinical, laboratory, radiologic and morphologic features of hepatitis C and its differentiation from other hepatic disorders. Special attention will be given to the influence of available therapeutic measures in prognosis.

The exciting up-to-date course will prepare students interested in family medicine, internal medicine, pediatrics and other primary care specialties to properly care for these special patients. Attendees will be provided with newest information on clinical, laboratory, radiologic, morphologic and etiologic criteria, as well as available medical, surgical and radiologic therapeutic modalities for liver disease.

b. Format:

1. Ambulatory evaluation and treatment of selected referred patients with chronic hepatitis C and other unique hepatic disorders.

2. Inpatient rounds on patients with hepatitis C or other disorders of the liver admitted to the Medical Hepatology and Surgical Transplant Services.

3. Instruction and observation of scheduled special diagnostic and therapeutic measures including upper endoscopy for bleeding varices, TIPS for varices and ascites, ERCP for biliary obstruction, and needle biopsy of the liver.

4. Participation in ongoing studies on detection and management of viral hepatitis without complications or in the presence of bleeding esophageal varices, ascites, hepatic encephalopathy, and renal dysfunction.

5. Participation in work-up of patients with end-stage liver disease not responsive to medical measures who require transplantation; observation of donor organ retrieval; participation in transplant surgery and postoperative care.

NOTE: Students may apply for Sammy Davis, Jr. or Nancy Starr Fellowship available to senior students.

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

OBG 9030 - WOMEN'S REPRODUCTIVE CHOICES

DIRECTOR: Dr. Natalie Roche

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Obstetrics and Gynecology 3rd year clerkship

DESCRIPTION OF ELECTIVE: This elective is designed to provide more in depth exposure to women's reproductive choices. The student will gain more detailed knowledge of the field of family planning, including contraception and pregnancy termination. Students will participate in patient care in ambulatory and inpatient settings. Teaching will take place in the operative room, clinic setting, ultrasound suite and inpatient hospital setting, following patients through the system of care.

OBG 9070 - HIGH-RISK OBSTETRICS

DIRECTOR: Dr. Leslie Iffy

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year by arrangement with Dr. Iffy

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Obstetrics and Gynecology

DESCRIPTION OF ELECTIVE: The student will work with the third year resident in the Antepartum Unit and will prepare a history and evaluation for each patient under his/her care. The student also prepares a detailed summary of some cases for presentation at daily rounds with the attending physician and /or at the weekly perinatal review. The student will alternate with the first year resident in the work-up of new admissions and consultations. During the initial week, the student will receive basic training in diagnostic ultrasound. He/she will be encouraged to be on call every fourth night.

OBG 9071 - OBSTETRICAL IN-PATIENT LABOR AND DELIVERY SERVICE

DIRECTOR: Dr. Leslie Iffy

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year by arrangement with Dr. Iffy

NUMBER OF STUDENTS PER ROTATION: 1

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.

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

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. If the preparation of a manuscript is required, it must be suitable for publication or for presentation.

OPH 9000 - OPHTHALMOLOGY

DIRECTOR: Dr. Suqin Guo

CONTACT PERSON: Kim V. Johnson (johnsokv@umdnj.edu) 973-972-2036

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

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

DESCRIPTION OF ELECTIVE: The Ophthalmology department Chair and the course director, Dr. Suqin Guo, ensure that the students learn and achieve the goals of the course by providing a supervised clinical experience in an outpatient setting as well as extensive lectures on CD and videos in ophthalmology. The major educational goal of the Institute of Ophthalmology and Visual Science is to provide third year medical students with 1) basic and fundamental knowledge of the visual system, and 2) information and understanding of the diagnosis and management of ophthalmic disorders.

The Institute of Ophthalmology and Visual Science uses the Pass/Fail grading system. Students who pass a quiz at the end of the rotation and fulfill the goals of the course will be given a "Pass" grade. Medical students are required to be on time, sign in/out daily, to follow dress code, and to bring ophthalmoscope during the course. It is also required to return the textbook at the end of the course.

REPORTING INSTRUCTIONS: The students are to report to the 6th floor, Suite 6100 in the Doctors Office Center (DOC) Building at 8:30 a.m. on the first day of their elective. They are to bring their ophthalmoscopes with them.

DEPARTMENT OF ORTHOPAEDICS

ORPS 9005 - PEDIATRIC ORTHOPAEDICS

DIRECTOR: Dr. Sanjeev Sabharwal

ADMINISTRATIVE CONTACT: **Ms. Abby Schwalb** (973) 972-3860

LOCATION: University Hospital and Affiliated Institutions

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Pediatrics or Family Medicine or Surgery

DESCRIPTION OF ELECTIVE: The objective of this rotation is to expose the medical student to the art of history taking, physical examination and decision making in a child with musculoskeletal problems. The student will attend pediatric orthopaedic clinics, private office, participate in in-patient care and assist in the operating room. Typical orthopaedic problems such as pediatric fractures, congenital and developmental musculoskeletal problems, neuromuscular diseases as well as spinal deformities will be encountered. The student will be required to attend daily orthopaedic teaching rounds as well as have a weekly didactic session on a common pediatric orthopaedic problem. Night call is optional.

Based on the students' interests and availability, the elective can be modified with regards to focus on an outpatient versus surgical experience, as well as spending time with other orthopaedic faculty specializing in trauma, sports medicine, foot and ankle, tumor, joint replacement, and hand surgery.

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 Dr. Sabharwal.

ORPS 9116 – ORTHOPAEDIC SURGERY

DIRECTOR: Francis Patterson, M.D.

ADMINISTRATIVE CONTACT: Ms. Abby Schwalb (973) 972-3860

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the 2006-2007 academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: General Surgery

DESCRIPTION OF ELECTIVE: This 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 UMDNJ-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.

Overnight orthopaedic call is not mandatory, but can be arranged during 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 emergency orthopaedic management principles.

COURSE GOALS:

1. To allow the broadest exposure possible for students in orthopaedic surgery and its sub-specialties.
2. To provide baseline skills in the orthopedic history taking, physical examination skills, and radiographic interpretation of common orthopaedic conditions.

COURSE OBJECTIVES:

1. The student will attend all clinics and assigned activities.
2. The student will demonstrate during interaction with faculty a baseline understanding of orthopaedic history taking, physical exam skills, and interpretation of basic radiographic imaging techniques.

REPORTING INSTRUCTIONS: On the first day of the rotation students should attend morning report at 6:45 a.m. at UH E349 and identify themselves to Dr. Patterson.

DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE

PATH 9001 - SURGICAL AND AUTOPSY PATHOLOGY

DIRECTORS: **Drs. Klein** and Aisner

LOCATION: Pathology Department, University Hospital (E-163)

DURATION: 2 weeks

WHEN OFFERED: July - December, February - June

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITE: Permission of either director

DESCRIPTION OF ELECTIVE: Students work with the Pathology residents in Surgical and Autopsy Pathology.

On Surgical Pathology, the student will observe the gross and microscopic examination of medical and surgical biopsies, and surgical resection material. While much of this material involves the diagnosis of tumors, there are also very active liver, GI, GYN, Orthopaedic and Neurosurgical services which provide a variety of pathologic disorders. The students will also sit in on the daily "sign-out" conference and attend all intra- and some interdepartmental conferences.

On the Autopsy service, the student will be expected to observe the autopsy, assist in dissection only to a limited extent but actively participate in library research about the nature of the patient's disease. There are about 5-10 autopsies per month at University Hospital, and 1 or 2 autopsies is sufficient for completion of the elective.

The student will be expected to spend a full day, every weekday, with one of the residents in the department. Individual preceptorships in selected sub-specialty areas of Pathology may also be arranged with Pathology department faculty members.

REPORTING INSTRUCTIONS: Students should report to room E - 163, University Hospital, at 8:00 a.m. on the first day of the elective.

DEPARTMENT OF PEDIATRICS

Students desiring pediatric electives are encouraged to discuss their plans with the Chairman of Pediatrics, UMD-NJMS, MSB, F-540, at (973) 972-5275, prior to decision. Formal approval from the Chairman is required for any elective taken outside of University Hospital, Hackensack University Medical Center or Morristown Memorial Hospital.

PEDS 9006 - PEDIATRIC OPHTHALMOLOGY

DIRECTOR: Dr. Rudolph S. Wagner

LOCATION: Pediatrics Clinic, Columbus Hospital, 495 N. 13th Street, Newark

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Pediatrics

DESCRIPTION OF ELECTIVE: This course is designed for medical students interested in Pediatrics who wish to gain familiarity with common ocular disorders that affect children. Emphasis will be placed on outpatients but will include inpatient evaluations and exposure to surgery. This course is not designed for students with a primary interest in Ophthalmology. Opportunity for participation in a clinical research project is available.

REPORTING INSTRUCTIONS: On the first day of the elective, students should report to the Pediatrics Clinic at Columbus Hospital, 495 E. 13th St., Newark, at 9:00 a.m. Phone: (973) 485-3186.

PEDS 9009 – PEDIATRIC GASTROENTEROLOGY

DIRECTOR: Iona Monteiro, M.D.

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: 9/11, 11/6, 11/27, 1/29, 3/26

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: Pediatrics

DESCRIPTION OF ELECTIVE: This elective will give the student exposure to various gastrointestinal and liver diseases in children

COURSE GOALS: To be able to elicit a thorough history, perform a physical exam in a child with gastrointestinal problems and learn the approach to diagnosis and treatment.

PEDS 9020 – PEDIATRIC, ALLERGY, IMMUNOLOGY & INFECTIOUS DISEASE

DIRECTOR: James M. Oleske, M.D.

LOCATION: FXB Clinic, G102 University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the 2006-2007 academic year only

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: None

DESCRIPTION OF ELECTIVE: This two week short elective is only available to third year medical students in order that they can have exposure to the pediatric subspecialties of Allergy/Immunology and Infectious Diseases. This exposure will include daily inpatient rounds with our pediatric fellows and on-call attendings. They will also attend two ambulatory clinics weekly including a pediatric HIV, follow-up clinic as well as Dr. Oleske's Immunology Clinic. Each student will be exposed to the CLI Laboratory in order to appreciate the importance of flow cytometry and other qualitative and quantitative immune studies in the diagnosis of a child with recurrent infections and to the importance of PCR in diagnosing viral infections.

COURSE GOALS: To expose students in the 3rd year to the broad range of pediatric allergy, immunology and infectious diseases.

COURSE OBJECTIVES: To allow medical students the opportunity to participate in the clinical care, diagnostic evaluations and treatment available to pediatric patients having an abnormality in immunological and host defense mechanisms.

COURSE MEETING DATES/TIMES: This will be a two week elective with students reporting at 9:00 a.m. to the FXB Clinic, G102 University Hospital and completion each day by 5:00 p.m.

METHOD OF STUDENT ASSESSMENT: Observation of daily interaction with fellows, attendings, nurses with only a pass/fail grade based on attendance, interaction with attendings and fellows and supervised care provided to patients cared for by the Division and FXB.

PEDS 9030 – AMBULATORY PEDIATRICS

DIRECTOR: Chitra Reddy, M.D.

LOCATION: University Hospital and Doctors Office Center

DURATION: 2 weeks

WHEN OFFERED: Throughout the 2006-2007 academic year only

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Pediatrics

DESCRIPTION OF ELECTIVE: Under the supervision of attending physicians, the student will provide primary care for infants, children and adolescents seen in the primary care continuity practice.

The student will a) provide primary care for infants, children and adolescents, b) become proficient in eliciting a comprehensive history and conducting a thorough, age-appropriate physical exam including a developmental assessment, c) formulate a clinical impression with consideration of differential diagnosis, d) devise and implement an appropriate diagnostic and therapeutic plan, e) present and write his/her findings clearly and concisely, f) acquire a level of proficiency in performing common office procedures, g) develop and refine his/her knowledge of pediatrics, focusing especially on primary care aspects: preventive health services, growth, nutrition, behavior and development, anticipatory guidance and school issues, h) become proficient in management of common acute and chronic pediatric diseases, i) develop skills in communicating with and counseling patients and families.

COURSE OBJECTIVES: Students are oriented on the first day and assigned to an office practice comprised of third year medical students, residents and faculty attendings. The duties and responsibilities of the students are identical to those of the PGY-1 residents. Students are expected to attend weekly Grand Rounds and daily noon conferences. Students will maintain a log of assigned patients for weekly review.

METHOD OF STUDENT ASSESSMENT: Students are evaluated by the attending physicians. Evaluation is based on subjective assessment of knowledge, problem-solving, proficiency in history-taking and physical examination, clinical judgment, presentation, record-keeping and interpersonal skills. As students are integral members of the patient care team, regular attendance and participation are essential. Unexcused absences are not allowed; anticipated absences for interviews should be cleared with the course director in advance.

PEDS 9061 - PEDIATRIC HEMATOLOGY AND ONCOLOGY

DIRECTOR: Dr. Michael Harris

LOCATION: Tomorrow's Children's Institute, Hackensack University Medical Center

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Pediatrics

DESCRIPTION OF ELECTIVE: Students will spend the majority of their time in the outpatient Hematology/Oncology clinic, learning about the evaluation and treatment of blood disorders and cancer. Opportunities will be available to attend inpatient rounds on the Hematology/Oncology and Bone Marrow Transplant services. Students will attend weekly Tumor Board meetings and review blood smear and bone marrow pathology.

PEDS 9062 - DERMATOLOGY

DIRECTORS: **Drs. Robert A. Schwartz**, Camila Krysicka Janniger, W. Clark Lambert

LOCATION: University Hospital and Doctors Office Center

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: This elective covers all aspects of dermatology, with special emphasis on pediatric dermatology. Student(s) may delve in depth into areas of this discipline. Student(s) will attend dermatology conferences and may (by invitation) attend pediatric genetics conferences as well. Student(s) evaluation is done by mentor. Evaluation is based upon interest, enthusiasm, and performance.

PEDS 9065 - DEVELOPMENTAL DISABILITIES AND DEVELOPMENTAL MEDICINE AT MATHENY SCHOOL AND HOSPITAL

DIRECTOR: Dr. Gary E. Eddey

LOCATION: Matheny Medical & Educational Center, Matheny School & Hospital, Peapack Campus

DURATION: 2 weeks

WHEN OFFERED: September - June

NUMBER OF STUDENTS PER ROTATION: 3

PREREQUISITES: Pediatrics, Medicine

DESCRIPTION OF ELECTIVES: The student will explore the many aspects and interdisciplinary nature of caring for individuals with significant chronic neurologic handicapping conditions.

The elective will involve participation in the care of children and adults with different forms of cerebral palsy including an extensive understanding of the associated medical conditions often present in this population. In addition, patients with Lesch Nyhan Disease and other developmental disabilities will be seen in in-patient and out-patient settings. The rotation will include in-depth analysis of establishing the therapeutic alliance with patients who are non-verbal.

The elective may also be adapted to accommodate a student's specific research in developmental medicine as well as clinical medicine. Evaluation of the student's effort is by Dr. Gary E. Eddey.

Students wishing to take this elective should meet with Dr. Eddey at least two weeks prior to the elective, to plan the rotation.

PEDS 9081 - CLINICAL GENETICS

DIRECTOR: Dr. Franklin Desposito

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Medicine, Obstetrics and Gynecology, and Pediatrics desirable but not essential

DESCRIPTION OF ELECTIVE: An elective in clinical genetics offers an overview of the field including exposure to a variety of common genetic disorders and birth defects. It provides an understanding of the reasons families seek genetic information and counseling.

The specific learning experience will include familiarity with obtaining a genetic history and family pedigree, attention to human variation during physical examination, process analysis into the cause of birth defects and congenital malformations, exposure to our cytogenetic and biochemical laboratories, and an understanding of the multi-disciplined approach to the field including the roles of other medical disciplines (genetic counselors, ethics, obstetrics and dentistry). On-going research endeavors are available and encouraged.

PEDS 9151 - PEDIATRIC EMERGENCY MEDICINE

DIRECTOR: Dr. Robert L. Barricella and staff

LOCATION: University Hospital

DURATION: 2 weeks with permission of the Director

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2 (students are on opposite shifts)

PREREQUISITE: Pediatrics, Medicine, Surgery

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 attendings, and present these cases to the attending physicians. The focus will be on the history taking and examination of children of all ages, and on 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, orthopaedic films).

While on this rotation, the student will work approximately 6 shifts of twelve hours each; times and dates will be arranged with the attending at the beginning of the elective. S/he

will participate in the management of pediatric trauma patients in conjunction with the Emergency Department residents and attendings, and possibly pediatric Psych emergencies as they present. 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 pediatric departmental conferences and grand rounds. They will also attend conferences given by pediatric Emergency Medicine attendings on core topics. They may have the opportunity to ride one shift in the ambulance if they are interested in this experience (highly recommended). Students will be given an opportunity to write up an interesting case for possible publication in clinical literature.

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

REPORTING INSTRUCTIONS: Students must contact Dr. Barricella via e-mail one month prior to the start of the rotation (barricro@umdnj.edu).

DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION

The Department of Physical Medicine and Rehabilitation encourages students to participate in our electives for an introduction to our field. With the number of debilitating diseases and injuries, such as multiple sclerosis, stroke, cancer, spinal cord injury and traumatic brain injury, that cause long-term disabilities, it is important that medical students be exposed to the principles of rehabilitation medicine. Because electives are offered at various locations, a preceptor will be assigned to each student by the Director of the elective. Evaluations are performed by the preceptor using the department evaluation form.

Note: Elective rotations in this department are open to students from LCME schools only. If you have questions regarding electives in the Dept. of PM&R, please contact our Program Assistant, Ms. Michele Browne at (973) 972-3606, or e-mail pmrresid@umdnj.edu.

REHB 9000 - ACTING INTERNSHIP IN PHYSICAL MEDICINE & REHABILITATION

DIRECTOR: Dr. Patrick Foye

LOCATIONS: University Hospital; Kessler Institute - East, West, North and Welkind; Department of VA New Jersey Healthcare System - East Orange; Atlantic Health System (Mountainside, Overlook and Rehabilitation Institute of Morristown Memorial (RIMM) Hospitals); private physicians' offices

DURATION: 2 weeks

WHEN OFFERED: July, August, October, December, January, May and June. Other times only with approval of Clerkship Director, Dr. Foye.

NUMBER OF STUDENTS PER ROTATION: 8

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Exposure to the field of comprehensive rehabilitation medicine 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 spinal cord injured patients, including the care of the neurogenic bladder, stroke, prescription and training in the use of prostheses for comprehensive care of the amputee and exposure to other selective neurological or orthopaedic categories and their rehabilitation retraining.

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; both inpatient and outpatient services are included.

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.

If you have questions regarding this elective, please contact our Program Assistant, Ms. Michele Browne at (973) 972-3606, or e-mail pmrresid@umdnj.edu.

REHB 9001 - PEDIATRIC PHYSICAL MEDICINE AND REHABILITATION

DIRECTOR: Dr. Michael Armento

LOCATION: Children's Specialized Hospital

DURATION: 2 weeks

WHEN OFFERED: July, August, October, December, January, May, and June. Other times, only with approval of Clerkship Director, Dr. Foye.

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Two weeks will be spent at Children's Specialized Hospital, a pediatric rehabilitation facility in Mountainside, N.J. Time will be divided between in- and outpatient services, giving the student the opportunity to evaluate and follow the management of children with neuromuscular, musculoskeletal and developmental disorders including cerebral palsy, spina bifida, muscular dystrophy, head and spinal cord injuries, bronchopulmonary dysplasia, etc. The student will attend specialty clinics in orthopaedics, neurology and urology, as well as observe the performance of diagnostic and management techniques unique to the field of rehabilitation medicine, including electrodiagnosis and peripheral nerve blocks. In addition, there will be the opportunity to attend regularly-scheduled didactic teaching sessions offered by the professional staff. This elective would be of particular interest to students thinking of careers in either Physical Medicine and Rehabilitation or Developmental Pediatrics. Evaluation will be based on overall interest, enthusiasm and clinical performance.

If you have questions regarding this elective, please contact our Program Assistant, Ms. Michele Browne at (973) 972-3606, or e-mail pmrresid@umdnj.edu.

REHB 9003 - RESEARCH IN PHYSICAL MEDICINE AND REHABILITATION

DIRECTORS: **Drs. John Bach** and Joel DeLisa

LOCATIONS: University Hospital; Kessler Institute - West, East, North and KMRREC*; Department of VA New Jersey Healthcare System - East Orange

DURATION: 2 weeks

WHEN OFFERED: By arrangement

NUMBER OF STUDENTS PER ROTATION: 6

PREREQUISITES: None

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 the UMDNJ-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.

*KMRREC – Kessler Medical Rehabilitation Research and Educational Corporation

If you have questions regarding this elective, please contact our Program Assistant, Ms. Michele Browne at (973) 972-3606, or e-mail pmrresid@umdnj.edu.

REHB 9004 - SPORTS MEDICINE/MUSCULOSKELETAL CLINICAL ROTATION

DIRECTORS: **Drs. Patrick Foye** and Todd Stitik

LOCATION: Doctor's Office Center, Newark. Please contact Dr. Foye for other locations.

DURATION: 2 weeks

WHEN OFFERED: July, August, October, December, January, May, and June. Other times, only with approval of Clerkship Director, Dr. Foye

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

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.

If you have questions regarding this elective, please contact our Program Assistant, Ms. Michele Browne at (973) 972-3606, or e-mail pmrresid@umdnj.edu.

REHB 9005 – SPORTS MEDICINE/MUSCULOSKELETAL RESEARCH

DIRECTORS: **Drs. Patrick Foye** and Todd Stitik

LOCATION: Doctors Office Center, Newark. Please contact Dr. Foye for other locations.

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Students within this elective will actively participate in research projects related to topics in sports medicine and 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 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.

REHB 9100 - GERIATRIC REHABILITATION

DIRECTOR: Dr. Bruce Pomeranz

LOCATION: Kessler Institute - North

DURATION: 2 weeks

WHEN OFFERED: July, August, October, December, January, May and June. Other times only with approval of Clerkship Director, Dr. Foye.

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Medicine Clerkship

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.

If you have questions regarding this elective, please contact our Program Assistant, Ms. Michele Browne at (973) 972-3606, or e-mail pmrresid@umdnj.edu.

REHB 9200 - SPINAL CORD INJURY

DIRECTOR: Dr. Steven Kirshblum

LOCATIONS: Kessler Institute-West and University Hospital

DURATION: 2 weeks

WHEN OFFERED: July, August, October, December, January, May and June. Other times only with approval of Clerkship Director, Dr. Foye.

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: None

DESCRIPTION OF ELECTIVE: **Objectives:** (1) Learn how to evaluate and classify spinal cord injury patients according to ASIA 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.

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.

If you have questions regarding this elective, please contact our Program Assistant, Ms. Michele Browne at (973) 972-3606, or e-mail pmrresid@umdnj.edu.

REHB 9400 - BRAIN INJURY REHABILITATION

DIRECTOR: TBD

LOCATION: Please contact the department

DURATION: 2 weeks

WHEN OFFERED: July, August, October, December, January, May and June. Other times only with approval of Clerkship Director, Dr. Foye

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

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.

If you have questions regarding this elective, please contact our Program Assistant, Ms. Michele Browne at (973) 972-3606, or e-mail pmrresid@umdnj.edu.

REHB 9401 - REHABILITATION IN PRIVATE PRACTICE

DIRECTORS: Drs. Robert Vrablik and Thomas Cava

LOCATIONS: Physicians' offices in the Newton, Dover and West Orange, NJ areas

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

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; and 4) develop realistic functional goals, individualized for each patient.

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.

If you have questions regarding this elective, please contact our Program Assistant, Ms. Michele Browne at (973) 972-3606, or e-mail pmrresid@umdnj.edu.

DEPARTMENT OF PREVENTIVE MEDICINE AND COMMUNITY HEALTH

PMCH 9003 - PREVENTIVE ONCOLOGY

DIRECTOR: Dr. G. Reza Najem

LOCATION: Medical Sciences Building, Room F-516, (973) 972-4778

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year by arrangement

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Students will study in detail primary and secondary prevention for various tumors. They will also be involved in interactive computer programs directed towards cancer prevention (primary and secondary). They will analyze tumor patterns and risk factors among populations with an inordinately low or inordinately high incidence of specific cancers. There will be ample opportunity to participate in ongoing projects or even to develop new projects.

PMCH 9023 - INDEPENDENT STUDY IN PREVENTIVE MEDICINE

DIRECTOR: Dr. G. Reza Najem

LOCATION: Medical Sciences Building, Room F-516, (973) 972-4778

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year by arrangement

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The students are assigned (1) to an ongoing project or to a new project that may be selected by themselves or by the director of this elective course or (2) to a critical review of literature on a current topic in clinical preventive medicine. The topic may be selected by the student or may be assigned by the director of this elective course.

PMCH 9025 - PREVENTIVE CARDIOLOGY OR PREVENTION OF OTHER DISEASES

DIRECTOR: Dr. G. Reza Najem

LOCATION: Medical Sciences Building, Room F-516, (973) 972-4778

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year by arrangement

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The students are assigned to investigate risk factors and/or prevention of a disease that may be selected by them or the Director.

PMCH 9040 - NUTRITION

DIRECTOR: Dr. Herman Baker

LOCATION: ADMC-1618A, (973) 972-4664

DURATION: 2 weeks only

WHEN OFFERED: September, October, April

NUMBER OF STUDENTS PER ROTATION: 3

PREREQUISITES: Family Medicine, Medicine

DESCRIPTION OF ELECTIVE: This is an introductory elective course in the clinical significance of vitamin metabolism. As coenzymes, these micronutrients monitor every facet of intermediary metabolism; their imbalance leads to metabolic disturbances that induce various clinical syndromes. Lectures describing the effects of subclinical as well as clinical micronutrient deficits are given to correlate the laboratory and clinical course of the patients.

Protocols for research into the role played by vitamins in metabolic functions are also required. These consist of laboratory investigations and/or field survey and intervention programs.

One-half the grade depends on the submission of a paper to be assigned, the other half is based on performance in the course.

REPORTING INSTRUCTIONS: Students should report to ADMC 1618A on the first day of the elective. Contact Dr. Baker at 972-4664.

DEPARTMENT OF PSYCHIATRY

Prior to registering for any elective in Psychiatry, please contact Rosa Godwin (x5248)

Evaluation: Students are evaluated on the following:

- attendance, cooperation, and attitude
- fund of knowledge of the subject
- capacity to apply knowledge as problems are encountered
- reliability and judgment
- ability to relate to patients

PSYC 9008 - SUBINTERNSHIP IN V.A. PSYCHIATRY

DIRECTOR: Dr. Michael Hwang

LOCATION: Department of Veterans Affairs Medical Center in East Orange
(Inpatient Teaching Ward)

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year with approval from Dr. Hwang and Rosa Godwin

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The student will function as a Treatment Team member in an active inpatient teaching unit which treats a variety of psychiatric patients including a unique experience with Post-Traumatic Stress Disorder (PTSD) veterans. The student will assume some house staff responsibilities under supervision. The student will be evaluated by the Course Director and other attending staff at the end of the four weeks utilizing criteria similar to junior housestaff evaluation, as appropriate.

PSYC 9091 - SUBSTANCE ABUSE

DIRECTORS: **Drs. Michael Hwang** and Ronald Fudge

DURATION: 2 weeks

LOCATION: VA -NJ Healthcare System, East Orange (and other sites pending availability)

WHEN OFFERED: Throughout the academic year with approval of **both** Dr. Hwang and Rosa Godwin

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: This elective will emphasize clinical diagnosis and detection. Student will follow substance abusers in different clinical settings so that they can

evaluate the different treatment approaches that are available. Students will be exposed to the problem of substance abuse in a number of special populations: chronic pain patients, the medically ill, at-risk minorities, physicians and adolescents. This elective presents a good time to tie together basic science and clinical concepts and apply them to substance abuse. Students will have an opportunity to revisit preclinical subjects (such as pharmacology and genetics), to review their clinical skills (from psychiatry, medicine or surgery), then to apply their knowledge to drug and alcohol patients at all stages of illness.

DEPARTMENT OF RADIOLOGY

The purpose of these electives is to provide the medical student with an in-depth exposure to a broad range of radiology as practiced in different types of hospitals.

The evaluation of student performance is generally subjective. When a student completes an elective in University Hospital, several factors are considered, such as the student's enthusiasm and attendance, how the student relates to residents and attendings, and the student's general knowledge of the subject matter. After discussion with attendings and residents a report with a grade is submitted to the Registrar's Office.

RAD 9001 - PEDIATRIC RADIOLOGY

DIRECTOR: Dr. Sosamma Methratta

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: September - June

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Pediatrics

DESCRIPTION OF ELECTIVE: The purpose of this elective is to give the student the opportunity to observe the practice of Pediatric Radiology on a daily basis. The student is present during film reading sessions, and observes the various special procedures that are done every day. Texts and articles, as well as the pediatric teaching film file, are available for study. The student will prepare a pediatric teaching case.

It is anticipated that the student will become more aware of the role of radiology in clinical practice. The various types of radiologic and ultrasound imaging will be seen every day and the advantages and disadvantages of each modality and examination will be discussed. The importance of communication between the clinician and the radiologist will be stressed. Student evaluation is based on attendance, attitude, and general knowledge.

REPORTING INSTRUCTIONS: Students should report to UH, C-318A, on the first day of the rotation.

RAD 9030 - RADIATION ONCOLOGY

DIRECTOR: Dr. Charles Cathcart

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: An elective in radiation oncology involves the participation in pre-treatment evaluation, treatment planning and post-treatment follow-up of patients with a malignant disease treated in the department. The program stresses the integrated approach toward management of the cancer patient. The elective also includes instruction in the basics of radiation biology, radiation physics and radiation pathophysiology. Students participate actively in the evaluation and management of patients.

REPORTING INSTRUCTIONS: Students should report to UH, A-1020, on the first day of the rotation.

DEPARTMENT OF SURGERY

SURG 9011 - INTRODUCTION TO EMERGENCY MEDICAL SERVICES (EMS)

DIRECTOR: Dr. William Gluckman

LOCATION: University Hospital EMS, University Hospital Emergency Department and University Hospital NorthSTAR

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: This rotation is based at University Hospital's EMS in Newark and will afford the medical student an overview of Emergency Medical Services in general, with a focus on busy urban systems. Areas of study to be included are ground transportation, air medical services, communications and dispatch, CQI, protocol development, medical direction and EMS research. In addition the student will understand the role of state government in EMS in New Jersey by attending state meetings when possible. Time will be provided to ride on the ambulances and with the EMS physician.

REPORTING INSTRUCTIONS: Students must contact Dr. Gluckman (gluckmwa@umdnj.edu) at least one week prior to the start of the rotation to discuss meeting time and location.

SURG 9053 - ACTING INTERNSHIP / HACKENSACK

DIRECTOR: Dr. Richard Davies

LOCATION: Hackensack University Medical Center

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: General Surgery, Surgical Subspecialties

DESCRIPTION OF ELECTIVE: Objective of the program is to provide internship experience on a general surgical service with a wide variety of clinical material. Activities include formal rounds with residents and the director, formal rounds with an Intensivist in the Critical Care Unit, as well as a series of conferences which the student may attend. Special reading assignments will be required. The student will participate in all aspects of surgical care at PGY-1 level under supervision.

Evaluation will be made by the chief resident and director based on background fund of information, clinical judgment, progress during the rotation and clinical responsibilities.

REPORTING INSTRUCTIONS: Students should report to the Chairman's office at 8:00 a.m. on the first day of the elective

SURG 9055 - ACTING INTERNSHIP /ST. MICHAEL'S

DIRECTORS: **Drs. Robert Hobson** and Zafar Jamil

LOCATION: St. Michael's Medical Center

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Medicine, General Surgery

DESCRIPTION OF ELECTIVE: Working under close supervision of the attending and resident staff, students participate in the care of a wide variety of general surgical cases including intensive care and total parenteral nutrition. Depending upon the student's specific interest, special arrangements may be made for the student to follow a specific variety of surgical problems, including vascular and cardiovascular surgery.

SURG 9056 - ACTING INTERNSHIP/V.A.

DIRECTOR: Dr. Charles Tischler

LOCATION: Department of Veterans Affairs Medical Center in East Orange (SICU)

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: Medicine, General Surgery

DESCRIPTION OF ELECTIVE: One student is assigned to each surgical team. Students are responsible for the workup and care of surgical patients under close supervision. Duties essentially resemble those of an acting intern.

REPORTING INSTRUCTIONS: Students should report to the Surgical Office (Ward 2A, Room 2-127) at 8:00 a.m. on the first day of the elective.

SURG 9060 - PODIATRIC SURGERY

DIRECTOR: Dr. George F. Wallace

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: September - June

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The elective is suggested for the student who desires exposure to pathology of the lower extremity. The student will be exposed to a variety of clinical and operative experiences including trauma, reconstructive surgery, pediatric orthopedics, vascular disease, dermatologic and neurologic phenomena of the foot and leg. The student will be expected to attend all rounds, surgery, clinics and patient discussions. Academic teaching rounds include: radiology rounds, journal club, resident and attending lectures, preoperative conference, and clinic conference. Students are also expected to prepare a twenty minute academic presentation at the end of the rotation.

REPORTING INSTRUCTIONS: Students should call the residents on-call room at 972-6043 on the first day of the rotation for instructions where to report.

SURG 9061 - TRANSPLANTATION SURGERY

DIRECTOR: Dr. Baburao Koneru

LOCATIONS: University Hospital and Doctors Office Center

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Medicine, General Surgery

DESCRIPTION OF ELECTIVE: During their rotation on the Transplant Surgery Service, students will be able to participate in all the surgical procedures performed in the section. These include multiple organ procurement, liver transplants, and various hepatobiliary procedures. In addition to the operative experience, students will be exposed to pre- and post-operative management of patients with various liver disorders. There is also a strong emphasis on bedside and operating room teaching regarding the various aspects of transplantation science.

On the rotation, students will be expected to be available 24 hours a day, since timing of most of the donor procurements and transplant procedures is unpredictable. Students will be provided with a long-range beeper to facilitate this.

Interested students can discuss the rotation and availability of positions by calling (973) 972-7218 and speaking to either Regina Lowery, Office Manager, or the Director.

REPORTING INSTRUCTIONS: Students should report to University Hospital on their first day and page the resident on call at (973) 312-3984, who will provide a brief introduction. Later in the day, the student will meet with the faculty member making rounds.

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

DIRECTOR: Dr. Soly Baredes and staff

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITES: Medicine or General Surgery, Otolaryngology

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 otology-neurotology, head and neck surgery, facial plastic and reconstructive surgery, and pediatric otolaryngology. The elective can be modified to accommodate the student's interest in a given aspect of otolaryngology.

REPORTING INSTRUCTIONS: Students should report to the Conference Room located in the DOC Room 8131 (8th floor) at 8:00 a.m. on the first day of the elective. Email: baredeso@umdnj.edu

SURG 9175 - SURGERY OF NEONATES AND CHILDREN

DIRECTOR: Dr. Colin Bethel

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Objectives: (1) to gain a broad understanding of the basic pathophysiology of pediatric surgical diseases. This will include acquiring the ability to formulate a differential diagnosis, an understanding of basic work-up, and a general appreciation for the surgical treatment options. (2) To understand the issues (both medical and psychological) which are unique to the care of children.

Students on the service will have responsibilities similar to those of third year clinical rotations.

Responsibilities will include: (1) attendance of daily morning and afternoon work patient rounds; (2) attendance at teaching conferences, (3) attendance of all O.R. cases.

Students will be evaluated by the Attending Surgeon on service at the time. Evaluation criteria will include attendance, fund of knowledge, and level of participation in the activities outlined above.

REPORTING INSTRUCTIONS: Students should contact the course director to obtain meeting time and location.

SURG 9181 – PLASTIC SURGERY

DIRECTOR: Dr. M. Granick

ADMINISTRATOR: Amy Stolar

LOCATION: 140 Bergen St., E-1620

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Surgery Clerkship

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 prior to the first day of the rotation for meeting time and location. Phone number: (973) 972-8092.

SURG 9253 - UROLOGY - ACTING INTERNSHIP

DIRECTOR: Dr. Mark L. Jordan
jordanml@umdnj.edu

ADMINISTRATOR: **Rosemarie Puig**, puiglaro@umdnj.edu

LOCATION: University Hospital and Department of Veterans Affairs Medical Center

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Medicine, General Surgery

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 MSB, G-536, at 7:30 a.m. for location assignment. Phone number: (973) 972-4488 (ask for Rosemarie).

SURG 9260 - ACTING INTERNSHIP IN VASCULAR SURGERY

DIRECTORS: **Drs. Robert Hobson** and Zafar Jamil

LOCATION: St. Michael's Medical Center

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Medicine, General Surgery

DESCRIPTION OF ELECTIVE: Working under close supervision of the attending and resident staff, students participate in the active care of a wide variety of general surgical problems. Depending upon the student's specific interest, special arrangements may be made for the student to follow a specific surgical problem, including vascular and cardiovascular surgery. A research project which may be of a clinical nature will be encouraged.

SURG 9261 - NONINVASIVE VASCULAR LABORATORY

DIRECTORS: **Drs. Frank Padberg**, Zafar Jamil, and Robert Hobson

LOCATIONS: University Hospital, Department of Veterans Affairs Medical Center in East Orange and/or St. Michael's Medical Center

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Students will learn applications of noninvasive technology in the diagnosis of vascular disease. Physical examination and interpretation of arteriograms and venograms will be stressed. Students will be expected to follow patients admitted to the hospital, and scrub on selected surgical procedures.

Dr. Padberg is located in Room: 2-110, VA East Orange, (973) 676-1000 Ext 1208
SURG 9300 - ORAL AND MAXILLOFACIAL SURGERY

DIRECTOR: Dr. Vincent Ziccardi

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1 - 2

PREREQUISITES: General Surgery

DESCRIPTION OF ELECTIVE: This elective will introduce the student to the field of oral and maxillofacial surgery. University Hospital is a Level I Trauma Center with the oral and maxillofacial surgery division managing hundreds of patients who have sustained injuries to the maxillofacial region. In addition to trauma, the oral and maxillofacial surgery service treats patients with cysts, benign and malignant tumors of the jaws, performs reconstruction of jaws, manages patients with severe odontogenic infections, performs orthognathic and cosmetic procedures, and many other procedures in the oral and maxillofacial region. The student will have the opportunity to observe and assist in the operating room. He/she will also be exposed to postoperative management of surgical patients in the ambulatory clinic, as well as to numerous dentoalveolar procedures carried out using local anesthesia, ambulatory intravenous sedation, or general anesthesia.

This elective is recommended for students interested in oral and maxillofacial surgery, otolaryngology or plastic surgery.