

*Electives for  
Third and Fourth Year  
Students  
2007-2008*

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

## FOREWORD

This brochure describes the electives offered to third and fourth 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. Please see the section on Program Guidelines and Registration Procedures for further information.

Best wishes for a rewarding and enjoyable year.

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

N.B. This brochure is for informational use only and does not constitute a contract between UMDNJ and any student. It may be changed by UMDNJ without prior notice to students. Any rules, regulations, policies, procedures or other representations made herein may be interpreted and applied by UMDNJ to promote fairness and academic excellence, based on the circumstances of each individual situation.

This brochure represents programs of the current curricula, educational plans, offerings and requirements of the UMDNJ-New Jersey Medical School. The School reserves the right to change any provisions, offerings, tuition, fees, or requirements at any time within the student's period of study at UMDNJ. In addition, UMDNJ may at any time eliminate, modify or change the location of any School, Institute, Center, Program, Department, course or academic activity.

# TABLE OF CONTENTS

Foreword and Table of Contents

Program Guidelines and Registration Procedures

Professional Liability Coverage and Attendance Policy

Student Evaluation

Students from Other LCME Accredited Schools

Teacher-Learner Relationship: Code of Behavior

Standards of Professionalism/Code of Professional Conduct

Professionalism Evaluation Form

HIV/HBV/HCV Policy

Chemoprophylaxis Policy and Procedures

Directory of Clinical Training Sites

Elective Schedule/Dates

Electives:

## **Anesthesiology**

ANES 9000 - General Anesthesia  
ANES 9001 - Obstetrical Anesthesia  
ANES 9002 - Management of Chronic Pain Syndromes  
ANES 9004 - Research in Anesthesiology

## **Biochemistry and Molecular Biology**

BIO 9000 - Research in Biochemistry and Molecular Biology

## **Cell Biology and Molecular Medicine**

ANAT 9003 - Surgical Anatomy

## **Family Medicine**

FMED 9010 - Ambulatory Family Practice/Mountainside  
FMED 9012 - Ambulatory Primary Care  
FMED 9020 - Ambulatory Family Practice/Overlook Hospital  
FMED 9030 - Health Disparities in Minorities  
FMED 9040 - Research in Family Medicine  
FMED 9060 - Student Family Health Care Center  
FMED 9080 - Family Medicine in the Community  
FMED 9900 - International Elective

## **Medicine**

MED 9001 - Intensive Review of Medicine  
MED 9002 - Ethics at the Bedside: From Principles to Practice  
MED 9004 - End-of-Life Care  
MED 9010 - Asthma, Allergy & Immunology  
MED 9011 - Asthma & Allergy and Immunology Research  
MED 9030 - Preventive Cardiology  
MED 9031 - Cardiology/Morristown  
MED 9040 - Cardiovascular Diseases  
MED 9050 - Critical Care Medicine  
MED 9051 - Infectious Diseases/Morristown  
MED 9060 - Dermatology  
MED 9061 - Internal Medicine Advanced Clerkship/Morristown  
MED 9070 - Endocrinology  
MED 9082 - Preceptorship in Ambulatory Internal Medicine/Morristown  
MED 9092 - Geriatrics/Home Care-Hackensack  
MED 9100 - Hematology  
MED 9101 - Hematology-Oncology/Morristown  
MED 9106 - Acting Internship in Internal Medicine  
MED 9121 - Gastroenterology  
MED 9140 - Emergency Medicine Research/Morristown  
MED 9150 - Infectious Diseases  
MED 9170 - Nephrology  
MED 9171 - Nephrology/Morristown  
MED 9190 - Medical Oncology  
MED 9195 - Occupational Medicine/Morristown  
MED 9210 - Pulmonary Diseases  
MED 9211 - Pulmonary Medicine/Morristown  
MED 9241 - Global Tuberculosis Institute  
MED 9245 - Emergency Medicine  
MED 9250 - Emergency Medicine/Morristown  
MED 9260 - Gastroenterology/Morristown  
MED 9900 - Emergency Medicine at Beth Israel (Externship)

## **Microbiology and Molecular Genetics**

MICR 9000 - Research in Microbiology and Molecular Genetics

## **Neurological Surgery**

NSUR 9000 - Acting Internship in Neurological Surgery

## **Neurosciences**

NEUR 9000 - Neurosciences Research  
NEUR 9010 - Neurology Acting Internship  
NEUR 9011 - Neurology Consultation  
NEUR 9012 - Neurology Preceptorship  
NEUR 9020 - Pediatric Neurology

## **New Jersey Medical School Liver Center**

LIVC 9000 - Liver Disease and Hepatitis C

## **Obstetrics, Gynecology and Women's Health**

OBG 9010 - Women's Health Ambulatory Care  
OBG 9020 - Gynecologic Oncology  
OBG 9030 - Women's Reproductive Choices  
OBG 9040 - Ob/Gyn Resident Readiness Training  
OBG 9051 - Prenatal Diagnosis  
OBG 9070 - High Risk Obstetrics  
OBG 9071 - Obstetrical In-Patient Labor and Delivery Service  
OBG 9081 - Reproductive Endocrinology/Infertility  
OBG 9085 - Women's Health

## **Ophthalmology**

OPH 9000 - Ophthalmology  
OPH 9010 - Retina Research  
OPH 9011 - Clinical Research in Retinal Disorders  
OPH 9012 - Enzymology/Molecular Biology Study of the Ocular Lens

## **Orthopaedics**

ORPS 9000 - Clinical Orthopaedics for the Non-Orthopaedist  
ORPS 9005 - Pediatric Orthopaedics  
ORPS 9116 - Acting Internship in Orthopaedics  
ORPS 9192 - Orthopaedic Research

## **Pathology and Laboratory Medicine**

PATH 9001 - Surgical and Autopsy Pathology  
PATH 9003 - Neuropathology  
PATH 9005 - Cellular and Subcellular Studies of Cancer  
PATH 9014 - Forensic Pathology  
PATH 9015 - Tutorial in Orthopaedic Pathology  
PATH 9016 - Dermatopathology  
PATH 9025 - Dermatopathology Research

## **Pediatrics**

PEDS 9001 - Acting Internship in Pediatrics  
PEDS 9006 - Pediatric Ophthalmology  
PEDS 9008 - Pediatric Intensive Care  
PEDS 9009 - Pediatric Gastroenterology  
PEDS 9010 - Adolescent Health Care  
PEDS 9018 - Pediatric Gastroenterology and Nutrition/Morristown  
PEDS 9020 - Pediatric Infectious Diseases  
PEDS 9022 - Pediatric Infectious Diseases/Hackensack  
PEDS 9030 - Ambulatory Pediatrics  
PEDS 9033 - Ambulatory Care Pediatrics/Morristown  
PEDS 9040 - Pediatric Cardiology  
PEDS 9042 - Pediatric Cardiology/Morristown  
PEDS 9050 - Child Development and Pediatric Rehabilitation  
PEDS 9060 - Developmental Pediatrics/Hackensack  
PEDS 9061 - Pediatric Hematology and Oncology/Hackensack  
PEDS 9062 - Dermatology  
PEDS 9063 - Adolescent Medicine/Morristown  
PEDS 9064 - Developmental Pediatrics/Morristown

PEDS 9065 - Developmental Disabilities and Developmental  
Medicine at Matheny School and Hospital  
PEDS 9066 - Pediatric Critical Care Medicine/Hackensack  
PEDS 9070 - Pediatric Endocrinology  
PEDS 9081 - Clinical Genetics  
PEDS 9110 - Neonatology  
PEDS 9114 - Neonatal Intensive Care Sub-Internship/Morristown  
PEDS 9120 - Acid-Base, Fluid and Electrolytes  
PEDS 9121 - Pediatric Nephrology  
PEDS 9140 - Pediatric Sub-Internship/Morristown  
PEDS 9142 - Pediatric Pulmonary Medicine  
PEDS 9144 - Pediatric Pulmonology/Morristown  
PEDS 9151 - Pediatric Emergency Medicine  
PEDS 9160 - Pediatric Critical Care Medicine/Morristown  
PEDS 9170 - Pediatric Endocrinology and Diabetes/Morristown

### **Physical Medicine and Rehabilitation**

REHB 9000 - Acting Internship in Physical Medicine and Rehabilitation  
REHB 9001 - Pediatric Physical Medicine and Rehabilitation  
REHB 9003 - Research in Physical Medicine and Rehabilitation  
REHB 9004 - Sports Medicine/Musculoskeletal Clinical Rotation  
REHB 9005 - Sports Medicine/Musculoskeletal Research  
REHB 9100 - Geriatric Rehabilitation  
REHB 9200 - Spinal Cord Injury  
REHB 9300 - Neuromuscular and Pulmonary Rehabilitation  
REHB 9400 - Brain Injury Rehabilitation  
REHB 9401 - Rehabilitation in Private Practice  
REHB 9402 - Complementary and Alternative Medicine

### **Preventive Medicine and Community Health**

PMCH 9002 - Special Topics in Preventive Medicine  
PMCH 9003 - Preventive Oncology  
PMCH 9004 - Prob. Solving in Prev. Medicine and Clinical Epidemiology  
PMCH 9022 - A Review of Epidemiology and Preventive Medicine  
PMCH 9023 - Independent Study in Preventive Medicine  
PMCH 9025 - Preventive Cardiology or Prevention of Other Diseases  
PMCH 9033 - International Medicine  
PMCH 9040 - Nutrition  
PMCH 9042 - Clinical Clerkships in the Indian Health Service  
PMCH 9045 - Clinical Field Epidemiology and Clinical Preventive Services

### **Psychiatry**

PSYC 9000 - Subinternship in Psychiatry  
PSYC 9008 - Subinternship in V.A. Psychiatry  
PSYC 9020 - Child and Adolescent Psychiatry  
PSYC 9030 - Consultation-Liaison  
PSYC 9040 - Research in Psychiatry  
PSYC 9070 - Ambulatory Psychiatry  
PSYC 9091 - Substance Abuse/VA East Orange

## **Radiology**

RAD 9001 - Pediatric Radiology  
RAD 9010 - Diagnostic Radiology  
RAD 9012 - Diagnostic Radiology/Morristown  
RAD 9020 - Interventional and Vascular Radiology  
RAD 9030 - Radiation Oncology

## **Surgery**

SURG 9010 - Introduction to Critical Care Research  
SURG 9011 - Introduction to Emergency Medical Services  
SURG 9020 - Adult Cardiothoracic Surgery  
SURG 9050 - Acting Internship/University Hospital  
SURG 9053 - Acting Internship/Hackensack  
SURG 9055 - Acting Internship/St. Michael's  
SURG 9056 - Acting Internship/VA  
SURG 9060 - Podiatric Surgery  
SURG 9061 - Transplantation Surgery  
SURG 9064 - Acting Internship/Jersey City Medical Center  
SURG 9065 - Acting Internship/Morristown  
SURG 9140 - Otolaryngology-Head and Neck Surgery, Acting Internship  
SURG 9151 - Otolaryngology Research  
SURG 9175 - Pediatric Surgery  
SURG 9181 - Plastic Surgery  
SURG 9184 - Plastic Surgery/Hackensack  
SURG 9195 - Topics in Surgical Research  
SURG 9232 - Trauma Team Acting Internship  
SURG 9233 - Surgical Intensive Care Unit  
SURG 9235 - Critical Care Problems in Surgery/Hackensack  
SURG 9241 - Surgical Intensive Care Unit/Morristown  
SURG 9243 - Research in Historical Medicine  
SURG 9245 - Gastrointestinal Surgery/ Morristown  
SURG 9253 - Urology - Acting Internship  
SURG 9260 - Acting Internship in Vascular Surgery/St. Michael's  
SURG 9261 - Noninvasive Vascular Laboratory  
SURG 9264 - Vascular Surgery/Hackensack  
SURG 9265 - Vascular Surgery and Vascular Diagnostic Lab/Morristown  
SURG 9270 - Research Project in Urology  
SURG 9271 - Research in Vascular Surgery  
SURG 9300 - Oral and Maxillofacial Surgery

## PROGRAM GUIDELINES AND REGISTRATION PROCEDURES

### **Academic Offerings/Programs of Study**

Each academic department of the New Jersey Medical School is responsible for certifying the educational merit of the electives relating to its discipline. All electives submitted to the Office of Education for inclusion in the Electives Brochure must be approved by the appropriate academic department prior to publication.

All electives offered at NJMS or its affiliates are listed in this brochure. Under exceptional circumstances, a special elective may be developed by arrangement between a student and a faculty member. A written description of the course, with the approval of the department chair, must be submitted to the Registrar's Office before the student will be permitted to register.

***Elective choices for the year will be limited to sixteen (16) weeks in any one academic department.*** Exceptions may be granted on an individual basis, however they must be approved by the Associate Dean for Student Affairs.

Students may only apply a maximum of eight (8) credits of longitudinal coursework towards their requirements for degree. Longitudinal coursework consists of: 1) tutoring, 2) mini-medical school, 3) SFHCC, 4) Scholars Program in Family Medicine.

Applications for an elective with a sponsor who is a relative must be approved by the Associate Dean for Student Affairs. Approval must be requested at least 30 days in advance of the elective.

### **Registration Procedures For NJMS Students**

#### **NJMS Electives**

There are NJMS electives and outside elective courses (externships) that can be scheduled in the fall (June through November) and spring (December through May). NJMS electives are those offered at NJMS and its affiliates. Externships are those offered at other medical schools (see the section "Externships" for more complete information).

**Fall Electives** are NJMS electives taken in June - November. Registration for these electives is conducted by the Registrar's Office. Students are asked to pick a first, second, and third course choice for each month in which they would like to take an NJMS elective and write these choices on an Elective Selection Form. Completed forms are processed by the Registrar's Office according to the student's lottery number. Instructions and Elective Selection Forms are distributed to students in January. Upon completion of the fall elective registration for NJMS students, visiting student course requests are processed on a space available basis.

**Spring Electives** are NJMS electives taken in December - May. Instructions and forms are e-mailed to fourth year students in September. Upon completion of spring elective registration for NJMS students, visiting student elective request are processed on a space available basis.

Students who are out of state or abroad during the registration period must contact the Office of the Registrar to procure the Elective Selection Form. Registrations are processed in the order determined by lottery position. Students who wish to have their notification mailed elsewhere than their local mailing address should attach a signed written request to the Elective Selection Form.



### **Externships/Outside Electives Registration**

Many NJMS students choose to do elective courses at other LCME-accredited medical institutions, or at a hospital located in another country, during their third or fourth year. Since each school has its own procedure and may require completion of a visiting student or non-degree student application, it is advantageous to contact potential host institutions as early as possible to determine requirements and obtain copies of required forms.

A student will not be approved to do an externship if he/she has any unresolved unsatisfactory grades in NJMS courses.

The NJMS Registrar's Office must be notified of a student's acceptance into an externship no later than four (4) weeks prior to the externship start date.

#### **To register for an externship:**

1. Contact the other medical school/host institution for its visiting student application. Many schools have rotation dates that do not match the NJMS calendar. Please take dates into consideration when planning your schedule.
2. Fill out the application and obtain any necessary supporting documents, i.e. transcript, processing fees, certification of health insurance coverage, etc. Do not send in the application at this time; hold materials until you complete steps 3 and 4.
3. Obtain a *Request for Approval of a Third or Fourth Year Externship* form from the Registrar's Office. Fill out the top portion of this form and take it to the chair of the corresponding NJMS department.
4. Obtain pre-approval and a signature from the chair of the corresponding NJMS department (Step B. on the form). Bring the signed copy of the form to the Registrar's Office with a signed Waiver and Release Agreement required for use prior to participation in a university approved educational activity. Within 3 business days, a Registrar office staff member will make a copy of the forms for your file. The Registrar's Office will then review your academic record and give final approval of the externship (Step C. on the form). Two letters will be generated for you: A letter of externship approval and a letter of malpractice liability coverage.
5. Send the application, all supporting documentation, including the *Request for Approval of a Third or Fourth Year Externship* form, to the host institution.
6. Upon notification of acceptance by the host institution, **you must provide the NJMS Registrar with the written approval**. Typically this information is detailed in your acceptance letter. If you do not receive a formal acceptance letter you must obtain written confirmation of acceptance on the *Request for Approval of a Third or Fourth Year Externship Form* from the host institution. Notification of acceptance and your intent to enroll must be given to the Registrar's Office no later than four (4) weeks prior to the externship start date. Upon receipt of this information you will become officially registered for the externship. Please note: While enrolled at the host institution you will be expected to abide by all of their rules and policies.

Occasionally, it becomes necessary for a student to cancel an outside elective. It is the student's responsibility to notify both the sponsor of the course and the NJMS Registrar's Office of such a change within four (4) weeks prior to the start date.

7. You are requested to take an evaluation form: *Summary Evaluation of Student Performance in Clinical Courses* to the externship sponsor. Request the evaluation form be completed and returned to the NJMS Registrar's Office **within two weeks** following completion of the elective. It is your responsibility to see that an evaluation gets sent to the NJMS Registrar. You will not get credit for the course until and unless we receive this evaluation. The evaluation submitted by the other school will be available for you to review in the Registrar's Office.

### **Expectation to Travel to Affiliate Sites Policy**

During the course of their education, students enrolled in the doctor of medicine degree program at UMDNJ-New Jersey Medical School will receive their training at various clinical training sites. New Jersey Medical School has affiliations with a number of private practitioners, facilities and hospitals. The breadth of clinical training sites enriches the student's learning experience, as the student is exposed to diverse patient populations and health care environments.

Students are expected to make their own travel arrangements when assigned to an affiliate site. If a student does not own an automobile, it is expected that the student will carpool, make full use of public transit systems, or secure another method of transportation that will insure their prompt arrival at the site.

If a student cannot fulfill the NJMS essential functions for admission, matriculation and program Completion or travel to affiliate sites, the student should request accommodations through the NJMS Request for Accommodations process. In the absence of approved accommodations, failure to secure adequate transportation to an affiliate site cannot be used as an excuse for tardiness or absenteeism.

To view the entire policy, please visit:

[http://njms.umdnj.edu/education/student\\_affairs/freq\\_ref\\_policies.cfm](http://njms.umdnj.edu/education/student_affairs/freq_ref_policies.cfm)

### **Adding/Dropping An Elective**

NJMS students may process NJMS elective course changes no less than two weeks prior to the date the course is scheduled to begin. NJMS students may process externship course changes no less than four weeks prior to the date the course is scheduled to begin.

Students may add a course within two weeks of the course start date only with Registrar Office approval and permission of the department. Students requesting to drop a course subsequent to the two week deadline and prior to the first day of class will have a grade of withdrawal (WD) recorded on his/her transcript.

A student who may need to take a leave on or after the first scheduled day of an elective, with concurrence of the faculty sponsor, will have a grade of withdrawal (WD) recorded on his/her transcript. Otherwise, a final grade of Fail (F) will be recorded.

Add/drop activity is not official until processed in the Registrar's Office. Notification to academic departments is not considered official.

### **Evaluation Forms**

On the first day of the rotation, students are requested to take an evaluation form ("Summary Evaluation of Student Performance in Clinical Courses") to the elective sponsor and ask that the responsible faculty member complete the evaluation and return it to the Registrar's office **within two weeks** following completion of the elective.

At the conclusion of the elective, students are expected to complete all course questionnaires.

## PROFESSIONAL LIABILITY COVERAGE

Students of the UMDNJ-New Jersey Medical School are covered for professional liability claims arising out of their treatment of patients only as part of a course authorized by the School. This coverage extends to include elective programs at other institutions as long as the elective has been approved by the appropriate department of the school and the Registrar's Office. The following conditions must be satisfied for this coverage to be in effect:

1. Entries on a patient's medical record must be signed legibly by the student and countersigned by a graduate physician and/or licensed physician in accordance with state law.
2. Procedures other than venepuncture, arterial puncture, insertion of peripheral venous lines, and insertion of urethral catheters must be directed and supervised by a graduate physician and/or licensed physician, and documentation of supervision noted on the chart.

## ATTENDANCE POLICY

Participation in learning experiences is essential for the development of competent physicians. Attendance is expected at all scheduled activities, including lectures, conference, rounds, clinical assignments, on-call, and preceptorships. A clerkship or elective director may grant a student an excused absence from a mandatory clerkship or elective session for the following reasons:

- severe personal illness;
- birth of a child;
- mandatory jury duty;
- serious illness or death of an immediate family member<sup>1</sup>;
- residency interviewing;
- or by approval of the Associate Dean for Student Affairs.

Students must notify the respective clerkship/elective director or her/his designee of his/her expected absence on or before the scheduled start time of the clerkship/elective. The student may not leave a message or write an email; he/she must speak to the clerkship/elective or his/her designee and be granted the excused absence. The clerkship/elective director may require appropriate documentation. In the event that the clerkship/elective director or his/her designee is not available, the student must contact the Associate Dean for Student Affairs.

Unexcused absences are not permitted and will result in failure and repetition of the clerkship/elective. All excused absences must be made-up; any time not made-up will result in a grade of "I/R - Incomplete/Requirements."

Clerkship and elective directors are obligated to enforce this policy.

<sup>1</sup>Members of the immediate family are defined as spouse, domestic partner, children, parents, brother or sister, parents-in-law, grandparent, brother-in-law or sister-in-law, aunt or uncle, niece or nephew or other relatives living in the student's household unit.

## **STUDENT EVALUATION**

Students are evaluated according to the criteria set by the individual elective sponsors. Students should discuss mutual expectations and evaluation methods with sponsors at the beginning of the elective. An informal assessment of progress halfway through the elective is strongly encouraged.

Grades are reported to the Registrar using the *Summary Evaluation of Student Performance in Clinical Courses Form*, available in the Office of the Registrar.

## STUDENTS FROM OTHER LCME-ACCREDITED SCHOOLS

Students from institutions accredited by the Liaison Committee on Medical Education (LCME) interested in applying for elective rotations at New Jersey Medical School or one of our affiliate hospitals (Morristown Memorial Hospital or Hackensack University Medical Center) must supply the following documentation to the Registrar's Office:

- Complete and return the Visiting Student Elective Application
- Complete and return the Essential Functions for Admission, Matriculation and Program Completion and HIPAA Training forms.
- Forward an official copy of your academic transcript.
- Forward proof of personal health insurance.
- Forward proof of malpractice liability coverage.
- Complete and return the Criminal Background Check Authorization form.
- Forward a \$135 application fee. This payment can be made by either check or money order made payable to UMDNJ-NJMS. (This fee is waived for UMDNJ-Robert Wood Johnson Medical School students and UMDNJ-School of Osteopathic Medicine students.) Please add \$25 for each additional elective.

You must also:

- Complete and return the Visiting Student Immunization Record Form, Hepatitis B Form, Physical Examination Form, and Health History Form to the Student Health Services Office. You MUST include copies of all lab reports. Please be sure to indicate the elective you are applying for and the dates you would like to attend.

All application information must be received at least six weeks prior to the start of the elective rotation. If you wish to apply for more than one elective, please use one form per elective. Please be advised that you must follow NJMS rotation dates and use NJMS course numbers to identify the electives in which you seek to enroll. Do not directly submit application materials to academic departments.

We begin processing applications for the fall term in April. We begin processing applications for the spring term in October. Acceptance into an elective is based upon a complete application, including immunization compliance, and elective availability. If you are accepted into the rotation you will be automatically registered. Should you wish to drop the course, you must notify this office in writing no later than two weeks prior to the start date.

The electives offered by NJMS for the 2007-2008 academic year can be accessed online at <http://njms.umdj.edu/education/registrar/Elective0708.pdf>.

Students from international medical schools must be US citizens and satisfy the application requirements identified above. We suggest you send your application materials at least 6 months prior to a start date. Please note that Morristown Memorial Hospital and Hackensack University Medical Center do not accept students from international medical schools.

If you have any questions, please do not hesitate to contact staff of the Office of the Registrar.

Office of the NJMS Registrar  
Medical Sciences Building, B-640  
185 South Orange Avenue  
P.O. Box 1709  
Newark, NJ 07101-1709  
Voice: (973) 972-4640  
Fax: (973) 972-6930  
Internet: <http://njms.umdj.edu/education/registrar>

Requests for electives from visiting students are processed as soon as possible after NJMS students have registered for the semester.

# STATEMENT ON TEACHER-LEARNER RELATIONSHIP IN MEDICAL EDUCATION

## CODE OF BEHAVIOR

The following statement is excerpted from a report by the AMA Section on Medical Schools in cooperation with the AMA Student and Resident Sections and reflects the policy of the UMDNJ-New Jersey Medical School:

The teacher-learner relationship should be based on mutual trust, respect and responsibility. This relationship should be carried out in a professional manner in a learning environment that places strong focus on education, high quality patient care, and ethical conduct.

In the teacher-learner relationship, each party has certain legitimate expectations of the other. For example, the learner can expect that the teacher will provide instruction, guidance, inspiration and leadership in learning. The teacher expects the learner to make an appropriate professional investment of energy and intellect to acquire the knowledge and skills necessary to become an effective physician. Both parties can expect the other to prepare appropriately for the educational interaction and to discharge their responsibilities in the educational relationship with unfailing honesty.

Certain behaviors are inherently destructive to the teacher-learner relationship. Behaviors such as violence, sexual harassment, inappropriate discrimination based on personal characteristics must never be tolerated. Other behavior can also be inappropriate if the effect interferes with professional development. Behavior patterns such as making habitual demeaning or derogatory remarks, belittling comments or destructive criticism fall into this category. On the behavioral level, abuse may be operationally defined as behavior by medical school faculty, residents, or students which is disapproved by society and by the academic community as either exploitive or punishing.

Examples of inappropriate behaviors are:

- a. physical punishment or physical threats
- b. sexual harassment
- c. discrimination based on race, religion, ethnicity, sex, age, sexual orientation and physical disabilities
- d. repeated episodes of psychological punishment of a student by a particular superior (e.g. public humiliation, threats and intimidation, removal of privileges)
- e. grading used to punish a student rather than to evaluate objective performance
- f. assigning tasks for punishment rather than educational purposes
- g. requiring the performance of personal services
- h. taking credit for another individual's work
- i. intentional neglect or intentional lack of communication

While criticism is part of the learning process, in order to be effective and constructive, it should be handled in a way to promote learning. Negative feedback is generally more useful when delivered in a private setting that fosters discussion and behavior modification. Feedback should focus on behavior rather than personal characteristics and should avoid pejorative labeling.

Should you experience instances of non-compliance with this policy, you are encouraged to notify Dr. Stagnaro-Green, Dr. Cohen, or Dr. Heinrich. The reporting of incidents which violate appropriate teacher-student relationships will be held in the strictest confidence and will be dealt with quickly and appropriately by the Dean of the New Jersey Medical School.

# Standards of Professionalism

Appropriate professional behavior is a fundamental component of clinical competency. Accountability for the professional development of students and the evaluation of their professionalism is the responsibility of all clinical evaluators, despite the relatively short clerkships, changing sites and perception that this is a subjective area.

In addition to clinical performance and medical knowledge, interpersonal skills need to meet a New Jersey Medical School standard. Interpersonal skills are described here as (1) professional attributes and responsibilities; (2) self-improvement and adaptability; (3) relationships with patients; and (4) interpersonal relationships with other members of the health care team. These are the areas of evaluation on the Professionalism Form and the language was chosen to define the minimum standard of behavior that the student has not attained. Very importantly, once a student is identified, remediation is instituted.

We must set standards for the attainment of professionalism that are as high as those for the attainment of the cognitive skills. However, while cognitive areas are judged in blocks of time (clerkships), professionalism must be assessed over the continuum of the student's medical school education.

**If you (the faculty member) have an experience with a student that does not meet the standards stated above, the following steps must be taken:**

1. Discuss the situation with the Clerkship Coordinator and decide if it is appropriate to complete the Professionalism Form. If yes, the form is completed by the Clerkship Coordinator within three weeks from the start of the next clerkship.
2. The Clerkship Coordinator discusses the form with the student. If another faculty member initiated the action, he or she may be present for the meeting, at the discretion of the Clerkship Coordinator.
3. The student signs and comments on the form.
4. The form is submitted to the Associate Dean for Student Affairs.
5. The Associate Dean presents the form to the Student Affairs Committee, which decides if the form has merit. Appropriate methods of remediation are discussed.
6. The Associate Dean meets with the student to design and implement the method of remediation.
7. The Associate Dean gives feedback to the Clerkship Coordinator as to the outcome of the report.

If one Professionalism Form is completed, it will not be placed in the student file. However if two or more forms are submitted for an individual student, the student will need to appear before the Student Affairs Committee and may be placed on academic probation.

## THE UMDNJ - NEW JERSEY MEDICAL SCHOOL CODE OF PROFESSIONAL CONDUCT

The UMDNJ-New Jersey Medical School Code of Professional Conduct (hereinafter referred to as "the Code") sets forth general principles of integrity as well as expectations for behavior consistent with the ethical study and practice of medicine as described in the American Medical Association (AMA) code of ethics and the American Board of Internal Medicine's Project Professionalism.

To view the entire policy, please visit:

[http://njms.umdj.edu/education/student\\_affairs/documents/CodeofProfessionalConduct706.doc](http://njms.umdj.edu/education/student_affairs/documents/CodeofProfessionalConduct706.doc)







# New Jersey Medical School Professionalism Evaluation Form Clinical

\_\_\_\_\_  
Student Name

\_\_\_\_\_  
Clerkship

\_\_\_\_\_  
Clerkship Coordinator

\_\_\_\_\_  
Date of Rotation/Site Location

\_\_\_\_\_  
Clerkship Coordinator's Signature

\_\_\_\_\_  
Date

Date this form was discussed with the student by the clerkship coordinator \_\_\_\_\_

Other faculty present \_\_\_\_\_

A student with a pattern of the following behavior has not sufficiently demonstrated professional and personal attributes for meeting the standards of professionalism inherent in being a physician:

*Circle the appropriate category. Comments are required.*

1. Unmet professional responsibility:

- a. The student cannot be relied upon to complete tasks.
- b. The student needs continual reminders in the fulfillment of responsibilities to patients or to other health care professionals.
- c. The student has unexcused absences from clerkship requirements.
- d. The student misrepresents or falsifies action and/or information.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Lack of effort toward self-improvement and adaptability:

- a. The student is resistant or defensive in accepting criticism.
- b. The student remains unaware of his/her own inadequacies.
- c. The student resists considering or making changes.
- d. The student does not accept blame for failure, or responsibility for errors.
- e. The student is abusive or critical during times of stress.
- f. The student demonstrates arrogance.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Diminished relationships with patient and families:

- a. The student inadequately establishes rapport with patients or families.
- b. The student is often insensitive to the patient's or families' feelings, needs, or wishes.
- c. The student uses his/her professional position to engage in romantic or sexual relationships with patients or members of their families.
- d. The student lacks empathy.
- e. The student has inadequate personal commitment to honoring the wishes of the patients.

---

---

---

---

4. Diminished relationships with members of the health care team:

- a. The student does not function within a health care team.
- b. The student is insensitive to the needs, feelings, and wishes of the health care team members.

---

---

---

---

5. Please comment on an appropriate plan of action to pursue when counseling the student:

---

---

---

---

**To be completed by the student**

6. I have read this evaluation and have discussed it with the clerkship director

\_\_\_\_\_  
Students Signature

\_\_\_\_\_  
Date

7. My comments (optional):

---

---

---

---

## **HIV (HUMAN IMMUNODEFICIENCY VIRUS) HBV (HEPATITIS B VIRUS) AND HCV (HEPATITIS C VIRUS) POLICY**

This purpose of this policy is :

- A. to provide expert and safe patient care;
- B. to protect the personal rights of human immunodeficiency virus (HIV)-infected, hepatitis B virus (HBV)-infected and hepatitis C virus (HCV)-infected University patients, students, housestaff, faculty and staff, including confidentiality and freedom from discrimination;
- C. to promote the personal and professional well-being of students, housestaff, faculty and staff through the provision of information, education and counseling about AIDS, HIV, HBV, HCV and other bloodborne viral hepatitis;
- D. to provide a safe work and learning environment for all University students, housestaff, faculty and staff; and
- E. to provide for the implementation of laws and regulations pertaining to public health and health care services.

This policy also relates both to students who may be infected with the HIV, HBV or HCV viruses and to activities that may involve exposure. It is excerpted from University Policy 00-01-45-52:00, revised 5/7/04. Full copies of the policy are available in the Office of Student Affairs.

**NB:** This policy is also online at:

[http://www.umdnj.edu/oppmweb/Policies/HTML/HealthSafety/45-52\\_00/HIV-HBV-HCV-POLICY.doc](http://www.umdnj.edu/oppmweb/Policies/HTML/HealthSafety/45-52_00/HIV-HBV-HCV-POLICY.doc)

## **CHEMOPROPHYLAXIS AFTER POTENTIAL OCCUPATIONAL/EDUCATIONAL HIV EXPOSURE**

The purpose of this policy is to outline the procedure under which chemoprophylaxis will be made available to the University's health care personnel, including students, housestaff, faculty, staff, postdoctoral fellows and volunteers, who in the course of their studies and/or occupational activities are exposed to blood, tissue or other body or laboratory fluids that may contain human immunodeficiency virus (HIV), hepatitis B virus (HBV) and/or hepatitis C virus (HCV). This policy is based upon the available scientific data and Public Health Service recommendations for postexposure management of health-care workers who have occupational exposure that may place them at risk of acquiring HIV and other bloodborne pathogens infection.

This policy also contains information about testing, treatment, and counseling of students who may have exposures to the HIV virus in the course of their educational activities. It is excerpted from University Policy 00-01-40-40:10, revised 10/18/02. Full copies are available in the Office of Student Affairs.

**NB:** This policy is also online at:

[www.umdnj.edu/oppmweb/Policies/HTML/HealthServ/00-01-40-40\\_10.html](http://www.umdnj.edu/oppmweb/Policies/HTML/HealthServ/00-01-40-40_10.html)

## DIRECTORY OF CLINICAL TRAINING SITES

Children's Specialized Hospital  
150 New Providence Road  
Mountainside, NJ 07092  
Telephone: (908) 233-3720

Center for Reproductive Medicine  
214 Terrace Avenue  
Hasbrouck Heights, NJ 07604  
Telephone: (201) 393-7444

Department of Veterans Affairs  
New Jersey Health Care System  
Tremont Avenue  
East Orange, NJ 07019  
Telephone: (973) 676-1000

Doctors Office Center  
90 Bergen Street  
Newark, NJ 07103  
Telephone: (973) 972-2000

Eye Institute of New Jersey  
Doctors Office Center  
90 Bergen Street  
Newark, NJ 07103  
Telephone: (973) 872-2000

FOCUS Community Health Center  
449 Broad Street  
Newark, NJ 07102  
Telephone: (973) 972-0980

Hackensack University Medical Center  
30 Prospect Avenue  
Hackensack, NJ 07601  
Telephone: (201) 996-2000

Jersey City Medical Center  
50 Baldwin Avenue  
Jersey City, NJ 07304  
Telephone: (201) 915-2000

Kessler Institute for Rehabilitation  
1199 Pleasant Valley Way  
West Orange, NJ 07052  
Telephone: (973) 731-3600

Kessler Institute for Rehabilitation  
240 Central Avenue  
East Orange, NJ 07018  
Telephone: (973) 414-4700

Kessler Institute for Rehabilitation  
300 Market Street  
Saddle Brook, NJ 07663  
Telephone: (201) 587-8500

Matheny Medical and Educational Center  
P.O. Box 339, Highland Avenue  
Peapack, NJ 07977  
Telephone: 908-234-0011

Morristown Memorial Hospital  
100 Madison Avenue  
Morristown, NJ 07962  
Telephone: (973) 971-5000

Mountainside Family Practice  
799 Bloomfield Avenue  
Verona, NJ 07044  
Telephone: (973) 746-7050

Overlook Hospital  
99 Beauvoir Avenue  
Summit, NJ 07902  
Telephone: (908) 522-2000

Regional Medical Examiner's Office  
325 Norfolk Street  
Newark, NJ 07103  
Telephone: (973) 648-7259

St. Elizabeth/Trinitas Hospital  
225 Williamson Street  
Elizabeth, NJ 07207  
Telephone: (908) 994-5000

St. Michael's Medical Center  
306 Martin Luther King, Jr. Boulevard  
Newark, NJ 07102  
Telephone: (973) 877-5000

UMDNJ-Behavioral Health Science Building  
at New Jersey Medical School  
183 South Orange Avenue  
Newark, NJ 07103  
Telephone: (973) 972-5479

UMDNJ-University Hospital  
150 Bergen Street  
Newark, NJ 07103  
Telephone: (973) 972-4300

## **ELECTIVES SCHEDULE - Fourth Year Students**

### **ACADEMIC YEAR 2007-2008**

	<b>CALENDAR DATES</b>			<b>BROCHURE DESIGNATION</b>
2007	June 4	to	June 29	June
	July 2	to	July 27	July
	July 30	to	August 24	August
	August 27	to	September 21	September
	September 24	to	October 19	October
	October 22	to	November 16	November
	November 26	to	December 21	December

Winter recess begins at 5:00 p.m. on Friday, December 21, 2007. Classes resume on Wednesday, January 2, 2008.

2008	January 2	to	January 25	January
	January 28	to	February 22	February
	February 25	to	March 20	March
	March 24	to	April 18	April
	April 21	to	May 16	May

## **DEPARTMENT OF ANESTHESIOLOGY**

**EVALUATION:** The majority of the student's grade is based upon clinical performance. A multiple-choice exam is given at the completion of the four-week elective, covering lecture material and clinical experience. 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 - 8 weeks

**WHEN OFFERED:** June, August - May

**NUMBER OF STUDENTS PER ROTATION:** 5

**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 6:45 a.m. on the first day of the elective.

### **ANES 9001 - OBSTETRICAL ANESTHESIA**

DIRECTOR: Dr. Michael Kiselev

LOCATION: University Hospital

DURATION: 4 weeks

WHEN OFFERED: June, August - May

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: Medicine, General Surgery, Obstetrics and Gynecology, Anesthesia clerkship or permission of Dr. Yacoub.

DESCRIPTION OF ELECTIVE: The full spectrum of anesthetic management of parturients is available, including general and regional analgesia/anesthesia. This elective provides the student with insight into the psychologic, physiologic and metabolic alterations in pregnancy, labor and delivery, and how they affect the conduct of anesthesia. Other topics include neonatal resuscitation, management of airways, and care of patients with high-risk pregnancies. Students are given reading assignments and are expected to participate in discussion and prepare a short paper on a topic of interest.

REPORTING INSTRUCTIONS: Students should contact Dr. Kiselev at [mikiselev@yahoo.com](mailto:mikiselev@yahoo.com) or call (973) 972-5254.

### **ANES 9002 - MANAGEMENT OF CHRONIC PAIN SYNDROMES**

DIRECTOR: Dr. Andrew Kaufman

EDUCATION COORDINATOR: Ms. Sharon Venino

LOCATION: Pain Center, DOC Suite 3400

DURATION: 2 - 4 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.



**ANES 9004 - RESEARCH IN ANESTHESIOLOGY**

DIRECTORS: **Drs. Bennett**, Ye, Ponnudurai, and Atlas

EDUCATION COORDINATOR: Ms. Sharon Venino

LOCATION: University Hospital

DURATION: 4 - 12 weeks

WHEN OFFERED: By arrangement with Dr. Bennett, MSB E-547

NUMBER OF STUDENTS PER ROTATION: 1 - 2

PREREQUISITE: Permission of the Program Director

DESCRIPTION OF ELECTIVE: Research projects are available for the motivated student interested in a career in Anesthesiology and Pain Medicine. Areas of research include clinical sciences, neurobiology, laboratory participation and/or computer simulation. Interested students should arrange a meeting with Dr. Bennett.

REPORTING INSTRUCTIONS: First day meeting time and place to be arranged with mentor. Please contact the department.

## DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

### BIO 9000 - RESEARCH IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

DIRECTORS: Dr. Michael B. Mathews and members of the Department

LOCATION: Medical Sciences Building, E Level

DURATION: 4 - 8 weeks or more

WHEN OFFERED: October - May

NUMBER OF STUDENTS PER ROTATION: Flexible

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Students will be given the opportunity to contribute individually to some ongoing research program under the preceptorship of a departmental staff member. The elective will be designed by arrangement. A list of faculty members and their research interests can be seen on the web site <http://njms.umdj.edu/biochemistry> or obtained in the Biochemistry and Molecular Biology Department office. Evaluations are based on laboratory technique, contributions to experimental or theoretical aspects of the work, and the clarity of the written presentation of the results of the work.

A brief list of some of the projects is as follows:

Molecular Consequences of Tolerance and Dependence; Opioid Receptor Structure and Function - Dr. Howells ([howells@umdj.edu](mailto:howells@umdj.edu)) x5652  
Regulation of Growth and Differentiation in Cancer Cells - Dr. Lea ([lea@umdj.edu](mailto:lea@umdj.edu)) x5345  
Regulation of Translation; Cyclins and HIV transcription - Dr. Mathews ([mathews@umdj.edu](mailto:mathews@umdj.edu)) x4411  
Molecular Effectors of Enzymatic DNA Synthesis; Structure Function Relations in DNA and RNA dependent DNA polymerases - Dr. Modak ([modak@umdj.edu](mailto:modak@umdj.edu)) x5515  
Vitamin D Hormone: Function and Molecular Mechanism of Action - Dr. Christakos ([christak@umdj.edu](mailto:christak@umdj.edu)) x4033  
Signal Transduction Involving Membrane Proteins and Lipids - Dr. Cunningham ([cunnineb@umdj.edu](mailto:cunnineb@umdj.edu)) x5514  
Mitochondrial Biogenesis and Regulation of the Mitochondrial Genome - Dr. Suzuki ([suzukick@umdj.edu](mailto:suzukick@umdj.edu)) x1555  
Role of RNA/DNA Helicases in Transcription - Dr. Lee ([leecg@umdj.edu](mailto:leecg@umdj.edu)) x0130  
Regulation of Cellular Differentiation and Apoptosis - Dr. Birge ([birgera@umdj.edu](mailto:birgera@umdj.edu)) x4497  
Cytokine Activities, Receptors and Signal Transduction - Dr. Kotenko ([kotenkse@umdj.edu](mailto:kotenkse@umdj.edu)) x3134  
Molecular Mechanisms of Hepatitis/C Virus Replication/Effectors & Inhibitors of SARS Virus Replicase - Dr. Kaushik-Basu ([kaushik@umdj.edu](mailto:kaushik@umdj.edu)) x8653  
Retinoid-regulated gene expression - Dr. Rogers ([rogersmb@umdj.edu](mailto:rogersmb@umdj.edu)) x2984  
Identification of protein function via proteomics - Dr. Li ([liho@umdj.edu](mailto:liho@umdj.edu)) x8396  
HIV-1 Biology: Molecular Mechanisms of HIV-1 Replication - Dr. Pandey and Dr. Harris ([pandey@umdj.edu](mailto:pandey@umdj.edu)) x0660  
Interferon regulatory factors (IRFs) as chemosensitizers to DNA Damage/Signaling pathways that Mediate apoptosis in immune cells – Dr. Betsy Barnes ([barnesbe@umdj.edu](mailto:barnesbe@umdj.edu))

This elective is not open to students from other U.S. medical schools or to international students.

## **DEPARTMENT OF CELL BIOLOGY AND MOLECULAR MEDICINE**

### **ANAT 9003 - SURGICAL ANATOMY**

DIRECTOR: Dr. Anthony Boccabella

LOCATION: ADMC Building 14 & MSB Gross Laboratory

DURATION: 2 or 4 weeks

WHEN OFFERED: March and May

NUMBER OF STUDENTS PER ROTATION: 6 maximum

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. Lectures will emphasize the clinical and surgical importance of the region under consideration, and will be supported by dissection.

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 at 10:00 a.m. 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 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 or 4 weeks

**WHEN OFFERED:** June, September - May, with approval from Norma Hernandez

**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.

This elective is not open to international medical students.

### **FMED 9012 - AMBULATORY PRIMARY CARE**

**DIRECTOR:** Dr. Chantal Brazeau

**LOCATION:** Variable

**DURATION:** 2 - 4 weeks

**WHEN OFFERED:** July - August, November - December, January - March, with approval from Norma Hernandez

**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.

This elective is not open to students from other U.S. medical schools or to international medical students.

### **FMED 9020 - AMBULATORY FAMILY PRACTICE**

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

LOCATION: Overlook Hospital Family Practice Residency Program and Affiliates

DURATION: 2 or 4 weeks

WHEN OFFERED: June, August - May, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: Approval signature required

DESCRIPTION OF ELECTIVE: This elective is designed to provide the fourth year 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.

This elective is not open to international students.

### **FMED 9030 - HEALTH DISPARITIES IN MINORITIES**

DIRECTOR: Dr. Mark S. Johnson

LOCATION: Medical Sciences Building, B-648

DURATION: 4 - 8 weeks

WHEN OFFERED: June, December - May, with approval from Norma Hernandez

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The objective is to give the students an understanding of the health disparities of minorities and potential roles physicians can play in eradicating these disparities.

The elective will involve a review of the *Healthy People 2010* document and other related reports. The student will be introduced to epidemiological assessment methods with particular emphasis on social epidemiology. Students will be encouraged to concentrate on one disease entity and develop plans for studying and diminishing the disparity.

Students will be given assigned readings and will develop a written research proposal or paper for improving health status.

This elective is not open to international medical students.

### **FMED 9040 - RESEARCH IN FAMILY MEDICINE**

DIRECTORS: **Drs. Sue Rovi** and Mark S. Johnson

LOCATION: Medical Sciences Building B-648

DURATION: 4 - 8 weeks

WHEN OFFERED: Throughout the academic year, with approval from Norma Hernandez

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The objective of this elective is to have the student actively participate in research in the discipline of Family Medicine. The student will have a choice of participating in on-going studies of the Department or will be given the chance to participate in the design of his or her own study.

Individual guidance and feedback will be provided by the course directors and the members of the Department. A research curriculum will be provided by the directors including articles and workbooks pertinent to the basics of research design, development of the research question, data analysis, statistics, and writing for publication.

All students wishing to take this elective should meet with the course directors 2-3 months before the elective to plan an adequate coordination of effort and ensure a "product" of this elective that will be of value to the student.

This elective is not open to international medical students.

### **FMED 9060 - STUDENT FAMILY HEALTH CARE CENTER**

DIRECTOR: Dr. Robin Schroeder

LOCATION: Doctors Office Center

DURATION: Approximately one night per month during the third and fourth years (four weeks credit)

WHEN OFFERED: Throughout the academic year - credit will be given in May of the fourth year

NUMBER OF STUDENTS PER ROTATION: Unlimited

PREREQUISITE: Twenty (20) nights' participation in first and/or second year

DESCRIPTION OF ELECTIVE: This elective awards credit for participation in the **Student Family Health**

**Care Center (SFHCC).** The SFHCC was started by students in 1967 to provide primary care to the people of the community and to provide a fulfilling medical educational experience for students. It allows students, beginning in the preclerkship years, to interview and examine patients under the supervision of attending physicians.

The SFHCC is a student organization and is student administered. A commitment of at least three years is expected in order to provide the continuity of care between patient and student. Credit will be given in May of the fourth year for students who have participated in at least 20 sessions during the third and fourth years and fulfilled other published requirements. In addition, students are expected to fulfill a continuity requirement of following the same patient for three visits, at some point in their four years.

Third and fourth year students will be expected to participate in the core curriculum sessions offered prior to the SFHCC sessions. These sessions cover basic concepts of primary care. They will also cover review topics for first and second year students including aspects of the doctor-patient relationship and the physical exam.

Students will be assigned to a team comprised of students from each year of training. Students will be evaluated by the faculty attending based on the quality of care, which includes comprehensive medical and psychosocial management, empathy and professional responsibility.

This elective is not open to visiting medical students.

### **FMED 9080 - FAMILY MEDICINE IN THE COMMUNITY**

DIRECTOR: Dr. Cynthia Paige

DURATION: 2 or 4 weeks

LOCATION: Medical Sciences Building

WHEN OFFERED: Variable, with approval from Norma Hernandez

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.

This elective is not open to international medical students.

### **FMED 9900 - INTERNATIONAL ELECTIVE**

DIRECTOR: Dr. Chantal Brazeau

LOCATION: Variable

DURATION: 2 - 4 weeks

WHEN OFFERED: July - March

NUMBER OF STUDENTS PER ROTATION: 3

PREREQUISITE: Family Medicine, Medicine and Pediatrics Clerkships

DESCRIPTION: This elective is designed to provide the fourth year medical students ambulatory care experience in an international family practice/primary care setting. The student must actively participate in the care of patients under the supervision of a host physician. Hospital experience can be part of the elective if the focus remains on ambulatory care work. This should be a full-time (40 hours/week minimum) experience.

The student's responsibility prior to the elective:

- Request approval form the Director of Family Medicine
- Follow Registrar's Office International Elective guidelines and obtain forms
- Identify an attending physician (host) willing to supervise the student and obtain a letter of acceptance from this physician. This letter should include a description of the host's practice and the student's responsibilities.
- Request professional liability coverage.

The student must give at least one month notice to the family medicine department to prepare for this elective. No exceptions will be made.

Two weeks after the completion of the elective the student must submit to the Family Medicine Department:

- A write up of his/her experience (1-2 pages)
- An evaluation form completed and signed by the host.

*A grade of Incomplete will be assigned to the student if these requirements are not fulfilled.*



## DEPARTMENT OF MEDICINE

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

### **MED 9001 - INTENSIVE REVIEW OF MEDICINE**

DIRECTOR: Dr. Robert Fede

LOCATION: Medical Sciences Building

DURATION: 4 weeks

WHEN OFFERED: **October** only

NUMBER OF STUDENTS PER ROTATION: unlimited

PREREQUISITES: Medicine, General Surgery

DESCRIPTION OF ELECTIVE: This course is designed to provide in-depth review of the body of knowledge of clinical medicine required by the graduate physician. It consists of lectures by clinical faculty in a range of specialties with independent study by the student expected. Students are also required to sit for two mock Step 2 examinations to help them assess their knowledge at the beginning and the end of the course. This course is Pass/Fail; student must attend 80% of all lectures and complete BOTH practice examinations to receive a Pass grade. Times and locations of the lectures will be announced by mailing/emailing from the department of medicine in July prior to the start of the course.

This elective is not open to international medical students.

### **MED 9002 - ETHICS AT THE BEDSIDE: FROM PRINCIPLES TO PRACTICE**

DIRECTOR: Helen D. Blank, Ph.D.  
Medical Ethicist (973-972-9558)

LOCATION: University Hospital

DURATION: 2 weeks

WHEN OFFERED: January - February

NUMBER OF STUDENTS PER ROTATION: 10

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The purpose of this elective is to enhance clinical decision making. The ethics elective will train healthcare professionals in the essential principles and practical clinical applications of ethics in the health care setting. Participants will learn the boundaries of health care law and the standards of professional behavior essential for competent and confident medical practice. The elective prepares attendees to deal responsibly with such clinical challenges as forgoing life-sustaining treatment and DNR, palliative care, confidentiality, truth-telling and informed consent, the determination of decision making capacity and the use of advance directives. Participants will also be able to attend Ethics Committee meetings at University Hospital and other local institutions if they choose.

Topics may include:

- Medical Futility: Who Defines Inappropriate Medical Care?
- Truth-telling and Disclosure: How Much Should We Tell?
- Patient Decision-making: Who Gets to Choose?
- End-of-Life Choices: What Should the MD Know?
- Humanism in the Patient-Physician Relationship
- Using Advance Directives: Interpreting Patient Preferences/ Family Needs
- Breaking Bad News: Patients and Informed Consent
- DNR: The Problem That Still Will Not Go Away
- Physician-Assisted Suicide: Where Are the Legal and Ethical Boundaries?
- Mediating Disputes at the Bedside: Reducing Your Professional Liability

Requirements: Using an ethical decision-making process, students will “work-up” ethical dilemmas for class presentation. The course will focus on cases, articles and film clips to stimulate provocative discussions.

### **MED 9004 - END-OF-LIFE CARE**

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

LOCATION: University Hospital

DURATION: 2 or 4 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 [murphypa@umdnj.edu](mailto:murphypa@umdnj.edu).

## **MED 9010 – ASTHMA, ALLERGY & IMMUNOLOGY**

DIRECTOR: Leonard Bielory, M.D.

LOCATION: Doctors Office Center, Suite 4700

DURATION: 2 - 4 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 2-4 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 10) as part of their rotation for the use of searching the literature and developing their evaluation of patients seen during the elective.

This elective is open to international students as a minimum of a 4 week 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) 972-2768.

## **MED 9011 – ASTHMA & ALLERGY AND IMMUNOLOGY RESEARCH**

DIRECTOR: Leonard Bielory, M.D.

LOCATION: Doctors Office Center, Suite 4700

DURATION: 4 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 this elective will be exposed to clinical research techniques, writing styles for the development of manuscripts and/or grants, library research techniques, manuscript review techniques, use of a reference manager, and institutional review board requirements. During this 4-week elective students will be involved in the development of goals and objectives for the scholarly activity that may include submission of manuscripts for publication in a peer reviewed journal, translational research and/or clinical research projects.

This elective is only open to New Jersey Medical School students.

REPORTING INSTRUCTIONS: On the first day of the elective, students should report to the Doctors Office Center (DOC), Suite 4700 at 8:00 a.m. The phone number for the office is (973) 972-2768.

### **MED 9030 - PREVENTIVE CARDIOLOGY**

DIRECTOR: Dr. Norman Lasser

LOCATION: Doctors Office Center and Bergen Building

DURATION: 2 weeks, as component of Cardiovascular Diseases (MED 9040) only

WHEN OFFERED: June, September - December, February, April, May

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Permission of both Dr. Norman Lasser and Dr. Bunyad Haider

DESCRIPTION OF ELECTIVE: The following objectives should be fulfilled by students in this elective component:

- a. Acquire knowledge of the theoretical background and current status of the science of preventive cardiology, with emphasis on epidemiology, pathophysiology, nutrition, and behavioral science.
- b. Develop awareness of the wide range of techniques (medical, counseling, use of hypolipidemic and antihypertensive drugs, behavioral and nutritional techniques) available for preventive cardiology, as well as some knowledge of their effectiveness and appropriate application.
- c. Acquire skill in applying a variety of techniques in a preventive clinical setting. This will include skill in applying the current guidelines for detection, evaluation and treatment of hypertension and lipid disorders.

This program will consist of a didactic as well as applied component. The didactic segment will consist of tutorial sessions to be held throughout the elective period, which will address the major risk factors for cardiac disease and will involve interaction with the program director as well as behavioral scientists, nutritionists and nurse practitioners. During the same period the students will participate in a variety of ongoing Preventive Cardiology Program activities such as care of private patients and participation in NIH-sponsored clinical studies such as the Women's Health Initiative Extension Study and the DISC girls follow-up study (originally a children's cholesterol study), TRIAD (a translational research study in diabetes), and pharmaceutical studies,

such as JUPITER, a clinical trial of the effectiveness of statin treatment of patients with a normal LDL cholesterol and elevated CRP and EXCEL, a study of breast cancer prevention using a new class of drugs.

### **MED 9031 - CARDIOLOGY / Morristown**

**DIRECTORS:** Drs. Grant V.S. Parr and Stephen Winters

**LOCATION:** Morristown Memorial Hospital

**DURATION:** 4 - 8 weeks

**WHEN OFFERED:** August - May, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** Medicine, approval signature required

**SPECIAL NOTE:** Students are asked to contact Dr. Parr 3-4 weeks before the beginning of the rotation, as Dr. Parr will customize the student's learning experience to his/her interests.

**DESCRIPTION OF ELECTIVE:** The goals of the program are to provide the student with an introduction to clinical cardiology and the opportunity of developing the proper techniques of obtaining a cardiovascular history; to gain experience and skill in the cardiovascular examination; to develop a differential diagnosis and appropriate diagnostic plan; and to gain a basic knowledge of electrocardiography, cardiac catheterization, angioplasty, ultrasound, electrophysiology studies and various modes of therapy including the indications, contraindications and complications.

**Learning experience:** Scheduled meetings with the Chairman, Department of Cardiovascular Medicine take place regularly for case presentation. Students read EKG's with cardiologists to gain experience in this modality. Students attend CCU rounds, spend time in the office of a cardiology practice, and participate in hospital rounds, diagnostic test performance and interpretation, medical and interventional therapy, and consultations including pre- and post-op cardiac surgery care. Exposure to the catheterization laboratory, electrophysiology studies, nuclear cardiology, CT angiography, open heart surgery, and research projects are included. Active participation is encouraged. Ample time is provided for students to read about their cases. Students are welcome to attend daily Morning Report and Noon Conference, where lunch is often provided.

#### **Goals and Objectives:**

- Provide the student with an introduction to clinical cardiology
- Provide an opportunity to develop proper techniques of obtaining a cardiovascular history and experience and skill in the cardiovascular examination
- Discuss how to develop a differential diagnosis and appropriate diagnostic plan
- Gain a basic knowledge of cardiac testing and procedures

**Feedback/Evaluation:** By the Chairman, Department of Cardiovascular Medicine and the attending preceptor.

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

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **MED 9040 - CARDIOVASCULAR DISEASES**

DIRECTOR: Dr. Bunyad Haider  
[haider@umdnj.edu](mailto:haider@umdnj.edu), x5291, x6252

ADMINISTRATIVE CONTACT: Ms. Harper

LOCATION: The primary teaching location for this rotation is University Hospital. Students will meet with the Director initially at University Hospital and be assigned in groups of 2 at University Hospital or Department of Veterans Affairs Medical Center in East Orange. Attempts will be made to accommodate individual preferences (minimum two students at each site), but final decisions will be made on the first day of the rotation. Presence at University Hospital on the first day is mandatory so that all students receive assignments.

DURATION: 4 weeks

WHEN OFFERED: June, September - May

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITE: Medicine

### **DESCRIPTION OF ELECTIVE:**

#### **1. Objectives:**

Cardiovascular disease remains the leading cause of death in the United States, and with the aging of our population, a greater number of patients with proven or suspected cardiovascular disease will present to primary and specialty physicians of all kinds.

To better prepare our graduates in the evaluation of these patients. This course is designed to hone bedside and office skills in the physical diagnosis and management of patients with cardiovascular disease.

This will include an exposure to ECG reading to prepare participants to interpret arrhythmias, conduction abnormalities and ischemic and hypertrophic patterns. An exposure to further diagnostic modalities such as stress testing, echocardiography, cardiac catheterization and other myocardial imaging will be available during this elective. In addition to diagnostic testing the student will also have the opportunity to observe the latest in therapeutic interventions for cardiovascular disease such as angioplasty and cardiac surgery.

The program is designed to meet the needs not only of those with a special interest in cardiology, but also those who have other career plans in medicine.

Specialized tracks: Students who have a particular interest in cardiovascular disease may choose to devote more time to that aspect and distribute the rest of their time to selected other topics. The outline of one such specialized program, preventive cardiology, can be found under the elective heading MED 9030 - Preventive Cardiology.

#### **2. Format:**

On the first day of the rotation, all students taking electives in cardiology at the University Hospital and affiliated hospitals will report to the Cardiology Division Elective Coordinator (Dr. Bunyad Haider) in the University Hospital Cath Lab Conference Room at 10:00 A.M. (see above). In addition to divisional conferences, all students must attend Departmental Rounds at University Hospital from 8:00 A.M. to 9:00 A.M. every Tuesday.

This elective is not open to international medical students.

REPORTING INSTRUCTIONS: Students are to report to the Cardiac Catheterization Conference Room, I-405, at 10:00 A.M. on the first day of the rotation.

## **MED 9050 - CRITICAL CARE MEDICINE**

**DIRECTORS:** Drs. Zaza Cohen and Steven Chang

**LOCATION:** University Hospital

**DURATION:** 2 or 4 weeks (Preference is extended to students taking the elective for four (4) weeks)

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 2 in July, Aug, Sept; 4 in all other months

**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.

This elective is not open to international medical students.

**REPORTING INSTRUCTIONS:** Students should report to I-Yellow (MICU) at 8:30 a.m. on the first day of the rotation. Pulmonary/CCM Office: 972-6111; I-Yellow Nurses Station: 972-6072.

## **MED 9051 - INFECTIOUS DISEASES**

**DIRECTORS:** Drs. John Salaki and Stanley Fiel

**LOCATION:** Morristown Memorial Hospital

**DURATION:** 4 or 8 weeks

**WHEN OFFERED:** August - May, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITE:** Medicine, approval signature required

**DESCRIPTION OF ELECTIVE:** The purpose of this elective is to introduce the student to a rational approach to the diagnosis and treatment of common infectious diseases, emphasizing as well general internal medicine and clinical microbiology.

**Learning experience:** An elective in clinical infectious diseases is available for a four or eight week period. The student will spend time in the Clinical Microbiology Laboratory in order to help gain insight into its proper usage, its function and its limitations, as well as to gain experience in the proper use of the gram stain, common cultures, and common serologies. Students are exposed to a wide variety of infectious disease problems of both in- and out-patients, as well as to common problems in internal medicine which may masquerade or present as infectious diseases. The elective includes one-on-one teaching sessions and formal didactic lectures about common infectious diseases and teaching and consultation rounds in general internal medicine and infectious diseases. Emphasis is placed on a rational and sophisticated approach to the use of common antimicrobial agents. At the end of this elective it is hoped that the student will have a greater appreciation for the use of history, physical examination, bacteriologic statistics, epidemiology, the gram stain, and basic microbiological laboratory test in the diagnosis and treatment of common infectious diseases as seen both in an out-patient and in-patient setting. Ample time is provided for students to read about their cases. Students are welcome to attend daily Morning Report and Noon Conference, where lunch is often provided.

**Goals and Objectives:**

- Observe the ID attending interview and examine patients in consultation
- Interview and examine at least 2 patients and present written report to attending physician
- Observe with ancillary personnel and review techniques of specimen examination and interpretation of findings

**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 3<sup>rd</sup> floor and follow sign to Medical Education.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **MED 9060 - DERMATOLOGY**

**DIRECTOR:** Dr. Robert A. Schwartz

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

**DURATION:** 4 weeks (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.

This elective is not open to students from other U.S. medical schools or to international medical students.



## **MED 9061 - INTERNAL MEDICINE ADVANCED CLERKSHIP**

**DIRECTORS:** Drs. David Kuo and Valerie Allusson

**LOCATION:** Morristown Memorial Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** August - May, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 4

**PREREQUISITES:** 3<sup>rd</sup> year Medicine clerkship, approval signature required

**DESCRIPTION:** The Internal Medicine Subinternship is designed to allow fourth year medical students to act as subinterns on an active general internal medicine service in UMDNJ-New Jersey Medical School University Hospital which sees a wide variety of diagnostic and acute care problems, as well as an even balance within the subspecialties of internal medicine.

**Learning Experience:** The sub-intern will act in the role of the first year resident, under the supervision of a second and third year resident as well as the chief resident and teaching attending physician. The subintern will be given patients on a rotational basis as part of a medical team consisting of first, second, and third year medical residents. The subintern will be responsible for histories, physical examinations, and the ordering of laboratory and diagnostic tests as well as permitted an active role in the choice of therapy when necessary. The subinternship is designed to expose the fourth year medical student to a general internal medicine internship during medical school so that he/she may experience the responsibility for patient care under the supervision of more senior residents. Emphasis will be placed upon history taking, the performance of a complete and sophisticated physical examination, a rational choice of diagnostic studies and therapy. Supervision and teaching are emphasized to permit the medical sub-intern to gain maximum experience in education and practical application of such during this elective. Ample time is provided for students to read about their cases. Students are welcome to attend daily Morning Report and Noon Conference, where lunch is often provided.

### **Goals and Objectives:**

- Gain a wide exposure to a variety of acute medical problems
- Provide medical students with the clinical skills and cognitive abilities required for problem solving and decision-making in clinical medicine

**Feedback/ Evaluation:** By the attending preceptor.

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

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **MED 9070 - ENDOCRINOLOGY**

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

**ADMINISTRATIVE CONTACT:** Marsha Taylor, [taylorm2@umdnj.edu](mailto:taylorm2@umdnj.edu)

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

DURATION: 2 - 4 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 9082 - PRECEPTORSHIP IN AMBULATORY INTERNAL MEDICINE**

DIRECTORS: **Drs. David Kuo** and Valerie Allusson

LOCATION: Morristown Memorial Hospital

DURATION: 4 weeks

WHEN OFFERED: September – May, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: Third year clerkship in Medicine, approval signature required

DESCRIPTION OF ELECTIVE: Students will be assigned full time to the internal medicine practice at Morristown Memorial's Family Health Center. The FHC is a busy community clinic that is also the continuity practice for MMH's internal medicine residents. It serves an ethnically diverse group of patients with a broad range of medical conditions. Highly trained faculty physicians and excellent support personnel staff the practice. Hence the teaching environment mimics a large private practice.

**Learning Experience:** The student will work under the direct supervision of attending physicians while seeing his/her own panel of patients. He or she will participate in and contribute to a variety of didactic experiences, including pre-clinic conferences, and our weekly clinical case conference. The student will gain experience in the evaluation and management of many common outpatient problems in internal medicine, with a special emphasis on preventive medicine and screening. He or she will also learn essential aspects of practice management, such as billing and coding, and be exposed to pre-operative consultation skills. Evidence based medicine is emphasized, and the practice has excellent teaching materials and internet access to assist in this goal.

**Goal and Objectives:**

- Provide the students with a structured continuity experience in ambulatory care
- Gain experience in the evaluation and management of many common outpatient problems in internal medicine, with emphasis on preventative medicine and screening
- Identify essential aspects of practice management, e.g. billing, coding pre-operative consultation skills

**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 3<sup>rd</sup> floor and follow sign to Medical Education.

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

**MED 9092 – GERIATRICS/HOME CARE**

DIRECTOR: Dr. Knight Steel

LOCATION: Hackensack University Medical Center

DURATION: 4 weeks

WHEN OFFERED: September - May

NUMBER OF STUDENT PER ROTATION: 2

PREREQUISITES: None

**DESCRIPTION OF ELECTIVE:** With Medicare eligible persons now accounting for as many as 50% or more of all hospital beds, physicians will be required to have an appreciation of the needs of the older patient and how to target services and interventions, whether or not they originate in hospitals, to those needs. Physicians, in both primary care and many of the specialties, will be required to carry out a comprehensive assessment initially and learn to maximize both the older person's functional state and quality of life.

The student will work on the acute geriatric floor at Hackensack University Medical Center and participate in rounds and patient assessment. Issues of great concern to all of us as we age, such as incontinence, dementia and falling, will be discussed. He/she will make home visits, have an experience in a long term care facility, attend geriatrics clinic and work with other professionals in the care of the older patient. A geriatrics syllabus and research opportunities will be provided.

The experience will be structured as a tutorial but students will be expected to attend geriatric didactic sessions, Geriatrics Grand Rounds, and Journal Club.

This elective is not open to students from other medical schools.

## MED 9100 - HEMATOLOGY

DIRECTORS: **Dr. Mark Levin** (University Hospital, Newark: 973-972-6257)  
Dr. Basil Kasimus (East Orange VA Medical Center: 973-676-1000)  
Dr. Stewart Goldberg (Hackensack Univ. Med Center: 201-996-5900)

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

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITES: Medicine, General Surgery

DESCRIPTION OF ELECTIVE: Assignments are made by the program director to University Hospital or an affiliated hospital, with input from the student. The following objectives must be fulfilled:

- a. Acquire detailed knowledge of the pathophysiology, clinical features, and basic principles of treatment of Hematologic Disorders of the following categories:
  - Hematologic Malignancies, including
    - Acute and Chronic Leukemias
    - Myeloproliferative Disorders
    - Myelodysplastic Syndromes
    - Bone marrow failure states
    - Lymphoproliferative Disorders
    - Plasma Cell dyscrasias
  - Disorders of Coagulation and Thrombosis, including
    - Platelet disorders and von Willebrand Disease
    - Genetic and acquired disorders of coagulation
    - Thrombophilic disorders
    - Hemostatic issues in Surgical and Obstetric patients
  - Evaluation and management of anemias, including
    - Hypoproliferative anemias
    - Hemolytic anemias
- b. Acquire expertise in interpreting laboratory data relating to the hematologic system, including interpretation of peripheral blood smears, immunophenotyping, and acquire fundamental skills in performing and interpreting peripheral blood smears, and in performing and interpreting bone marrow biopsy and aspirations.
- c. The student may elect to participate in ongoing laboratory or clinical research.

Students are encouraged to use Hoffman R, et al, editors **Hematology, Basic Principles and Practice** (Churchill, Livingston, New York, 3<sup>rd</sup> Edition) as a reference text during the rotation. Students will attend weekly divisional and research conferences, tumor and hematopathology seminars, as well as participating in outpatient clinics and inpatient consultations and patient care. The student will be evaluated at the end of the rotation on the basis of their performance and participation in clinical activities, case presentations, and knowledge acquired.

## **MED 9101 - HEMATOLOGY - ONCOLOGY /Morristown**

**DIRECTORS:** Drs. Gary Gerstein and Stanley Fiel

**LOCATION:** Morristown Memorial Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** August – May, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITES:** Medicine, approval signature required

**DESCRIPTION:** The purpose of this elective is to enable the student to recognize, diagnose, and treat a wide range of hematologic and oncologic entities; to know the work-up of selected hem/onc problems, and to interpret pertinent diagnostic tests.

**Learning experience:** Students attend weekly Tumor Board interdisciplinary conferences where fascinating cases are discussed. The elective also includes: a) daily bedside rounds in the busy Hematology-Oncology Unit during which practical problems in the management of these patients will be stressed; b) post-rounding discussions relevant to current problems and theoretical consideration; c) supervised bedside procedures including bone marrows will be conducted. Directed selected readings on topics in Hematology-Oncology will be discussed. Students will participate in activities of the subsection of Hematology/Oncology with regard to admission histories, physical examinations and follow-up. Consultations and admissions to the hem/onc service are done by the student, who then presents to the attending for discussion. The student attends monthly hem-onc clinic, and spends time in the private office as well. One afternoon per week is spent in a private physician's office. The student will have hands-on experience in endoscopic studies. Ample time is provided for students to read about their cases. Students are welcome to attend daily Morning Report and Noon Conference, where lunch is often provided.

### **Goals and Objectives:**

- Provide and overview of clinical Hematology/Oncology in both the in-patient and out-patient setting
- Provide reading lists/pertinent resources/conferences
- 1:1 interaction with physicians

**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 3<sup>rd</sup> floor and follow sign to Medical Education.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

This elective is not open to international medical students.

## **MED 9106 - ACTING INTERNSHIP IN INTERNAL MEDICINE**

**DIRECTOR:** Jo-Ann Reteguiz, M.D.  
[reteguiz@umdnj.edu](mailto:reteguiz@umdnj.edu)

**LOCATION:** University Hospital, Department of Veterans Affairs New Jersey Health Care System in East Orange, and Hackensack University Medical Center

Students must e-mail Dr. Reteguiz two weeks prior to the first day to arrange the location of your assignment.

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Medicine

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

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

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

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

- a. Morning report, where patients hospitalized during the previous twenty-four hours are reviewed.
- b. Noonday conferences which include a clinical case conference, bi-monthly literature reviews, scheduled special research conferences, scheduled primary care conferences, and scheduled basic-clinical science conferences at University Hospital.
- c. Departmental grand rounds in the Medical Sciences Building, Tuesdays, 8:00 A.M. - 9:00 A.M.
- d. Subspecialty conferences in which the patients they have worked up are presented and discussed.

**NB:** This elective is open on a space-available basis to students from other U.S. medical schools after all NJMS students have registered for the mandatory rotation.

## **MED 9121 - GASTROENTEROLOGY**

**DIRECTOR:** Dr. Mark Sterling

**LOCATION:** This elective is based at University Hospital and the Department of Veterans Affairs Medical Center in East Orange. It is supervised by Dr. Mark Sterling and associates. Students will participate in inpatient consultations, weekly case conferences, didactic sessions, and be exposed to the newest procedures used in diagnosis and treatment of digestive diseases.

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITE:** Medicine

**DESCRIPTION OF ELECTIVE:** The elective is directed towards students who are considering entering Internal Medicine, Family Practice, Pediatrics, Gastroenterology, or General Surgery. Emphasis is put on clinical diagnosis and treatment of digestive diseases and nutritional disorders. Assignments are made to either University Hospital or the Department of Veterans Affairs Medical Center in East Orange. The program is designed to provide instruction in gastroenterology, hepatology, and nutrition using newest approaches to common digestive disorders. There is a review of common techniques used in these areas and students participate in the weekly Digestive Disease Conferences, didactic lectures, journal club, pathology conference and radiology conference.

### **1. Objectives**

Obtain further knowledge of pathophysiology and additional experience in proper diagnosis of common problems in gastroenterology: esophageal disease, upper G.I. bleeding, peptic ulcer, diseases of the intestine, diverticulitis, proctitis, pancreatitis, diagnosis and treatment of hepatitis, fatty liver, cirrhosis, biliary obstruction, gallstones, inborn errors of metabolism, and primary liver cancer.

The student learns the most up-to-date approach to management of acute G.I. bleeding, acute and chronic pancreatitis, ascites, hepatic encephalopathy, and jaundice. Special attention will be given to the evaluation of patients for liver transplantation and gastrointestinal involvement with AIDS.

### **2. Format**

Utilizing newest video technology, students will participate in upper endoscopy, colonoscopy, treatment of bleeding ulcers, needle biopsy of the liver, esophageal, biliary and rectal manometry. Students work up patients in association with subspecialty residents and clinical faculty. They learn how to use clinical, laboratory, morphologic, radiologic and epidemiological studies for the diagnosis and evaluation of the effectiveness of treatment. They will assist in Endoscopic Ultrasound, liver biopsy, endoscopic retrograde cholangiography, interpretation of ultrasounds, CT scans, MRI's, hepatitis serology, and mucosal and liver biopsies.

**REPORTING INSTRUCTIONS:** On the first day of the rotation, students should report to University Hospital, E-178 at 8:00 a.m. The GI Office telephone number is (973) 972-5252. (Elaine Addeo: Division Secretary, [addeo@umdnj.edu](mailto:addeo@umdnj.edu))

Students doing the rotation at the East Orange VA Medical Center will report to the Endoscopy Suite at 8 a.m. on the first day of rotation.

## **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 or 4 weeks

WHEN OFFERED: Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 3

PREREQUISITE: Approval signature required

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 - 8 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.

For electives taken in June, arrangements are to be made through Sue Moshier, Medical Education Department, at 973-971-5316.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@hsys.org](mailto:jennifer.dilauri@hsys.org)

**This elective is not open to international medical students.**

## **MED 9150 - INFECTIOUS DISEASES**

DIRECTOR: Dr. Lisa Dever

DIVISION CHIEF: Dr. David Alland

PROGRAM COORDINATOR: TBD

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 or 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITE: None

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.

REPORTING INSTRUCTIONS: On the first day of the elective, students should report to MSB I-531 at 8:30 a.m.

### **MED 9170 - NEPHROLOGY**

DIRECTOR: Dr. Leonard G. Meggs  
(973) 972-4200; meggslg@umdnj.edu

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

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITES: None

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

a. Obtain further knowledge of pathophysiology and experience in proper diagnosis and treatment of acute and chronic renal failure, disorders of hydration, glomerulonephritis, renal calculi, electrolyte and acid-base disturbances, hypertensive emergencies, and urinary tract infections. A

fourth year student must work up at least three patients with renal disease each week and keep an account of the diagnosis and other pertinent data for review at the end of the rotation.

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

**REPORTING INSTRUCTIONS:** On the first day of the elective, students should report to MSB, I-524 and see Ms. Brenda Alston Hill at 9:30 a.m. (alstonbm@umdnj.edu).

## **MED 9171 - NEPHROLOGY**

**DIRECTORS:** Drs. Paul Fine and Stanley Fiel

**LOCATION:** Morristown Memorial Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** August - May, permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** Medicine, approval signature required

**DESCRIPTION OF ELECTIVE:** The goal of this elective is to familiarize the student with the work-up and treatment of patients with renal diseases.

**Learning experience:** This elective will consist of daily hospital and Dialysis Unit rounding with a physician from the Section of Nephrology, directed involvement in nephrology consultations and the management of hospitalized nephrology patients, and outpatient experience in the nephrologist's office. The elective will also acquaint the student with dialysis modalities (hemodialysis and peritoneal dialysis) and provide an introduction to renal transplantation. Developing an approach to the evaluation of chronic renal dysfunction, electrolyte disturbances and acid-based disorders will be emphasized. Ample time will be provided for students to read about their cases. Students are encouraged to use the print and on-line resources of the Lathrope Medical Library and to attend daily Morning Report and Noon Conferences presented by the Department of Medicine.

### **Goals and objectives:**

- Familiarize the student with evaluation and treatment of patients with acute and chronic renal disease
- Acquaint the student with dialysis modalities
- Provide an introduction to renal transplantation

**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 3<sup>rd</sup> floor and follow sign to Medical Education.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **MED 9190 - MEDICAL ONCOLOGY**

**DIRECTOR:** Dr. Mark Levin

**LOCATION:** University Hospital

**DURATION:** 2 or 4 weeks (4 weeks preferred)

**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 Leibu and Dr. Jan Schwarz-Miller

**LOCATION:** Morristown Memorial Hospital

**DURATION:** 2 or 4 weeks

**WHEN OFFERED:** June - July, September - May, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** Medicine. Candidates must use their own car for this elective. Approval signature required.

**DESCRIPTION OF ELECTIVE:** Fourth year medical students are invited to participate in a one month 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 3<sup>rd</sup> floor and follow sign to Medical Education.

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open for international medical students.**

## **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 or 4 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.

This elective is not open to international medical students.

### **MED 9211 - PULMONARY MEDICINE**

DIRECTORS: **Drs. Robert Capone** and Stanley Fiel

LOCATION: Morristown Memorial Hospital

DURATION: 4 weeks

WHEN OFFERED: August – May, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: Medicine, approval signature required

DESCRIPTION OF ELECTIVE: The elective is designed to provide a broad exposure in pulmonary medicine emphasizing the diagnostic and therapeutic approach to pulmonary diseases, the pulmonary function laboratory, and procedures.

**Learning experiences:** This elective involves the student in daily rounds in the Intensive Care Unit, exposure to pulmonary consultations and procedures such as thoracenteses and bronchoscopies. Students work closely with attending physicians, will perform appropriate histories and physical examinations on pulmonary consultations, and will be allowed to perform special procedures under supervision. They will make daily rounds with the consulting physician and house staff assigned to the elective and will see a wide variety of pulmonary diseases including participation in an outpatient tuberculosis clinic. The goals of the course are to provide the student with insight into the use of history, physical examination, pulmonary function testing and appropriate procedures in the diagnosis and treatment of common pulmonary diseases as seen both in outpatient and inpatient settings. Students will develop proficiency in reading chest x-rays, understanding ventilator management, interpreting pulmonary function tests, and blood gas analysis. Students will recognize the physiology of respiratory disease and be able to use pulmonary medications accordingly. Ample time is provided for students to read about their cases. Students are welcome to attend daily Morning Report and Noon Conference, where lunch is often provided.

### **Goals and Objectives:**

- Provide a broad exposure in pulmonary medicine
- Emphasize the diagnostic and therapeutic approaches to pulmonary disease
- Introduction to the pulmonary function laboratory
- Overview of pulmonary medicine procedures

**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 3<sup>rd</sup> floor and follow sign to Medical Education.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **MED 9241 - GLOBAL TUBERCULOSIS INSTITUTE**

**DIRECTORS:** Dr. Reynard McDonald  
([mcdonari@umdnj.edu](mailto:mcdonari@umdnj.edu), 2-7413)

**LOCATION:** New Jersey Medical School Global Tuberculosis Institute, Lattimore TB Clinic and University Hospital

**DURATION:** 2 or 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITES:** Centers for Disease Control & Prevention (CDC) online resource, *Interactive Core Curriculum on Tuberculosis: what the Clinician Should Know*. This can be accessed on the CDC website: <http://www.cdc.gov/nchstp/tb/webcourses/default.htm> and certificate of completion can be printed out.

**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 for clinic rotation and for hospital rounds. Students attend our weekly TB Grand Rounds where difficult cases are discussed among our multidisciplinary clinic staff. In addition, they accompany a nurse case manager or Directly Observed Therapy outreach worker to learn about the various methods of therapy administration and issues in patient care such as poverty,

substance abuse, and homelessness. Students will also have an opportunity to meet with our PHRI laboratory personnel to learn about basic research in molecular mechanisms of drug resistance in mycobacteria.

**REPORTING INSTRUCTIONS:** Medical students should plan to arrive at the Global Tuberculosis Institute at 9:00 a.m. on the first day of the rotation, and report to Education & Training – 1<sup>st</sup> floor, West Wing of the ICPH building located at 225 Warren St., Newark, NJ.

## **MED 9245- EMERGENCY MEDICINE**

**DIRECTOR:** Dr. Sandra Scott  
[scotts1@umdnj.edu](mailto:scotts1@umdnj.edu), (973) 972-5129

**ADMINISTRATIVE CONTACT:** Debbie Pedretti, [pedretld@umdnj.edu](mailto:pedretld@umdnj.edu), (973) 972-5128, (908) 902-9221

**LOCATION:** University Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITES:** None

**DESCRIPTION OF COURSE:** This course is a four week clinical rotation in the Emergency Department (ED) at University Hospital. The course is offered to fourth- year medical students. Students will do four 12-hour shifts per week and attend our conferences that are held each Wednesday from 8am-12pm. Shifts will be a combination at 7a-7p, 12p-12a, and 7p-7a shifts to be worked over a combination of weekdays and weekends. At UH, students will see patients with a wide range of presenting signs and symptoms that include trauma, chest pain, vaginal bleeding and abdominal pain. Students will be responsible for performing focused history and physical examinations on ED patients. Formulation of diagnostic and treatment plans will be in conjunction and under the supervision of the ED attending physicians. Students are encouraged to perform any necessary diagnostic, resuscitative and /or therapeutic procedures that may be necessary for patient care under direct supervision of the ED attending physician. Students are expected to follow-up on any diagnostic studies for the patients that they are following. Students are also encouraged to learn when and how to appropriately involve consultation services in patient evaluation and care. Students will be graded on their clinical performance via evaluations by the ED attending physicians. Mid-rotation feedback regarding clinical performance will be given to each student.

**Course Goals:** The goals of the Emergency Medicine elective are for the students to (a) demonstrate focused history and physical examinations based on presenting symptoms, (b) demonstrate differential diagnoses appropriate for patients presenting symptoms, (c) develop appropriate diagnostic and treatment plans for ED patients, (d) demonstrate knowledge for resuscitative requirements of patients in shock or cardiac arrest, (e) demonstrate the ability to incorporate psycho-social factors into patient assessment and treatment plans.

**Course Objective:** Instruct fourth-year medical students how to clinically evaluate patients, formulate diagnostic and treatment plans, and prioritize patient care in the ED. This will be done by direct supervision by ED attending physicians.

## **MED 9250 - EMERGENCY MEDICINE**

DIRECTOR: Dr. Richard Shih

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

LOCATION: Morristown Memorial Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITES: Approval signature required

**DESCRIPTION OF ELECTIVE:** The rotation offers medical students a challenging clinical experience in Emergency Medicine with a broad range of clinical pathology, in a closely supervised environment. 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 70,000 patients per year. The student is expected to work 12 twelve- hour shifts, some of which must be at night. Students attend a five- hour seminar each Tuesday and will ride the Mobile Intensive Care Unit and observe emergency care in the field.

### **Goals and Objectives:**

- Learn the basics of emergency medicine with one on one instruction from board certified attending physicians
- Students will have exposure to history taking and physical exams
- Students will be required to determine a diagnosis and plan of treatment for each patient
- The importance of work ethic and interpersonal skills will be emphasized

**Feedback/ Evaluation:** Attending physicians will evaluate the students during each shift worked. These evaluations will be combined into one inclusive evaluation completed by the Medical Student Director.

**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.

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department, at 973-971-5316.

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **MED 9260 – GASTROENTEROLOGY/Morristown**

DIRECTORS: **Drs. John Dalena** and Stanley Fiel

LOCATION: Morristown Memorial Hospital



WHEN OFFERED: August - May, with permission from Jennifer DiLauri, MMH Medical Education,  
973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Medicine

**DESCRIPTION:** The goal of this elective is to provide exposure to a broad variety of gastrointestinal diseases and the approach to the common in-patient and ambulatory problems as well as to stimulate an interest in the pathophysiology of the digestive system and to develop an understanding of the role of endoscopy in the diagnosis and management of medical patients.

**Learning experience:** There are daily rounds with a gastroenterologist and weekly sessions in that gastroenterologist's private office seeing ambulatory patients. There is a monthly supervised G.I. Clinic as well as access to observe and participate in procedures in the G.I. Suite. The Endoscopy Suite averages over 150 procedures a month, including upper and lower G.I. fiberendoscopy, ERCP, endoscopic sphincterotomy and small bowel biopsy. The student will have hands-on experience in endoscopic studies. The student will participate in consultations, and will be expected to present a well-focused history and physical examination, differential diagnosis and plan. The student is encouraged to use library resource material to supplement the differential diagnosis and plan. The student will become comfortable with interpretation of diagnostic testing in gastroenterology, including endoscopy, ERCP, manometry and radiologic studies. Ample time is provided for students to read about their cases. Students are welcome to attend daily Morning Report and Noon Conference, where lunch is often provided.

**Goals and objectives:**

- Provide exposure to a broad variety of gastrointestinal diseases
- Discuss the approach to the common in-patient and ambulatory gastrointestinal problems
- Stimulate an interest in the pathophysiology of the gastrointestinal system
- Develop an understanding of the role of endoscopy in the diagnosis and management of these patients

**Feedback/Evaluation:** By the attending preceptor.

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

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

**MED 9900 - EXTERNSHIP (EMERGENCY MEDICINE AT BETH ISRAEL)**

***Students must complete externship paperwork for this elective***

DIRECTOR: Mark Watson, MD

LOCATION: Newark Beth Israel Medical Center

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 5

PREREQUISITES: All third year clerkships

DESCRIPTION OF ELECTIVE: Please send requests for this elective as early as possible. We will try to send you a copy of the schedule prior to your arrival. You will work 16 to 18 shifts during a 4-week rotation. This will consist of 16 shifts (ten 10 or 12-hour shifts in the adult ED, three 10-hour shifts in the Adult Fast Track Area and three 10-hour shifts in the Pediatric ED). Each Wednesday we have conference in the D-10 Conference Room from 8:00 a.m. to 1:00 p.m. There will be student-based lectures on Wednesdays from 1:30 p.m. to 3:00 p.m.

During your rotation in the ED, you will function as a Sub-intern. You will see, evaluate, and try to develop a care plan for your patients. You will be supervised at all times. These are your patients and you will be expected to follow and manage them. Your immediate supervisor in the ED will usually be the senior resident, EM3, on duty. You should present to the senior resident, try to develop a differential diagnosis, formulate a plan of diagnostic tests, and try to develop a care plan. Then you and the senior resident can present to the attending. If there is no senior resident quickly available, then you can present directly to the attending. There will be at least one attending and as many as four working at the same time in the adult ED. While in the pediatric ED, you should present directly to the attending.

Prior to seeing any patient, you should bring the chart to your supervisor, so they can assess the acuity. If the patient appears to be high acuity or in extremis, you may still see the patient, but the resident or attending should accompany you to the bedside. While in the ED, we do want you to become involved with high acuity patients, but with a team approach.

Applications for rotations should be directed towards Lisa Crapps, NBIMC Medical Education Coordinator  
[LCrapps@sbhcs.com](mailto:LCrapps@sbhcs.com)

If you have any questions, please contact us.

Mark Watson, MD, Director of the Undergraduate Emergency Medicine [markwatson@pol.net](mailto:markwatson@pol.net)  
David Saloum, Resident Coordinator of the Emergency Medicine Student Rotation

## Summary of Electives Offered by the Department of Medicine

Elective Program	Location**
Acting Internship in Internal Medicine*	1, 2, 3
Asthma, Allergy and Immunology	1
Asthma, Allergy and Immunology Research	1
Cardiology	4
Cardiovascular Diseases	1, 2, 3
Critical Care Medicine	1
Cross-Cultural Ambulatory Medicine	5
Dermatology	1, 2
Emergency Medicine Research	4
Emergency Medicine*	1, 4
Endocrinology	1
End-of-Life Care	1
Ethics at the Bedside	1
Gastroenterology	1, 2, 4
Geriatrics/Home Care	3
Global Tuberculosis Institute	1
Hematology	1, 2, 3
Hematology/Oncology	4
Infectious Diseases	1, 2, 3, 4
Intensive Review of Medicine	1
Internal Medicine Advanced Clerkship	4
Medical Oncology	1, 2
Nephrology	1, 2, 4
Occupational Medicine	4
Preceptorship in Ambulatory Internal Medicine	4
Preventive Cardiology	1
Pulmonary Diseases	1, 2, 3
Pulmonary Medicine	4

\* These programs are elective; they are not available as substitutes for the required Acting Internship in Internal Medicine (Primary Care) or for the required Emergency Medicine rotation.

\*\* 1 = University Hospital, Doctors Office Center (DOC), Bergen Building and/or Medical Sciences Building  
 2 = Department of Veterans Affairs Medical Center in East Orange  
 3 = Hackensack University Medical Center  
 4 = Morristown Memorial Hospital  
 5 = FOCUS Community Health Center  
 6 = Overlook Hospital

## **DEPARTMENT OF MICROBIOLOGY AND MOLECULAR GENETICS**

### **MICR 9000 - RESEARCH IN MICROBIOLOGY AND MOLECULAR GENETICS**

DIRECTOR: Dr. Carol S. Newlon  
973-972-4483 Ext 28952, newlon@umdnj.edu

LOCATION: International Center for Public Health, 225 Warren Street

DURATION: 4 - 8 weeks

WHEN OFFERED: Throughout the academic year (with permission from Dr. Newlon)

NUMBER OF STUDENTS PER ROTATION: Flexible

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Students will participate in ongoing research programs in various areas of microbiology (e.g. molecular biology, genetics, virology, infectious disease) under the preceptorship of a faculty member. Evaluations are made by the faculty member directing the elective work and are based on laboratory technique, contributions to experimental or theoretical aspects of the work, and on the clarity of the written presentation.

This elective is not open to students from other U.S. medical schools or international medical students.

## **DEPARTMENT OF NEUROLOGICAL SURGERY**

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

**DIRECTOR:** Dr. Peter Carmel

**LOCATION:** University Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITES:** Medicine, General Surgery, Neurology

**DESCRIPTION OF ELECTIVE:** Students act as members of the neurosurgical team and are responsible for the work-up and care of neurosurgical patients; they are involved in operative procedures. Students will scrub on cases, take some night call with the residents, and will be asked to prepare and present conferences. The elective is recommended for students interested in neurosurgery, neurology, trauma surgery or critical care.

This elective is not open to international medical students.

## **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 9000 - NEUROSCIENCES RESEARCH**

DIRECTOR: Dr. Peter Dowling

LOCATION: Medical Sciences Building and Dept of Veterans Affairs Medical Center in East Orange

DURATION: 8 weeks minimum

WHEN OFFERED: November - May (with permission from Dr. Hillen)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Students work with a member of the Neurosciences faculty in an area of basic or applied research. The elective provides an opportunity to develop investigative skills in neurosciences.

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

DIRECTORS: Dr. Machteld Hillen

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

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year (with permission from Dr. Hillen)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Neurology

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

REPORTING INSTRUCTIONS: The student should contact Dr. Hillen ([hillenme@umdnj.edu](mailto:hillenme@umdnj.edu)) one week prior to the start of the course and report to the DOC 8141 at 9:00 a.m. on the first day.

### **NEUR 9011 - NEUROLOGY CONSULTATION**

DIRECTORS: Dr. Machteld Hillen

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

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year (with permission from Dr. Hillen)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Neurology

DESCRIPTION OF ELECTIVE: Taken after the Neurology Clerkship, this elective offers further training in neurology. The student participates in seeing neurology consultations with senior residents and attending neurologists.

REPORTING INSTRUCTIONS: The student should contact Dr. Hillen ([hillenme@umdnj.edu](mailto:hillenme@umdnj.edu)) one week prior to the start of the course and report to the DOC 8141 at 9:00 a.m. on the first day.

### **NEUR 9012 - NEUROLOGY PRECEPTORSHIP**

DIRECTOR: Dr. Stephen S. Kamin

LOCATION: Private offices and hospitals of participating neurologists.

DURATION: 2 or 4 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**

DIRECTORS: Dr. Carolyn Hayes-Rosen

LOCATION: University Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 3

PREREQUISITES: Medicine, Pediatrics

DESCRIPTION OF ELECTIVE: Students participate in the clinical service with partial responsibilities for patients. They also participate in teaching rounds. A wide variety of neurological pathology ranging in ages from the premature infant to the adolescent should be encountered. Neurodiagnostic techniques will be taught including CT scan, EEG, ultrasound, and MRI.

REPORTING INSTRUCTIONS: Students should report to DOC 8139 (972-8072), Pediatric Neurology, at 9:00 a.m. on the first day of the elective.

## **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 - 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 4

**PREREQUISITES:** None

#### **DESCRIPTION OF ELECTIVE:**

a) Objectives: This elective exposes third and fourth 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 9010 - WOMEN'S HEALTH AMBULATORY CARE**

DIRECTOR: Dr. Lisa Pompeo

LOCATION: University Hospital

DURATION: 2 or 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Obstetrics and Gynecology 3<sup>rd</sup> year clerkship

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

### **OBG 9020 - GYNECOLOGIC ONCOLOGY**

DIRECTOR: Dr. Bernadette Cracchiolo

LOCATION: University Hospital and Ambulatory Care Center

DURATION: 4 weeks

WHEN OFFERED: By arrangement with department

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: Obstetrics and Gynecology, Medicine, Surgery clerkships

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

### **OBG 9030 - WOMEN'S REPRODUCTIVE CHOICES**

DIRECTOR: Dr. Natalie Roche

LOCATION: University Hospital

DURATION: 2 or 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Obstetrics and Gynecology 3<sup>rd</sup> 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, genetics, pathology, and following patients through the system of care.

### **OBG 9040 - OB/GYN RESIDENT READINESS TRAINING**

DIRECTOR: Dr. Lisa Pompeo

LOCATION: University Hospital

DURATION: 4 weeks

WHEN OFFERED: April only

NUMBER OF STUDENTS PER ROTATION: Minimum 4, maximum 13

PREREQUISITE: Obstetrics and Gynecology 3<sup>rd</sup> year clerkship

DESCRIPTION OF ELECTIVE: This elective is designed for students entering the field of obstetrics, gynecology and women's health and is designed to provide participants with the skills and knowledge to successfully begin their PGY-1 year in Ob/Gyn training. Specifically, it will focus on teaching surgical skills and Ob/Gyn patient management issues commonly encountered as a PGY-1. It will also focus on the "nuts and bolts" of being a resident such as dictating operative notes and discharge summaries, preparing for journal club, resident statistics, M&M conferences and the CREOG in-service exam. In short, this course is designed to teach you everything you didn't realize you didn't know until you became a resident. This course will be taught through a number of methods including: faculty and resident facilitated didactic sessions, small group exercises, surgical skill simulated models, and mock pages and interviews.

### **OBG 9051 - PRENATAL DIAGNOSIS**

DIRECTOR: Dr. Joseph Apuzzio

LOCATION: University Hospital and Ambulatory Care Center

DURATION: 4 weeks

WHEN OFFERED: September - May

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Obstetrics and Gynecology 3<sup>rd</sup> year clerkship

**DESCRIPTION OF ELECTIVE:** The student will spend the first week in ultrasound instruction, starting at 9:00 a.m., Ambulatory Care Center, C Level. During the remainder of the month the student will follow reviews of data and ultrasonographic findings in pregnant patients referred for possible genetic disorders. The student will be asked to present one or more topics per week to the Perinatology Attending physicians.

This elective is not open to international medical students.

### **OBG 9070 - HIGH-RISK OBSTETRICS**

**DIRECTOR:** Dr. Leslie Iffy

**LOCATION:** University Hospital

**DURATION:** 2 - 8 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.

This elective is not open to international medical students.

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

**DIRECTOR:** Dr. Leslie Iffy

**LOCATION:** University Hospital

**DURATION:** 2 - 8 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.

This elective is not open to international medical students.

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

### **OGB 9081 - REPRODUCTIVE ENDOCRINOLOGY/INFERTILITY**

DIRECTOR: Dr. Peter McGovern

LOCATION: University Reproductive Associates, Hasbrouck Heights

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year (December reserved for 3<sup>rd</sup> year students only)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Obstetrics and Gynecology

DESCRIPTION OF ELECTIVE: The student will follow, with the REI Attending physician, patients in the in vitro fertilization program, as well as in- and out-patients with gynecological endocrine or infertility problems. The student will be given topics and patient cases to review, analyze and present to the Attending physician. The student may elect to participate in a specific research project with a faculty member.

This elective is not open to international medical students.

### **OBG 9085 - WOMEN'S HEALTH**

DIRECTOR: **Drs. Lisa Pompeo** and Laura Goldsmith

LOCATION: Medical Science Building

DURATION: 4 - 8 weeks

WHEN OFFERED: Throughout the academic year with permission from Dr. Pompeo

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: Obstetrics, Gynecology and Women's Health

DESCRIPTION OF ELECTIVE: The student(s) will work on an independent project in one aspect of women's health care to be decided upon in consultation with the Director. This may include a review of women's health issues covered in the curriculum as well as a chance to visit other institutions to learn what is being taught in this subject. The goal will be to complete a project that will contribute to the health care of women. It may include observation and participation in the ambulatory care centers in the medical school system that have as a primary focus the care of women in all their needs. It could also include the development of teaching tools to focus on women's health care.

This elective is not open to international medical students.

## 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

**OTHER DIRECTORS:** Drs. N. Bhagat, D. Chu, R. Fechtner, L. Frohman, P. Hersh, P. Langer, P. Lama, R. Rescigno, M. Roy, R. Turbin, M. Zarbin

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

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

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year for UMDNJ students  
Jan – May and Oct – Dec for visiting students

**NUMBER OF STUDENTS PER ROTATION:** 5

**DESCRIPTION OF ELECTIVE:** Students work in the General Eye Clinic and various sub-specialty clinics offered within the Institute of Ophthalmology and Visual Science along with the residents. These will include pediatric ophthalmology, neuro-ophthalmology, cornea and external diseases, retina-vitreous, glaucoma, oculoplastics and uveitis. They learn how to use the ophthalmoscope, slit lamp and other specialized instruments. Students attend the lectures and conferences for the resident staff and have a chance to experience the problems of the office practice. The students will be taught the basis of the general ophthalmology examination and allowed to observe eye surgeries.

**REPORTING INSTRUCTIONS:** The students are to report to the 6<sup>th</sup> 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.

### OPH 9010 - RETINA RESEARCH

**DIRECTOR:** Dr. Monique Roy

**LOCATION:** The Institute of Ophthalmology and Visual Science, Doctors Office Center

**DURATION:** 12 weeks

**WHEN OFFERED:** July - September

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITES:** None

**DESCRIPTION OF ELECTIVE:** Students have an opportunity to work on research projects in the retinal field under the auspices of the Department of Ophthalmology. They will participate in the examination and psychovisual testing of patients with varied retinal disorders.

REPORTING INSTRUCTIONS: On the first day of the elective, students should report to the Doctors Office Center, Suite 6100 at 9:00 a.m. Phone: (973) 972-2029.

### **OPH 9011 - CLINICAL RESEARCH IN RETINAL DISORDERS**

DIRECTOR: Dr. Monique Roy

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

DURATION: 4 or 12 weeks

WHEN OFFERED: 4 weeks throughout the academic year or 12 weeks July-Sept

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None, except for some computer knowledge

DESCRIPTION OF ELECTIVES: 1) Objectives: provide exposure to examination and evolution of patients with retinal disorders using various techniques such as electroretinography; 2) Activities: clinical examination, psychovisual testing; 3) Evaluation: review of skills on a weekly basis.

REPORTING INSTRUCTIONS: On the first day of the elective, students should report to the Doctors Office Center, Suite 6100 at 9:00 a.m. Phone: (973) 972-2029.

### **OPH 9012-ENZYMOMOLOGY/MOLECULAR BIOLOGY STUDY OF THE OCULAR LENS**

DIRECTOR: Dr. B.J. Wagner

LOCATION: Biochemistry and Molecular Biology Department, Medical Sciences Building

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Students work on a biomedical research project utilizing methods of enzymology, protein chemistry and/or molecular biology to investigate the normal and cataractous lens. A report, suitable for inclusion in a manuscript to be submitted for publication, is required.

REPORTING INSTRUCTIONS: On the first day of the elective, students should report to MSB Room E-663 at 9:00 a.m.

This elective is not open to students from other U.S. medical schools or to international students.

### **Additional Elective**

#### **PEDIATRIC OPHTHALMOLOGY (under Department of Pediatrics)**

## DEPARTMENT OF ORTHOPAEDICS

### **ORPS 9000 - CLINICAL ORTHOPAEDICS FOR THE NON-ORTHOPAEDIST**

DIRECTOR: Dr. Fran Patterson

ADMINISTRATIVE CONTACT: **Marie Birthwright** (973) 972-3860

LOCATION: University Hospital and Doctors Office Center

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITES: General Surgery and Family Medicine

**DESCRIPTION OF ELECTIVES:** This elective is specially designed for a medical student who is desiring to enter a field other than orthopaedic surgery but deeply desires to improve their knowledge base of clinical orthopaedics. The elective is focused on providing outpatient evaluation and examination and treatment techniques to the medical student. Consequently, the medical student will spend the majority of the time working with the residents and attendings in the orthopaedics clinics and private offices at the Doctors Office Center. Additional exposure is provided with patient consultation in the emergency room and on the orthopaedic floors as well as interactions with orthopaedic radiology. In general, these students are not required to go to the operating room unless they so desire. No overnight call is required. Extensive opportunity is provided for interchanges regarding the discussion of diagnosis and treatment of simple, common orthopaedic problems. This is particularly directed towards educating the medical student on proper techniques for diagnosis and initializing their treatment as well as providing the baseline information to help the future physicians understand when it is most beneficial to refer patients to orthopaedic surgeons as well as to know what type of diagnostic modalities to utilize in their evaluations and to gain an understanding of certain symptomatology and presentation necessitating further evaluation and treatment.

**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. Patterson.

### **ORPS 9005 - PEDIATRIC ORTHOPAEDICS**

DIRECTOR: Dr. Sanjeev Sabharwal

ADMINISTRATIVE CONTACT: **Marie Birthwright** (973) 972-3860

LOCATION: University Hospital and Affiliated Institutions

DURATION: 2 - 4 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 - ACTING INTERNSHIP IN ORTHOPAEDICS**

**DIRECTOR:** Dr. Fran Patterson

**ADMINISTRATIVE CONTACT:** **Marie Birthwright** (973) 972-3860

**LOCATION:** University Hospital and Doctors Office Center

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 4

**PREREQUISITE:** General Surgery

**DESCRIPTION OF ELECTIVE:** This elective is designed for the medical student contemplating a career in Orthopaedic Surgery. The elective is designed to give the best exposure possible with various members of the Orthopaedic Department and provide a broad overview of orthopaedic surgery at 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 in daily presentations of patient conditions and monthly formal diagnostic reviews. Overnight orthopaedic call is strongly encouraged in this rotation in order to allow the medical students to have a closer working interaction with the orthopaedic resident and provide better opportunities for the student to learn and demonstrate orthopaedic and manual dexterity skills.

**REPORTING INSTRUCTIONS:** On the first day of the rotation students should attend morning report at 6:45 a.m. at UH E 349 and identify themselves to Dr. Patterson.

## **ORPS 9192 - ORTHOPAEDIC RESEARCH**

**DIRECTOR:** Dr. J. R. Parsons

**LOCATION:** Laboratories for Orthopaedic Research, New Jersey Medical School

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITES:** None

**DESCRIPTION OF ELECTIVE:** Students will be assigned to one of many ongoing research activities concerned with the development of advanced orthopaedic implants or materials, new orthopaedic therapeutic modalities or a variety of musculoskeletal basic science research projects. Students work closely with faculty and staff with expertise in orthopaedic surgery, biomechanics, biomaterials, molecular biology, computer science, and the anatomy and physiology of the musculoskeletal system. Examples of some current projects are: computer designed tissue engineering scaffolds for bone repair, synthetic bone graft substitutes, bone micromechanics and remodeling, molecular biology of fracture healing, spinal mechanics, including the testing of hydrogel spine disc implants and the evaluation of advanced ceramic surfaces for bone integrated implants. Students will be evaluated on the basis of their contribution to the project and a written report.

**REPORTING INSTRUCTIONS:** Students should contact Dr. Parsons to arrange a meeting time on the first day of the rotation.

## 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 - 4 weeks

WHEN OFFERED: June - December, February - May

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.

### **PATH 9003 - NEUROPATHOLOGY**

DIRECTORS: Drs. **Sharer** and Cho  
(973) 972-7167 [cho@umdnj.edu](mailto:cho@umdnj.edu), [sharer@umdnj.edu](mailto:sharer@umdnj.edu)

LOCATION: Pathology Department, Medical Sciences Building

DURATION: 4 weeks

WHEN OFFERED: October and March

NUMBER OF STUDENTS PER ROTATION: 3

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Specific areas (e.g. neoplasms, vascular disease) of neuropathology are reviewed in depth. The students review selected autopsy cases of neuropathologic interest, with emphasis on

the clinicopathologic correlation. They also participate in the routine activities of the department related to neuropathology. Grades are determined by the extent of knowledge acquired during the elective, and attendance.

REPORTING INSTRUCTIONS: Students should report to MSB, Room C-525, (972-7167) at 9:00 a.m. on the first day of the rotation.

### **PATH 9005 - CELLULAR AND SUBCELLULAR STUDIES OF CANCER**

DIRECTOR: Dr. Studzinski

LOCATION: Pathology Department, Medical Sciences Building, Room C-546

DURATION: 4 - 12 weeks

WHEN OFFERED: Throughout the year by arrangement with Dr. Studzinski

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: A short course designed as an introduction to research in experimental pathology with special emphasis on preparation of a research project in any branch of the medical sciences. Attention is directed to selection of a project, its planning and preparation, as well as experimental approach and methodology. Practical experience in tissue culture, subcellular fractionation, differentiation of leukemic cells and an introduction to the use of DNA recombinant technology to study disease are included. Grades are awarded on the basis of performance in assigned tasks and a presentation at the end of the course.

### **PATH 9014 - FORENSIC PATHOLOGY**

DIRECTORS: **Drs. Zhongxue Hua** and Junaid R. Shaikh

LOCATION: Regional Medical Examiner's Office, Newark

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 5

PREREQUISITES: None

DESCRIPTION OF ELECTIVES: This elective in forensic pathology offers the opportunity to witness and participate in medicolegal autopsies. Cases are routinely reviewed at 8:30 each morning, and autopsies commence shortly afterward. The office performs an average of six autopsies per day, and they reveal a wide range of natural disease, trauma, and chemical injury. The student will also have the opportunity to report to death scenes with a forensic investigator or with an on call physician. In addition, the student can observe pre-trial preparations between medical examiners and attorneys on various civil and criminal cases as well as attend a few trials where the medical examiners testify as expert witnesses. There are lectures by staff Forensic Pathologists in which a particular topic is discussed in detail. An interesting and complex case, where the cause or manner of death is a problem, is often discussed informally after the autopsy. Opportunities exist to learn from our very modern toxicology laboratory. The staff, including the doctors, are more than willing to teach and explain, and the students' experience here should be very rewarding. This

elective is educational for students of varying subspecialty interests for future residency, both clinical and non-clinical.

Students should contact Ms. Roseann Viola at the Regional Medical Examiner's Office at least two weeks prior to the course start date (973) 648-7258.

### **PATH 9015 - TUTORIAL IN ORTHOPAEDIC PATHOLOGY**

**DIRECTOR:** Dr. William D. Sharpe (Contact Ms. Lea Jacobucci 973-972-4520)

**LOCATION:** Medical Sciences Building

**DURATION:** 4 weeks

**WHEN OFFERED:** By arrangement with Dr. Sharpe

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITE:** Third or fourth year medical student status

**DESCRIPTION OF ELECTIVE:** Orientation to the general pathology of bones and joints, including but not limited to: embryology, normal histology, and physiology of bone; skeletal growth and senescence; osteoporosis; fracture healing; infections of bone; vascular and radiation disease; rickets and osteomalacia; arthritides; joints, ligaments, tendons, and bursae. Congenital disorders will be touched in passing, and, although several sessions will be devoted to primary and metastatic tumors of bone, stress will be on general, not surgical pathology. One session will be devoted to record keeping and trial preparation. There will be ten or twelve three-hour sessions with Dr. Sharpe, time and place to be arranged. Participants will be expected to read all prescribed material and review assigned microscopic slides before formal sessions. A record of discussions will be kept for reference. Student evaluation will consist of an analysis of 10-12 microscopic slides and a written evaluation by the instructor.

International students may participate with the instructor's prior approval.

### **PATH 9016 - DERMATOPATHOLOGY**

**DIRECTORS:** **Drs. W. Clark Lambert** and Robert A. Schwartz

**LOCATION:** University Hospital and MSB

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year with permission from Dr. Lambert or Dr. Schwartz

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** None

**DESCRIPTION OF ELECTIVE:** This course is designed to familiarize students with principles and techniques relevant to the study of skin diseases. Focus is placed on the pathogenesis, micro- and macroscopic presentation of cutaneous lesions. Students are evaluated on the basis of attendance and ability to acquire and apply information pertinent to the science of dermatopathology.

## **PATH 9025 - DERMATOPATHOLOGY RESEARCH**

**DIRECTORS:** Drs. W. Clark Lambert and Robert A. Schwartz

**LOCATION:** MSB H-576 and MSB C-520

**DURATION:** 4 - 8 weeks

**WHEN OFFERED:** Throughout the academic year with permission from Dr. Lambert or Dr. Schwartz

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITES:** None

**DESCRIPTION OF ELECTIVE:** Clerkship covers all aspects of dermatopathology. Student will have the ability to delve into depth in areas of this discipline. Student will attend dermatopathology conferences and selected pathology and/or dermatology clinics and conferences. Student evaluation is done by mentor. Evaluation is based upon interest, enthusiasm and performance.

This elective is not open to students from other U.S. medical schools or to international medical students.

## **DEPARTMENT OF PEDIATRICS**

### **A. GENERAL**

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.

### **B. EVALUATION**

In each of the pediatric electives, students will be assessed on the following items by the supervising faculty attending using the new student evaluation form:

1. History Taking and Interviewing Skills
2. Physical Examination & Assessment
3. Formulation of Diagnosis & Treatment Plan
4. Ability to Apply Knowledge to Patient Care
5. Reliability, Industry & Professional Attitude in Patient Care
6. Interpersonal Skills/Team Work
7. Specialty-Specific Technical Skills
8. Written & Verbal Communication
9. Self-Teaching Skills
10. Potential as a Resident

Grades are assigned as Honors, High Pass, Pass or Fail

### **C. LOCATION**

Electives are taken at University Hospital, Hackensack University Medical Center or Morristown Memorial Hospital.

### **D. TYPES OF ELECTIVES**

The Department of Pediatrics offers two major types of electives:

1. Acting Internships in Pediatrics on the inpatient or outpatient service. The student functions as a junior resident.
2. Subspecialty Rotation. The student is assigned to a subspecialty preceptor and participates in all clinical and academic activities of a subspecialty division.

## **PEDS 9001 - ACTING INTERNSHIP IN PEDIATRICS**

DIRECTOR: Dr. Susan Mautone

LOCATION: University Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 4 total (including mandatory AI)

PREREQUISITES: 40 weeks of clerkships including Medicine and Pediatrics

DESCRIPTION OF ELECTIVE: Goals and objectives: The Acting Internship in Pediatrics seeks to enhance the skills acquired during the third-year clerkship and provide the student the opportunity to function as a first-year pediatric resident.

At the conclusion of this experience, the AI will be able to:

### Knowledge:

- Demonstrate competence in the evaluation, diagnoses, management and disposition of patients with the common inpatient pediatric problems, including knowledge of the anatomic and pathophysiologic correlates of disease and relevant clinical pharmacology.

### Skills:

- Elicit a thorough, accurate and focused history with emphasis on behavioral, psychosocial, environmental as well as medical aspect of illness
- Conduct a comprehensive initial physical examination as well as focused, problem-specific physical examinations to evaluate patients with fever, fluid imbalance and changes in mental status
- Analyze the data base and formulate a thorough problem list with an appropriate differential diagnoses for each problem
- Request and interpret problem-specific and cost-effective diagnostic tests
- Present patient data thoroughly and concisely and in both written and verbal formats
- Communicate effectively with patients and families, including discussion of diagnoses and prognosis and education about disease processes
- Communicate effectively with other members of the healthcare team, including nurses, social workers, dietitians, senior residents, attendings, consultants and colleagues
- Write clear, specific, comprehensive and accurate admitting orders, prescriptions, progress notes and discharge summaries
- Effectively organize, prioritize and manage daily patient care activities
- Demonstrate the ability to perform common procedures, including venipuncture, intravenous catheter insertion, blood culture, urethral catheterization and nasogastric tube insertion
- Teach and supervise junior medical students
- Plan for timely discharge and appropriate disposition and follow-up for each patient.

### Attitudes/Professional Development:

- Recognize enhanced confidence in his/her abilities to assume primary responsibility for the care of patients and function competently as a first-year resident
- Demonstrate professionalism in all clinical interactions including tolerance, sensitivity, cultural awareness, intellectual curiosity, initiative, responsibility and reliability
- Understand the role and appreciate the essential contributions of all providers within the healthcare system



- Appreciate the importance of continually improving one's practice based on self- and external review of practice parameters and critical appraisal of the scientific literature.

**Format:** Students are oriented on the first day and assigned to an inpatient team at University Hospital comprised of a senior resident, 1 or 2 first year residents, third year medical students and a faculty attending. Assignment is to the general pediatric inpatient unit. The duties and responsibilities of acting interns are identical to those of the PGY-1 residents. Acting interns are expected to attend weekly Grand Rounds and daily Morning Report, attending rounds and noontime conference. Students will maintain a log of assigned patients for review with Dr. Mautone.

**Evaluation:** Students are evaluated by the senior resident, chief resident and team attending. Evaluation is based on subjective assessment of knowledge, proficiency in history-taking and physical examination, clinical judgment, presentations, record-keeping and interpersonal skills, using an evaluation form designed by the department.

As Acting Interns are integral members of the patient care team, regular attendance and participation are essential. Unexcused absences are not allowed; excused absences for interviewing are strongly discouraged.

### **PEDS 9006 - PEDIATRIC OPHTHALMOLOGY**

**DIRECTOR:** Dr. Rudolph S. Wagner

**LOCATION:** Pediatrics Clinic, Columbus Hospital, 495 N. 13<sup>th</sup> Street, Newark

**DURATION:** 2 or 4 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. 13<sup>th</sup> St., Newark, at 9:00 a.m. Phone: (973) 485-3186.

### **PEDS 9008 - PEDIATRIC INTENSIVE CARE**

**DIRECTOR:** Dr. Dianne Sin Quee

**LOCATION:** University Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITES:** Medicine, Pediatrics

**DESCRIPTION OF ELECTIVE:** The objective of this elective is to expose students to management problems of critical care in pediatric patients. The student will be required to participate in rounds, conferences and discussions as well as literature review involving patients admitted to the unit during that month.

**REPORTING INSTRUCTIONS:** Students should report to G-Green PICU at 7:00 a.m. on the first day of the rotation. The third year resident will assign patient responsibilities. PICU telephone: x3784

### **PEDS 9009 - PEDIATRIC GASTROENTEROLOGY**

**DIRECTOR:** Dr. Iona Monteiro

**LOCATION:** University Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 3

**PREREQUISITE:** Pediatrics

**DESCRIPTION OF ELECTIVE:** This is a four week preceptorship in clinical pediatric gastroenterology spent with the Pediatric Gastroenterologist, Dr. Monteiro. The interested student will be afforded the opportunity to observe and participate in G-I procedures, consultative services, and management of common G-I disorders in the ambulatory and in-patient setting. Basic reading material will be provided with time allotted for discussion. There is also the unique opportunity to observe the long-term care of pediatric liver transplant recipients.

### **PEDS 9010 - ADOLESCENT HEALTH CARE**

**DIRECTORS:** **Drs. Elizabeth Marino**, Robert Johnson, and Paulette Stanford

**LOCATION:** University Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** June, September - May by arrangement with Dr. Marino only

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** Pediatrics, signature of course director

**DESCRIPTION OF ELECTIVE:** This elective is designed to develop the student's skill in interviewing the adolescent as well as exposing the student to the diagnosis and treatment of adolescent maladies. The student participates in the delivery of service in both the inpatient and outpatient settings. The student will also become involved in the extramural community activities of the division.

Those students who are interested and wish to participate in a research project should contact Dr. Stanford prior to starting the rotation.

Evaluation is made by observation of the student in the clinical setting.

REPORTING INSTRUCTIONS: On the first day of the elective, student should meet Dr. Marino at 10:00 a.m. in F-340 on F-Yellow of the hospital OR by arrangement with Dr. Marino. ([marinoel@umdnj.edu](mailto:marinoel@umdnj.edu), x0360) Dr. Stanford's contact information: [stanfopd@umdnj.edu](mailto:stanfopd@umdnj.edu), x0361

## **PEDS 9018 - PEDIATRIC GASTROENTEROLOGY AND NUTRITION**

DIRECTORS: **Drs. Joel R. Rosh** and Richard Mones

LOCATION: Goryeb Children's Hospital - Morristown Memorial and Overlook Hospitals

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 1 (fourth years only)

PREREQUISITE: Pediatrics, Fourth Year Students Only, approval signature required

**Description:** This elective is designed to expose the student to a variety of gastrointestinal, hepatic, and nutritional disorders in children.

**Learning Experience:** The student will see patients with the attendings in the ambulatory setting as well as in the hospital. Students will be expected to do consults and follow up visits for all inpatients as well as see new consults in the office setting. There will be the opportunity to observe procedures in the Pediatric GI suite.

**Goals and Objectives:**

- Emphasis on diagnostic and therapeutic approaches to common pediatric gastrointestinal problems
- Overview and comprehension of the pathophysiology behind these disorders

**Feedback/Evaluation:** By the attending preceptor

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

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **PEDS 9020 - PEDIATRIC INFECTIOUS DISEASES**

DIRECTOR: **Dr. James Oleske, MD, MPH** and Barry Dashefsky, MD

LOCATION: University Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

**PREREQUISITES:** None

**DESCRIPTION OF ELECTIVE:** This elective primarily offers an experience in evaluating and managing pediatric and adolescent patients hospitalized at University Hospital who are either on the Pediatric Infectious Diseases (ID) Inpatient Service or are General Pediatrics or pediatric subspecialty patients for whom Pediatric ID consultation is requested. Students will work as part of a team routinely comprised of a Pediatric ID Attending Physician and Pediatric ID fellow. The team may also include a Pediatric Resident and/or Adult ID fellow who have elected this rotation. As opportunity permits, students will also attend sessions of the Pediatric HIV and General ID clinics. Students will attend, participate in, and contribute to the regular weekly and ad hoc didactic sessions conducted by the Division. More prolonged clinical and/or research electives in Pediatric ID can be accommodated selectively by individual arrangement.

### **PEDS 9022 - PEDIATRIC INFECTIOUS DISEASES**

**DIRECTOR:** Dr. Julia Piwoz

**LOCATION:** Hackensack University Medical Center

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** Pediatrics

**DESCRIPTION OF ELECTIVE:** This elective offers the student hands-on experience in the evaluation and management of both common and uncommon pediatric infectious diseases. The student will generally have initial contact with the patient in the patient consultation service and be involved with the care of the patients admitted to the Infectious Diseases service, as well as selected outpatients.

At the end of the elective, the student will be able to:

1. Understand the epidemiology and pathogenesis of common pediatric infectious disease problems, including meningitis, pneumonia, skeletal infections, catheter infections, Kawasaki syndrome and infection in the immunocompromised host.
2. Recognize and manage a wide variety of both common and complex pediatric infectious diseases.

### **PEDS 9030 - AMBULATORY PEDIATRICS**

**DIRECTOR:** Dr. Chitra Reddy

**LOCATION:** Doctors Office Center, Suite 4300, (973) 972-2100

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** Pediatrics

**DESCRIPTION OF ELECTIVE:** This third or fourth year ambulatory pediatric elective seeks to enhance skills acquired in the third year pediatric clerkship and provides opportunity for the student to work in an office setting at the level of a first year resident. Under the supervision of attending physicians, 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, j) become proficient in management of common acute and chronic pediatric diseases, k) develop skills in communicating with and counseling patients and families, and l) gain confidence in his/her ability to function competently as a first-year resident.

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.

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 judgement, presentations, 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 9033 - AMBULATORY CARE PEDIATRICS**

**DIRECTORS:** Drs. Donald Hoelzel and Alexander Petron

**LOCATION:** Morristown Memorial Hospital and affiliated sites

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** Pediatrics, approval signature required

**Description:** The student will be exposed to a variety of pediatric disorders in the office/clinic or newborn nursery settings.

**Learning Experience:** The student will spend one month in the pediatric clinic and newborn nursery at Morristown Memorial Hospital under the supervision of the Department of General Pediatrics. Clinic sessions are held daily at the Family Health Center of Morristown. Students will see patients independently under the supervision of the pediatric attending physicians. In addition, morning rounds in the newborn nursery will be held on a regular basis. Other activities will include weekly rounds at the Morristown public schools with the attending physician. The student will be responsible for keeping a record of all patient encounters for review by the preceptors, and for presenting a conference on a topic related to the ambulatory experience.

\

**Goal and Objective:**

- Develop skills in general ambulatory pediatrics in the office/clinic and newborn nursery setting
- Assessment of pediatric patients in the various ambulatory settings

**Feedback/ Evaluation:** By the attending preceptor.

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

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

**PEDS 9040 - PEDIATRIC CARDIOLOGY**

DIRECTOR: Dr. Jose Antillon

LOCATION: University Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Pediatrics

DESCRIPTION OF ELECTIVE: This is a 4 week clinical rotation on the pediatric cardiology service. Students will work up patients under supervision. Emphasis will be on diagnosis and treatment of the most common cardiac disorders; interpretation of ECHO's and EKG's; recognition and treatment of cardiac emergencies; introduction to diagnostic and interventional catheterization; and different types of cardiac surgical procedures.

Student evaluation will be based on attendance, evidence of reading, active participation in discussions and conferences, and demonstration of knowledge. Basic knowledge will be evaluated in cardiac anatomy and physiology and their application in congenital and acquired heart diseases.

**PEDS 9042 - PEDIATRIC CARDIOLOGY**

DIRECTOR: Dr. Christine Donnelly

LOCATION: Morristown Memorial Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 1

**PREREQUISITE:** Pediatrics, approval signature required

**Description:** The one-month elective will include evaluation of the child with suspected cardiac disease.

**LEARNING EXPERIENCE:** Emphasis will be placed on history taking and physical examination in formulating differential diagnosis in both out-patient and in-patient settings. Exposure to diagnostic techniques including electrocardiography, echocardiography, fetal echocardiography, stress testing and holter recording analysis will be included. An opportunity to observe invasive diagnostic techniques will be provided.

**Goals and Objectives:**

- Provide exposure to children with suspected cardiac disease
- Emphasize the diagnostic and therapeutic approaches to pediatric cardiology
- Gain knowledge of diagnostic testing procedures

**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 3<sup>rd</sup> floor and follow sign to Medical Education.

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **PEDS 9050 - CHILD DEVELOPMENT AND PEDIATRIC REHABILITATION**

**DIRECTOR:** Dr. Barbie Zimmerman-Bier

**LOCATION:** Behavioral Health Sciences Building, F-level

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** Pediatrics

**DESCRIPTION OF ELECTIVE:** The objective of the four week program is to become familiar with developmental and behavioral assessment, diagnostic investigations, language and audiometric assessment, education law, and related medical/psycho-social issues to an extent that would enable a practitioner to assess the children suspected of delays and organize/oversee the care of developmentally disabled children. Particular attention will be paid to the evaluation and diagnosis of developmental, learning and behavioral disorders, respective educational and behavioral interventions, coordination of interdisciplinary interventions and the psycho-pharmacological treatment of attentional and behavioral problems. The rotation will involve on-site observation and medical management of autistic children in their special education setting, and familiarization with various community agencies serving the developmentally disabled population.

A second four week elective month is optional. Independent reading/research is encouraged in both the four and eight week elective.

REPORTING INSTRUCTIONS: Students should call Marianela Abreu at (973) 972-3817.

### **PEDS 9060 - DEVELOPMENTAL PEDIATRICS**

DIRECTORS: **Drs. Randy Huron** and Punam Kashyap

LOCATION: Institute for Child Development, Hackensack University Medical Center

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The objectives of this rotation include an introduction to the spectrum of developmental disabilities, including etiology, diagnosis and management.

During the one month block rotation, the student will have an opportunity to observe diagnostic evaluations by the interdisciplinary team (developmental pediatrics, psychology, speech/language pathology, early childhood specialist, OT/PT, etc.). In addition there are various therapy programs to be observed: hearing-impaired, early intervention, communication disordered, etc. The didactic and clinical program is complemented by a designed self-study experience.

### **PEDS 9061 - PEDIATRIC HEMATOLOGY AND ONCOLOGY**

DIRECTOR: Dr. Michael Harris

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

DURATION: 2 - 4 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 - 8 weeks



WHEN OFFERED: Throughout the academic year, with permission from Dr. Schwartz

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: This clerkship 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.

This elective is not open to students from other US medical schools or to international medical students.

### **PEDS 9063 - ADOLESCENT MEDICINE**

DIRECTORS: **Drs. Walter D. Rosenfeld** and Susan Brill

LOCATION: Morristown Memorial Hospital/Overlook Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: Pediatrics, Medicine, Ob/Gyn, approval signature required

DESCRIPTION OF ELECTIVE: This elective is designed to provide exposure to a broad variety of medical and psychological problems in the teenager and/or young adult.

**Learning experience:** The students will have an opportunity to participate in the diagnostic evaluation and management of medical and psychosocial problems of teenagers and young adults. The attending staff with whom students interact include faculty from Pediatrics, Internal Medicine, and Psychiatry. Much time is devoted to supervised direct patient care on the ambulatory service. Other aspects of the elective include a university health service, a chemical dependency program for adolescents, psychosocial and learning evaluations, psychiatric evaluations, scoliosis and orthopedic examinations, a youth detention facility, and patients with eating disorders.

#### **Goals and Objectives:**

- Provide an overview of adolescent medicine
- Emphasize the diagnostic and therapeutic management in this subset of patients

**Feedback/Evaluation:** By the attending preceptor.

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

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **PEDS 9064 - DEVELOPMENTAL PEDIATRICS**

**DIRECTORS:** Drs. Kathleen Selvaggi Fadden, Tosan Nanna-Obi, Vidya Bushan Gupta and Sergy Prokorov

**LOCATION:** Morristown Memorial Hospital/Overlook Hospital on optional days

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** Pediatrics, approval signature required

**Description:** This elective will provide exposure to a broad variety of pediatric developmental disorders.

**Learning experience:** The student will work in our Child Development Center providing evaluation and treatment services to infants, children and adolescents with developmental concerns or disabilities. Areas of emphasis include the follow-up of high risk infants from our neonatal intensive care unit, the evaluation of autism, Attention-Deficit/Hyperactivity Disorder, other behavioral, developmental and learning disorders, the evaluation of infants adopted internationally (in conjunction with Pediatric Infectious Disease) and a psychotropic medication follow-up program. It is an excellent opportunity to work with a team consisting of neurodevelopmental pediatricians, nurse practitioners, social workers, speech, physical and occupational therapists, psychologists and special education consultants. The student will be expected to learn the elements of the neurodevelopmental evaluation of children with a variety of developmental disorders and treatment options for them. The importance of coordinated interdisciplinary care of these complex patients is emphasized.

### **Goals and Objectives:**

- Students will recognize typical vs. atypical developmental milestones
- Students will learn diagnosis and treatment options for Attention-Deficit/ Hyperactive Disorder
- Students will learn appropriate referral services based on laws protecting persons with disabilities

**Feedback/Evaluation:** By the attending preceptor.

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

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

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

DIRECTOR: Dr. Gary E. Eddey  
([garyeddey@matheny.org](mailto:garyeddey@matheny.org))

LOCATION: Matheny Medical & Educational Center, Matheny School & Hospital, Peapack Campus  
DURATION: 2 - 4 weeks

WHEN OFFERED: June, September - May

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.

This elective is not open to students from other US medical schools or to international medical students.

REPORTING INSTRUCTIONS: Students should contact Elizabeth Andolino at (908) 234-0011, ext. 771 prior to the rotation.

**PEDS 9066 - PEDIATRIC CRITICAL CARE MEDICINE**

DIRECTOR: Dr. Bruce Friedman

LOCATION: Hackensack University Medical Center

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: Pediatrics

DESCRIPTION OF ELECTIVE: This elective will acquaint the student with the basic approach to care of the critically ill child. The student will be a member of the critical care team involved in patient management and critical care rounds. Interpretation of laboratory data and improvement of technical skills will be encouraged.

## **PEDS 9070 - PEDIATRIC ENDOCRINOLOGY**

DIRECTOR: Dr. Carol Singer-Granick

LOCATION: University Hospital, Doctors Office Center

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: Pediatrics

DESCRIPTION OF ELECTIVE: This elective is designed to introduce the student to the clinical practice of pediatric endocrinology and metabolism. The student will actively participate in the evaluation of outpatients attending our service, patients with insulin-dependent diabetes mellitus, as well as a variety of endocrine disorders such as congenital adrenal hyperplasia, congenital hypothyroidism, hyperthyroidism, growth hormone deficiency, obesity, etc.

He/she will also become involved in the care of hospitalized patients who are either acutely ill or have been admitted for diagnostic evaluations. The student will be encouraged to pursue an independent line of investigation as his or her interest and time allow. Students with interests in specific areas of endocrinology will be accommodated, if possible, to pursue their own independent course of study.

REPORTING INSTRUCTIONS: Students should contact Dr. Singer-Granick prior to the first day of the elective at [singercj@umdnj.edu](mailto:singercj@umdnj.edu), x2189.

## **PEDS 9081 - CLINICAL GENETICS**

DIRECTOR: Dr. Franklin Desposito

LOCATION: University Hospital

DURATION: 2 or 4 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 9110 - NEONATOLOGY**

DIRECTOR: Dr. T.J. Wei

LOCATION: University Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: Pediatrics

**DESCRIPTION OF ELECTIVE:** This introduction to neonatal-perinatal medicine will make the student aware of how and why perinatal and neonatal intensive care reduces infant mortality and morbidity. The student will participate in attendance at high-risk deliveries, transport of high risk infants, morning report, teaching rounds, endorsement rounds, lectures, and night duties (optional). A research project will be offered to interested students. Attending neonatologists and pediatric residents will participate in evaluating the student's performance.

## **PEDS 9114 - NEONATAL INTENSIVE CARE SUB-INTERNSHIP**

DIRECTOR: Dr. Lawrence Skolnick

LOCATION: Morristown Memorial Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Pediatrics, approval signature required

**Description:** The student will participate in the evaluation/ diagnosis and treatment of high risk infants in the neonatal intensive.

**Learning experience:** The student will function as an intern in the Newborn ICU, which serves the 4,000 infants born annually at Morristown Memorial Hospital, as well as high risk mothers and infants transferred from all over northwestern New Jersey. The NICU is a 27 bed unit under the direction of full-time hospital based neonatologists. The student will also be encouraged to evaluate infants in the regular newborn nursery with problems of lesser acuity, not requiring admission to the neonatal intensive care unit.

### **Goals and objectives:**

- Acquire knowledge of fetal growth and development
- Acquire an understanding of the normal process of labor and delivery and the effects of pathologic events on the fetus and newborn during labor
- Acquire skills necessary for delivery room management of extrauterine adaptation in the early neonatal period
- Learn the common aberrations, course and management of the high-risk infant
- Become familiar with normal variability in structure and development of the full term and large preterm neonate

- Learn the variations in the clinical course of the growing low birth weight infant (preterm or SGA), the factors influencing it, the common aberrations and their management
- Recognize, diagnose, evaluate and manage the commonly occurring disorders of the neonate:
  1. Jaundice
  2. Respiratory distress
  3. Infection
  4. Metabolic disturbances- hypoglycemia, hypocalcemia
  5. Infant of the Diabetic Mother
  6. SGA Infant
- Acquire skills for basic supportive care of the sick neonate:
  1. Umbilical artery catheterization
  2. Peripheral artery catheterization
  3. Lumbar puncture
  4. Percutaneous puncture of arteries and veins
- Develop familiarity with the management of the infant requiring mechanical ventilation
- Evaluate early infant-mother relationships and counsel parents in infant care

**Feedback/ Evaluation:** By the attending preceptor

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

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

**MMH Contact:** Jennifer DiLauri, Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **PEDS 9120 - ACID-BASE, FLUID AND ELECTROLYTES**

**DIRECTOR:** Dr. Constanca Uy

**LOCATION:** University Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** June, August, September, October, November, February, March, April

**NUMBER OF STUDENTS PER ROTATION:** 8

**PREREQUISITE:** Pediatrics or Medicine

**DESCRIPTION OF ELECTIVE:** This elective will cover the basic concepts of renal physiology, water, electrolytes and acid-base metabolism with clinical application through patient contact. The format includes daily rounds, seminars and conferences at University Hospital as well as affiliated hospitals. There will be ample time for library work.

Students will be evaluated on the basis of their gain of knowledge as judged by contribution during the seminars and rounds, and by their work-ups and case presentations.

**REPORTING INSTRUCTIONS:** Students should report to MSB C-684 at 9:00 a.m on the first day of the elective. Bring a calculator. Textbook: Clinical Physiology of Acid-Base & Electrolyte Disorders by Rose & Post, 5<sup>th</sup> ed. Contact information: [someraco@umdnj.edu](mailto:someraco@umdnj.edu), Pat Peluso (secretary) 972-0827.

## **PEDS 9121 - PEDIATRIC NEPHROLOGY**

DIRECTOR: Dr. Constancia Uy

LOCATION: University Hospital and major affiliated hospitals

DURATION: 4 weeks

WHEN OFFERED: June, August, September, October, November, February, March, April

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITES: Pediatrics or Medicine

**DESCRIPTION OF ELECTIVE:** The elective will cover the most frequent clinical conditions in pediatric nephrology, such as nephrotic syndrome, acute glomerulonephritis, urinary tract infections, hypertension, acute and chronic renal failure, and disorders of fluid and electrolytes. The format includes daily rounds, weekly clinics, observations of extracorporeal procedures, seminars, conferences and journal clubs at University Hospital as well as affiliated hospitals. There will be ample time for library work and the student has the opportunity to research a specific subject during the rotation.

Evaluation will be based on the gain in knowledge, as judged by contribution during the seminars and rounds, and by work-ups.

**REPORTING INSTRUCTIONS:** Students should report to MSB C-684 at 9:00 a.m on the first day of the elective. Bring a calculator. Textbook: Clinical Physiology of Acid-Base & Electrolyte Disorders by Rose & Post, 5<sup>th</sup> ed. Contact information: [someraco@umdnj.edu](mailto:someraco@umdnj.edu), Pat Peluso (secretary) 972-0827.

## **PEDS 9140 - PEDIATRIC SUB-INTERNSHIP**

DIRECTOR: Dr. Alan Meltzer

LOCATION: Morristown Memorial Hospital - Goryeb Children's Hospital

DURATION: 4 weeks

WHEN OFFERED: June, August – May, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Pediatrics Clerkship, approval signature required

**Description:** The student will receive advanced training in general pediatrics while functioning as an intern on a 28-bed general pediatric floor. A high faculty/student ratio facilitates individual attention and teaching.

**Learning experience:** Students care for patients under the supervision of senior house officers and full-time teaching attendings but are expected to assume major responsibility for the evaluation and management of patients. They attend daily rounds and teaching conferences along with pediatric house officers and are expected to participate in the preparation of cases for formal presentation.

### **Goals and Objectives:**

- Function as an intern on a general pediatric floor
- Evaluation and management of pediatric patients

- Assist in preparation of patient presentations

**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 3<sup>rd</sup> floor and follow sign to Medical Education.

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **PEDS 9142 - PEDIATRIC PULMONARY MEDICINE**

**DIRECTOR:** Dr. Helen Aguila

**LOCATION:** University Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS:** 2

**PREREQUISITE:** Pediatrics

**DESCRIPTION OF ELECTIVE:** This elective will provide the student an opportunity to: 1) review the structure and function of the lung, including pulmonary defense mechanisms; and 2) gain experience in the clinical evaluation of children with pulmonary disease.

Included will be interpretation of pulmonary function tests and chest radiographs, as well as discussion of other diagnostic procedures such as flexible fiberoptic bronchoscopy and pleural taps.

## **PEDS 9144 - PEDIATRIC PULMONOLOGY**

**DIRECTOR:** Dr. Arthur Atlas

**LOCATION:** Morristown Memorial Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** June, August – May, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** Pediatrics, approval signature required

**Description:** This elective provides an overview of Pediatric Pulmonology including asthma, cystic fibrosis, and bronchopulmonary dysplasia.



**Learning experience:** Students will be given direct patient related responsibilities of evaluation of pulmonary symptoms.

**Goals and Objectives:**

- Give the student an opportunity to observe and understand pulmonary function testing
- Gain insight into the diagnosis and treatment of pediatric diseases

**Evaluations** will be based on overall improvement in the knowledge of pediatric pulmonary medicine as well as attitude and desire to learn.

**PLEASE NOTE:** The first day of the elective, students are to report to the Medical Education Department of Morristown Memorial Hospital located on Simon 3. Go through Simon lobby to first set of elevators - take to 3<sup>rd</sup> floor and follow sign to Medical Education. They will then be directed to the Goryeb Children's Medical Center - 2<sup>nd</sup> Fl. Start time: Medical Education 8:00 A.M. - Children's Center at 9:00 A.M.

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

This elective is not open to international medical students.

**PEDS 9151 - PEDIATRIC EMERGENCY MEDICINE**

**DIRECTOR:** Dr. Robert L. Barricella and staff

**LOCATION:** University Hospital

**DURATION:** 4 weeks (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 12 shifts of twelve hours each; times and dates will be arranged with the attending at the beginning of the month. 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).

## **PEDS 9160 - PEDIATRIC CRITICAL CARE MEDICINE**

**DIRECTOR:** Dr. Gary Kohn

**LOCATION:** Morristown Memorial Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year, with approval from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITE:** Pediatrics, approval signature required

**Description:** The elective in Pediatric Critical Care Medicine offers students the opportunity to study the pathophysiology and treatment of organ system failure, and to better understand the complex interaction between the patient, the patient's family, the disease process and the Pediatric Critical Care team.

**Learning experience:** Students will follow individual patients under the supervision of house staff and Pediatric Intensivists in an 8-bed Pediatric Intensive Care Unit. They will round with the multidisciplinary Pediatric Critical Care team, and attend daily pediatric intake rounds. Students will be invited to take an active role in the discussion of pathophysiology and management, and will be expected to prepare 2-3 brief presentations on patient-related topics. Pertinent reading material will be distributed during the elective to supplement discussions on sepsis, systemic inflammatory response syndrome, cerebral resuscitation, circulatory support, trauma, ventilator management, and other critical care topics.

### **Goals and Objectives:**

- Expose to critically ill pediatric patients
- Understand pathophysiology of disease process
- Understand clinical management of disease process

**Feedback/ Evaluation:** By the attending preceptor.

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

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open for international medical students.**

## **PEDS 9170 - PEDIATRIC ENDOCRINOLOGY AND DIABETES**

DIRECTOR: Dr. Harold Starkman

MEDICAL STUDENT COORDINATOR: Debby Ace - (973) 971-6277

LOCATIONS: Morristown Memorial Hospital and Overlook Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Pediatrics, approval signature required

**Description:** The elective in Pediatric Endocrinology offers the student a one-on-one training experience in pediatric/adolescent endocrinology and diabetes. Emphasis will be on the diagnosis and management of common endocrine disorders.

**Learning experience:** The student will be invited to participate in ongoing clinical research and will share in the interdisciplinary management of young patients with diabetes mellitus, emphasizing psychosocial concerns.

### **Goals and Objectives:**

- Overview of pediatric/adolescent endocrinology and diabetes
- Emphasis on the diagnosis and treatment of common endocrine disorders

**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 3<sup>rd</sup> floor and follow sign to Medical Education.

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open for international medical students.**

## **Additional Electives**

**PEDIATRIC NEUROLOGY** - under Department of Neurology

**PEDIATRIC ORTHOPAEDICS** - under Department of Orthopaedics

**PEDIATRIC PHYSICAL MEDICINE AND REHABILITATION** - under Department of Physical Medicine and Rehabilitation

**PEDIATRIC RADIOLOGY** - under the Department of Radiology

## **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](mailto:pmrresid@umdnj.edu).

### **REHB 9000 - ACTING INTERNSHIP IN PHYSICAL MEDICINE AND 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 - 4 weeks

WHEN OFFERED: June, July, October, December, January, and May. 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](mailto:pmrresid@umdnj.edu).

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

**DIRECTOR:** Dr. Michael Armento

**LOCATION:** Children's Specialized Hospital

**DURATION:** 2 or 4 weeks

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

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITES:** None

**DESCRIPTION OF ELECTIVE:** Two-to-four weeks will be spent at Children's Specialized Hospital, a pediatric rehabilitation facility in Mountainside, N.J. Time will be 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](mailto: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 or 4 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](mailto: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, 4, 6 or 8 weeks

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

**NUMBER OF STUDENTS PER ROTATION:** 1 (additional student with approval only)

**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](mailto: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, 4, 6, or 8 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 1 (additional student with approval only)

**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 or 4 weeks

**WHEN OFFERED:** June, July, October, December, January, and May. 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](mailto:pmrresid@umdnj.edu).

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

**DIRECTOR:** Dr. Steven Kirshblum

**LOCATIONS:** Kessler Institute-West and University Hospital

**DURATION:** 2 to 4 weeks

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

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITE:** REHB 9000

**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.

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

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](mailto:pmrresid@umdnj.edu).

### **REHB 9300 - NEUROMUSCULAR AND PULMONARY REHABILITATION**

**DIRECTOR:** Dr. John Bach

**LOCATION:** Doctors Office Center

**DURATION:** 4 weeks

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

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITES:** None

**DESCRIPTION OF ELECTIVE: Objectives:** (1) To improve the quality and accuracy of the student in history taking, physical examination, diagnosis, and management of the neuromuscular and pulmonary patient stressing the areas that are most pertinent to the practice of physiatry. (2) To develop an ability on the part of the student to recognize the neuromuscular and pulmonary patients who will benefit from a program of physical medicine and rehabilitation, to set realistic goals of treatment and to project reasonable time frames for the achievement of the goals. (3) To develop a sense of cost consciousness as it applies to treatments, length of treatments, and devices. (4) To develop an appreciation for the use of noninvasive alternatives to intubation and tracheostomy for the management of respiratory compromise in neuromuscular and pulmonary patients. (5) To develop an ability to critically analyze current literature and "standard" management approaches.

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

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](mailto:pmrresid@umdnj.edu).

This elective is not open to international medical students.

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

**DIRECTOR:** Dr. Peter Yonclas

**LOCATION:** Please contact the department



DURATION: 2 or 4 weeks

WHEN OFFERED: June, July, October, December, January, and May. 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](mailto: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](mailto:pmrresid@umdnj.edu).

## **REHB 9402 - COMPLEMENTARY AND ALTERNATIVE MEDICINE**

**DIRECTOR:** Dr. Ann Cotter

**LOCATION:** Rehabilitation Institute of Morristown Memorial (RIMM)

**DURATION:** 4 weeks

**WHEN OFFERED:** June, August, October, February, and April. Please contact PM&R department for availability. **Open to New Jersey Medical School students only.**

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITE:** Medicine Clerkship

**DESCRIPTION OF ELECTIVE:** This elective is designed to provide medical students with an introduction and exposure to the growing field of Complementary and Alternative Medicine (CAM).

**Learning experience:** The goals of this elective are to provide the student with the opportunity to become familiar with various CAM modalities, how they are practiced, and who they are practiced on. The student will gain an appreciation for the cultural belief systems from which the various modalities were derived. In addition, this course will increase the student's awareness of the potential applications of CAM within (or as an adjunct to) allopathic clinical practice.

The student will be expected to observe, assist with, and participate in the practice of different types of CAM. The student will learn the risks, benefits, and appropriate uses of various CAM modalities in promoting wellness and preventing illness, as well as in the healing and alleviation of specific medical problems (i.e. asthma and allergies, headache, musculoskeletal pain, hypertension, irritable bowel disease, gastro-esophageal reflux disease (GERD), smoking cessation, infertility, attention deficit hyperactivity disorder (ADHD). Problems encountered will fall both within and outside of the traditional scope of Physical Medicine and Rehabilitation. Depending on the student's interests, and the availability of preceptors, the student may either choose to survey various CAM practices (such as acupuncture, homeopathy, ayurvedic medicine, nutritional and holistic medicine, manual and touch therapies, yoga, and herbal medicine (including herb-drug interactions and contraindications) or focus solely on one or two practices and gain an increased functioning knowledge of these particular modalities. The student will develop proficiency in determining which types of patients would most likely benefit from a referral to a CAM practitioner.

There will be both required and optional readings from texts and journals, as well as a requirement to research and report on aspects of CAM that come up during patient evaluation and discussion. In addition, a 30-minute, literature based presentation on the applicability of CAM modalities for one medical condition (topic to be chosen with preceptor) is required by each student. Students will be required to provide literature citations and hand in their presentation in Powerpoint or Word format. Mentors will provide didactic lectures in their particular specialty.

**Evaluation:** The student will be evaluated according to NJMS guidelines on the basis of interest and participation in the CAM practitioner's activities, as well as on the 30 minute presentation.

By the end of this course, the student will better understand not only what motivates many patients to seek alternative and complementary therapies, but also will better understand the science, the therapeutic uses, and the contraindications of the various "complementary" modalities being sought by their future patients. The student will be able to see the practical application of "integrative medicine" in a clinical health care setting. The student will help strengthen the newly-forming bridge between allopathic and alternative medicine.

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

## **DEPARTMENT OF PREVENTIVE MEDICINE AND COMMUNITY HEALTH**

### **PMCH 9002 - SPECIAL TOPICS IN PREVENTIVE MEDICINE**

DIRECTOR: Dr. John Bogden

LOCATION: Medical Sciences Building

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The course objective is to improve a student's skills in critical review of the medical literature. The course requires the preparation of a critical essay on a topic in preventive medicine or public health. The student will conduct a review of literature on the topic under the direction of a faculty member. Frequent communication with the faculty member is required while taking the course. Credit for the course will be given only after an outline, draft and final version of a manuscript on the approved topic have been submitted. The grade for the course will be based on the quality of the manuscript.

Students are encouraged to suggest a topic of considerable interest to them. The final choice of topic will be made by mutual student/course director agreement. The range of possibilities is broad, including topics within the disciplines of community health, environmental health, epidemiology, health care delivery, health economics, nutrition, primary and secondary disease prevention, and other preventive medicine/public health subjects. A topic relevant to the residency training program that the student will pursue may be suitable.

REPORTING INSTRUCTIONS: The student should report to MSB F-590 on the first day of the rotation. Contact the course director in advance at 973-972-5432 or via email ([bogden@umdnj.edu](mailto:bogden@umdnj.edu)) to schedule a meeting time.

### **PMCH 9003 - PREVENTIVE ONCOLOGY**

DIRECTOR: Dr. G. Reza Najem

LOCATION: Medical Sciences Building, Room F-516, (973) 972-4778, [najem@umdnj.edu](mailto:najem@umdnj.edu)

DURATION: 2 - 12 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 9004 - PROBLEM SOLVING IN PREVENTIVE MEDICINE AND CLINICAL EPIDEMIOLOGY**

DIRECTOR: Dr. G. Reza Najem

LOCATION: Medical Sciences Building, Room F-516, (973) 972-4778, najem@umdnj.edu

DURATION: 2 or 4 weeks

WHEN OFFERED: Throughout the academic year by arrangement

NUMBER OF STUDENTS PER ROTATION: 6 (minimum) - 8

PREREQUISITES: NONE

DESCRIPTION OF ELECTIVE: The objective of this course is to help the students in the independent learning and problem solving techniques in clinical preventive medicine and clinical epidemiology. There are four sessions (one each week) for each problem solving project.

First Session: This consists of the presentation of a local public health problem as a case presentation. Dr. Najem will develop the case presentation which will be based on the local available data. Depending upon the nature of the public health problem, the students will be assigned voluntarily to each aspect of the problem.

Second and Third Sessions: These consist of the discussion regarding evidence -and information-compiling approaches and achievements by the students. During these sessions the students will present and discuss the approaches, progress, and difficulties in obtaining the required evidence and information.

Fourth Session: This consists of the discussion and conclusions regarding the public health problem by the students.

In all these sessions, Dr. Najem, as a leader of the problem-solving project, will provide essential guidance. Student evaluation is based upon the amount of work that each contributes in the Problem Solving project and his/her participation in the discussion sessions.

## **PMCH 9022 - A REVIEW OF EPIDEMIOLOGY AND PREVENTIVE MEDICINE**

DIRECTOR: Dr. G. Reza Najem

LOCATION: Medical Sciences Building, Room F-516, (973) 972-4778, najem@umdnj.edu

DURATION: 2 or 4 weeks

WHEN OFFERED: Throughout the academic year by arrangement

NUMBER OF STUDENTS PER ROTATION: 6 (minimum) - 8

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The course consists of three parts:

- a. Review of the principles and methods of epidemiology; biostatistics; problem-solving exercises; and how to critically review the published medical literature
- b. Review of clinical preventive medicine and clinical epidemiology of chronic and infectious diseases. This part also includes review of preventive oncology and preventive cardiology.
- c. It is also within the objective of this review course to prepare the medical students for the Preventive Medicine component of the National Board Part II Examination.

This course requires review of the relevant medical literature.

### **PMCH 9023 - INDEPENDENT STUDY IN PREVENTIVE MEDICINE**

DIRECTOR: Dr. G. Reza Najem

LOCATION: Medical Sciences Building, Room F-516, (973) 972-4778, najem@umdnj.edu

DURATION: 2 - 12 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, najem@umdnj.edu

DURATION: 2 - 12 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 9033 - INTERNATIONAL MEDICINE**

DIRECTOR: Dr. G. Reza Najem

Medical Sciences Bldg, Room F-516, (973) 972-4778, najem@umdnj.edu

LOCATION: Various sites throughout the world

DURATION: 4 - 12 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 4

PREREQUISITES: None

**DESCRIPTION OF ELECTIVE:** The overall objective of this elective is to expose medical students to the medical care system, clinical clerkships, public health problems and their intervention programs in the selected countries. It is the goal of this elective to educate medical students toward the international theme of the World Health Organization **"Health for All."** The elective is designed to be mutually beneficial to both the medical student and the selected country of the student's choice.

A list of selected countries has been prepared by the American Medical Student Association (AMSA). A Funding Guide list for international traveling has also been prepared for the medical students by the AMSA. The medical student, with Dr. Najem's guidance, will select a country from the AMSA list first and then apply for financial support to the organizations listed by AMSA.

The method of student evaluation consists of the evaluation of the medical student by the physician preceptor who supervises the student's performance abroad and by Dr. Najem, upon the student's return. Dr. Najem's evaluation consists of the review of the student's preceptor evaluation and the student's presentation of his/her experiences in the selected country.

This elective is culturally and religion sensitive toward the selected country. Dr. Najem will make sure that students study the published materials regarding the culture and religion of the selected country. Written authorization of liability insurance coverage from the Office of Risk Management is required for all international electives involving patient contact. Dr. Najem will provide health information for international traveling that will be covered before traveling, during traveling and after return.

Further information about this elective can be obtained from Dr. Najem. Students must follow all Registrar Office procedures concerning international externships.

## **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.

**PMCH 9042 - CLINICAL CLERKSHIPS IN THE INDIAN HEALTH SERVICE: COMMUNITY-BASED TRAINING**

DIRECTOR: Dr. G. Reza Najem  
Medical Sciences Bldg, Room F-516, (973) 972-4778, najem@umdnj.edu

LOCATION: Indian Reservation Medical Centers

DURATION: 4 - 12 weeks

WHEN OFFERED: Throughout the academic year by arrangement

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: The overall objective of this elective is to expose medical students to community-based training in clinical preventive medicine and public health. The elective is designed to be mutually beneficial to both the Indian Health Service (IHS) and medical students. Medical students will work under the supervision of board eligible or certified physicians as preceptors.

This is an opportunity through the IHS. The IHS usually provides government housing on site and meals at the hospital kitchen.

Further information about this elective can be obtained from Dr. Najem.

**PMCH 9045 - CLINICAL FIELD EPIDEMIOLOGY AND CLINICAL PREVENTIVE SERVICES AT CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)**

DIRECTOR: Dr. Reza G. Najem  
Medical Sciences Bldg, Room F-516, (973) 972-4778, najem@umdnj.edu

LOCATION: Centers for Disease Control (CDC), Atlanta, Georgia

DURATION: 4 - 12 weeks

WHEN OFFERED: Throughout the academic year by arrangement

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: This elective provides an opportunity for fourth year medical students to practice Clinical Epidemiology and Clinical Preventive Services under the supervision of a CDC Epidemic Intelligence Service (EIS) officer. CDC includes the following units: Center for Chronic Disease Prevention and Health Promotion; Center for Prevention Services; Center for Infectious Diseases; International Health Program Office; Center for Environmental Health and Injury Control; Public Health Practice Program Office; National Institute for Occupational Safety and Health; Epidemiology Program Office; and National Center for Health Statistics.

The medical student along with a CDC EIS officer may work in the investigation of acute health problems throughout the United States.

Students pay for their own living expenses during the elective and the cost for their round trip transportation to Atlanta. However, travel and living expenses related to field investigations outside of Atlanta are paid for by the CDC Epidemiology Program Office.

Interested students should complete and submit an application form. Further information about this elective can be obtained from Dr. Najem.



## **DEPARTMENT OF PSYCHIATRY**

**Prior to registering for any elective in Psychiatry, please contact Rosa Godwin (x5248, BHSB E1453)**

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 9000 - SUBINTERNSHIP IN PSYCHIATRY (INPATIENT UNIT)**

DIRECTOR: Dr. Chitra Malur, Behavioral Health Sciences Building, Room F-1560

LOCATION: University Hospital

DURATION: 4 weeks only

WHEN OFFERED: Throughout the academic year with approval from Rosa Godwin

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Must be at least a third year medical student

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

Note: This subinternship does not fulfill the "Acting Internship" requirement of New Jersey Medical School.

REPORTING INSTRUCTIONS: Students are to report to G-Yellow at 9:00 AM on the first day of their elective.

### **PSYC 9008 - SUBINTERNSHIP IN V.A. PSYCHIATRY**

DIRECTOR: Dr. Saila Donepudi

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

DURATION: 2 or 4 weeks

WHEN OFFERED: Throughout the academic year with approval from 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 house staff evaluation, as appropriate.

### **PSYC 9020 - CHILD AND ADOLESCENT PSYCHIATRY**

DIRECTOR: Dr. Dorothy Grice, BHSB Room F1416

LOCATION: Behavioral Health Sciences Building, University Hospital

DURATION: 4 weeks

WHEN OFFERED: October - May with approval from Rosa Godwin

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Students must be at least third year medical students, and, preferably, students will be in their fourth year. All students must contact the Training Director of Child Psychiatry Residency Program (973 972 0814) *at least one month prior* to their desired rotation month in order to receive permission to participate in this elective. *The rotation is not available in July, August, September or June*

DESCRIPTION OF ELECTIVE: This elective is designed for medical students with a particular interest in child psychiatry and psychosocial aspects of comprehensive health care. This rotation provides a broad exposure to child psychiatric settings, including emergency and crisis evaluation and treatment, consultation to medically ill youth, and clinical experience in child psychiatry specialty clinics. The clinical contact is augmented by inclusion of the medical student in scheduled teaching activities for the child psychiatry residents as well as clinical supervision of the medical student by the child psychiatry residents and child psychiatry faculty. In addition, residents and faculty will support the education of the student through recommendation of specific readings and videotapes, as indicated. Special interests will be discussed and accommodated, if possible and feasible. This should be discussed with the training director prior to beginning the rotation. At the completion of the elective the student is expected to write a brief essay on a topic of interest.

GOALS: The goal of the medical student elective in child psychiatry is to 1) familiarize the student with what a child and adolescent psychiatrist does, 2) to teach the student about the psychosocial aspects of health care, 3) to acquaint the student with diagnosis and treatment of the emotionally and behaviorally disturbed child/adolescent, and, 4) to improve understanding of the underlying problems via the biopsychosocial model.

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

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

DIRECTOR: Dr. Kevin O'Connor, BHSB Room E-1558

LOCATION: University Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year with approval from Rosa Godwin

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Must be at least a third year medical student.

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

**REPORTING INSTRUCTIONS:** Students will report to the consultation/liaison service in the Behavioral Health Sciences Building, room E-1538 (Residents' Library) at 9:00 AM on the first day of their elective.

### **PSYC 9040 - RESEARCH IN PSYCHIATRY**

**DIRECTOR:** Dr. George Petrides

**LOCATION:** Department of Psychiatry, BHSB F-level, & other sites

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year with approval from Rosa Godwin

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITES:** None

**DESCRIPTION OF ELECTIVE:** Students will have the opportunity to participate in a choice of basic and clinical science research activities in psychiatry. Prior to beginning the elective, students should make an appointment with Dr. Petrides, Vice Chair for Research, to plan the elective well in advance.

### **PSYC 9070 - AMBULATORY PSYCHIATRY**

**DIRECTOR:** Dr. Diego Coira

**DURATION:** 4 weeks

**LOCATION:** Hackensack University Medical Center

**WHEN OFFERED:** Throughout the academic year with approval from Rosa Godwin

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITES:** None

**DESCRIPTION OF ELECTIVE:** **Objectives:** (1) To gain experience in "Call Access" which includes telephone interview of potential patients for out-patient services, and gathering and formulating medical information with appropriate triage. (2) To learn how patients are treated in a psychiatric day program. **Activities:** Monday - Friday: Call Access Center in a.m., Adult Day Program in p.m.

### **PSYC 9091 - SUBSTANCE ABUSE**

**DIRECTORS:** **Drs. Saila Donepudi** and Ronald Fudge

**DURATION:** 2 or 4 weeks

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

WHEN OFFERED: Throughout the academic year with approval from 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. At the end of the month a written and oral exam is given. After discussion with attendings and residents a report with a grade is submitted to the Registrar's Office. When a student completes an elective at an outside institution, the director of the program at that institution submits a report with a grade directly to the Registrar's Office.

### **RAD 9001 - PEDIATRIC RADIOLOGY**

DIRECTOR: Dr. Neha Kothari

LOCATION: University Hospital

DURATION: 2 or 4 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 9010 - DIAGNOSTIC RADIOLOGY**

DIRECTORS: **Drs. Stephen Baker** and Pierre Maldjian

LOCATION: University Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year except January and December

NUMBER OF STUDENTS PER ROTATION: 7

PREREQUISITES: None

**DESCRIPTION OF ELECTIVE:** Students rotate through general radiology, neuroradiology, mammography, diagnostic ultrasound, nuclear medicine, musculoskeletal radiology, thoracic radiology, and interventional radiology. Mornings are spent in the clinical areas. There are daily teaching sessions for the medical students with the faculty. A teaching file on CD is also available for self-study. Teaching sessions where the medical students present interesting cases are also incorporated. The students are expected to attend departmental conferences. Lectures in medical decision making as they relate to diagnostic imaging will be given by the chairman. The objective of the program is to provide the student with the skills necessary to analyze common radiographic studies. Emphasis is on chest, abdomen, bone and gastrointestinal studies as well as emergency radiological evaluation. For exposure to ER radiology students are encouraged to observe in the ER reading area with the assigned Radiology attending or resident physician. Computed tomography, nuclear medicine, magnetic resonance and ultrasound evaluations are essential elements in the program. A better understanding of the imaging modalities, their limitations, advantages and costs will also emerge from the experience. Student evaluation is based upon participation in the conferences, attendance, presentation of cases, and a written and practical examination. Students may also write an optional case report or review a paper on a contemporary radiology issue for extra credit.

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

## **RAD 9012 - DIAGNOSTIC RADIOLOGY**

**DIRECTOR:** Dr. Jeanne Schwartz

**LOCATION:** Morristown Memorial Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** September – June, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 3

**PREREQUISITES:** Approval signature required

**Description:** This course is designed to provide a basic orientation to Diagnostic Radiology, including nuclear radiology, ultrasound, computerized tomography, MRI and special procedures.

**Learning experience:** The student will be expected to observe and thoroughly familiarize himself/herself with the mechanics and formats of fluoroscopic examinations, interventional procedures, ultrasound, nuclear medicine, and CT scanning. Film interpretation will be conducted on a one-to-one basis by staff radiologists in daily reading sessions. A daily teaching session for students and residents will be conducted, covering a specific area of interest, moderated by a staff radiologist. A very extensive book and audiovisual library of selected radiologic topics and a complete teaching file are available in the conference area of the Department of Radiology.

### **Goals and Objectives:**

- Basic overview of Diagnostic Radiology
- Familiarize themselves with numerous radiology procedures
- Gain knowledge in film interpretation
- Continuing education via our book and audio library/1:1 interaction with radiologist

**Feedback/ Evaluation:** By the attending preceptor.

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

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

***This elective is not open to international medical students.***

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

**DIRECTOR:** Dr. Sohail Contractor

**LOCATION:** University Hospital

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 1

**PREREQUISITES:** None

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

The student will become aware of the role of interventional radiology in clinical practice. The various types of procedures along with their indications and the advantages and disadvantages of each procedure and examination will be discussed.

**REPORTING INSTRUCTIONS:** Students should report to UH, C-235 (Angio Suite) on the first day of the rotation.

## **RAD 9030 - RADIATION ONCOLOGY**

**DIRECTOR:** Dr. Charles Cathcart

**LOCATION:** University Hospital

**DURATION:** 2 - 8 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**

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

### **SURG 9010 - INTRODUCTION TO CRITICAL CARE RESEARCH**

DIRECTOR: Dr. George Machiedo

LOCATIONS: NJMS G-Level and Department of Veterans Affairs New Jersey Health Care System

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2 (NJMS students only)

PREREQUISITE: Completion of first year medical school

DESCRIPTION OF ELECTIVE: The student(s) will learn Methodologies of Research on Diseases seen in Surgical Critical Care Unit, particularly SEPSIS, Multisystem Organ Failure and the Systemic Inflammatory Response Syndrome (SIRS). Attention will be directed toward the integration of animal models with Clinical Disease. The student(s) will make rounds in the SICU at both University Hospital and the VA, will work with the Surgical Residents on carrying out Clinical Research Protocols, will learn the ethical and administrative aspects of Human Subject Research, and will participate in animal studies. Evaluation will be based on level of participation in rounds, originality of ideas and questions and submission of a 2-4-page paper that will be reviewed and graded by the course director.

This elective is not open to visiting students.

REPORTING INSTRUCTIONS: Students should report to MSB, G-507 (Dr. Machiedo's lab), at 8:00 a.m. on the first day of the rotation.

### **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 - 4 weeks (discuss with course director)

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.

This elective is not open to international medical students.

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

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

DIRECTOR: Dr. Barry Esriq

ATTENDINGS: Drs. Paul Bolanowski, Justin Sambol and Douglas Jackson

LOCATION: University Hospital

DURATION: 4 - 8 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

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

REPORTING INSTRUCTIONS: Students should report at 9:00 a.m. to UH F-102 on the first day of the elective. Telephone: x3555

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

DIRECTORS: Dr. Edwin Deitch and staff (Elective Team)

LOCATION: E Level, University Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: Medicine, General Surgery

DESCRIPTION OF ELECTIVE: The student is an active member of one of the general surgical teams. This elective is designed to teach each student the principles of clinical surgery. Graded responsibility in the care of surgical patients is encouraged.

### **SURG 9053 - ACTING INTERNSHIP / HACKENSACK**

DIRECTOR: Dr. Richard Davies

LOCATION: Hackensack University Medical Center

DURATION: 2 or 4 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 or 4 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 or 4 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. Keith D. Cook

LOCATION: University Hospital, G-142

DURATION: 2 or 4 weeks

WHEN OFFERED: June, September - May

NUMBER OF STUDENTS PER ROTATION: 2

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.

This elective is not open to students from other U.S. medical schools.

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 or 4 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 9064 - ACTING INTERNSHIP /JERSEY CITY MEDICAL CENTER**

**DIRECTOR:** Dr. William Host

**LOCATION:** Jersey City Medical Center

**DURATION:** 4 weeks

**WHEN OFFERED:** Throughout the academic year

**NUMBER OF STUDENTS PER ROTATION:** 2

**PREREQUISITES:** Medicine, General Surgery

**DESCRIPTION OF ELECTIVE:** Students, performing in PGY1 capacity, will work in both clinical and private practice settings. Exercising their discretion, they will select clinical experiences from a wide variety of elective, emergent and traumatic cases. Working closely with senior faculty they will rapidly achieve graded responsibility, and will participate in the surgical experience from work up through final return to referring physician. Students will be required to arrive at each procedure intellectually prepared, and will have an opportunity to present cases at Tumor Board, make a subject presentation to the department and participate in selected conferences.

### **SURG 9065 - ACTING INTERNSHIP /MORRISTOWN**

**DIRECTOR:** Mark Cockburn, M.D.

**LOCATION:** Morristown Memorial Hospital

**DURATION:** 4 or 8 weeks

**WHEN OFFERED:** Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**NUMBER OF STUDENTS PER ROTATION:** 3

**PREREQUISITES:** Medicine, General Surgery, approval signature required

**Description:** This elective is designed to allow fourth year medical students to act as sub-interns on an active general surgery service in a hospital which sees a wide variety of surgical diagnostic/management and procedures.

**Learning experience:** The student will rotate on a busy general surgical service at a large tertiary care community based teaching institution. He or she will be exposed to all surgical subspecialties including general and laparoscopic surgery, vascular surgery, oncological and endocrine surgery, colorectal and general thoracic surgery for a broad introduction to surgical management of a variety of illnesses in a community hospital setting. The student will help manage the pre- and post-operative care of the patients, under the guidance of a full staff of general surgical residents and the full time and voluntary faculty. The student will be expected to attend all of the teaching conferences. Night call averages every three to four nights.

**Goals and Objectives:**

- Overview of general and sub-specialty surgery
- Introduction to surgical management of a variety of illnesses

**Evaluation:** The resident and attending surgeons on the service and the course directors will evaluate Students.

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

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open for international medical students.**

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

**DIRECTOR:** Dr. Soly Baredes and staff

**LOCATION:** University Hospital

**DURATION:** 2 or 4 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 (8<sup>th</sup> floor) at 8:00 a.m. on the first day of the elective. Email: [baredeso@umdnj.edu](mailto:baredeso@umdnj.edu)

### **SURG 9151 - OTOLARYNGOLOGY RESEARCH**

DIRECTORS: Dr. Patricia Connelly

ADMINISTRATIVE CONTACT: Faye Wiggins

LOCATION: University Hospital

DURATION: 4 - 8 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: A research elective month in the Division of Otolaryngology-Head and Neck Surgery at University. Students will participate in on-going research with members of the Division.

This is primarily for students interested in entering the field of Otolaryngology-Head and Neck Surgery.

REPORTING INSTRUCTIONS: Students should arrange for an appointment with Dr. Connelly one month prior to beginning the elective. Call 973-972-4588 to arrange an appointment. Report to the Otolaryngology Office, DOC 8, at 9:00 a.m. on the first day of the elective. Email: [connelpe@umdnj.edu](mailto:connelpe@umdnj.edu), [quraisha@umdnj.edu](mailto:quraisha@umdnj.edu)

### **SURG 9175 - PEDIATRIC SURGERY**

DIRECTOR: Dr. I. Thomas Cohen

LOCATION: University Hospital

DURATION: 2 or 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 3

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Objectives: (1) to understand the embryology relevant to congenital anomalies in neonates, infants, and children; (2) 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. (3) 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, and (4) participation in the evaluation of new and follow-up patients in the Pediatric Surgery office setting.

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: Ambulatory Care Center, E-1620

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Surgery and Medicine Clerkships

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 9184 - PLASTIC SURGERY**

DIRECTOR: Dr. Stephen Colen

LOCATION: Hackensack University Medical Center

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1



PREREQUISITES: Third year surgery

DESCRIPTION OF ELECTIVE: This is a comprehensive course covering all aspects of plastic surgery. Students will be required to attend conferences at University Hospital, but will obtain their clinical exposure at HUMC.

### **SURG 9195 - TOPICS IN SURGICAL RESEARCH**

DIRECTOR: Dr. Charles R. Spillert

LOCATION: G-502, Medical Sciences Building, (973) 972-4530, spillercr@umdnj.edu

DURATION: 4 weeks

WHEN OFFERED: September - May

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

DESCRIPTION OF ELECTIVE: Studies involving projects in a variety of experimental models are available in the Surgical Research Laboratory. There is a wide opportunity to learn different experimental techniques commonly employed in the surgical laboratory. Students are encouraged to submit material concerning their completed research work for presentation at meetings or for publication.

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

DIRECTOR: Dr. David H. Livingston

LOCATION: N. J. State Trauma Center at University Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: General Surgery

DESCRIPTION OF ELECTIVE: In this elective, students will serve as members of the Trauma Team at the New Jersey State Trauma Center, which is on call 24 hours a day alternating on a one-day-on, one-day-off basis. Days off are given in compliance with the 80 hour work week. They will participate in the initial assessment of trauma victims in the Emergency Room and in the subsequent pre-operative, operative and post-operative management. In addition, there are conferences, didactic lectures and daily rounds which allow for expansion of the interests of the student. There is opportunity for participation in research protocols and pursuit of research interests as well.

Students will also gain exposure to EMS pre-hospital patient care activities with ground and aeromedical transports.

Evaluations will be made by the Surgical Attending in charge, the Trauma Fellow, and the Chief Resident based upon presentations, observed skills, judgment and clinical performance.

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

DIRECTOR: **Drs. Anne Mosenthal** and David Livingston

LOCATION: University Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 3

PREREQUISITES: None

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

REPORTING INSTRUCTIONS: Students should report to the Trauma Critical Care Fellow in the Surgical ICU (UH E-Green) at 8:30 a.m. on the first day of their rotation. The phone number for the SICU is 973-972-5754 and the phone number for Dr. Mosenthal is 973-972-6398. Dr. Mosenthal's email address is [mosentac@umdnj.edu](mailto:mosentac@umdnj.edu) and Dr. Livingston's email address is [livingst@umdnj.edu](mailto:livingst@umdnj.edu).

## **SURG 9235 - CRITICAL CARE PROBLEMS IN SURGERY**

DIRECTORS: **Drs. Steven A. Blau** and D. John LoCurto

LOCATION: Hackensack University Medical Center

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: General Surgery

DESCRIPTION OF ELECTIVE: In conjunction with a full time intensivist and I.C.U. resident, the student functions as a member of the team in the Surgical Intensive Care Unit caring for the critically ill patients. The student will build on his or her knowledge of basic science and apply this to patient problems. S/he will learn to perform common I.C.U. procedures such as placement of arterial lines, central lines and pulmonary artery catheters. The curriculum will include such diverse subjects as shock and resuscitation, fluids and electrolytes, surgical nutrition, ventilator management and controversies in critical care. Students will learn from formal didactic sessions as well as from bedside discussions in which they will be expected to be active participants. They will take call at night on the trauma service and learn the basics of assessment and management of their patients.

## **SURG 9241 – SURGICAL INTENSIVE CARE UNIT**

DIRECTOR: Dr. John Adams

LOCATION: Morristown Memorial Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: Third year clerkships in Medicine and Surgery, approval signature required

DESCRIPTION OF ELECTIVE: The subintern will be expected to fully integrate into the critical care team. This will involve active participation in ICU work rounds, teaching rounds, clinical tasks and independent study. A working knowledge of ventilator management, nutrition, types of shock, pressor support, and antibiotic usage will be demonstrated by the student by the end of the rotation and prepare them for their post-graduate year.

**Goal and objectives:** To provide medical students with the clinical skills and cognitive abilities required for decision-making and problem solving in diseases requiring critical care consultation or intervention. The objectives of the Critical Care Sub-internship will be achieved by providing a structured supervised clinical experience in an inpatient setting and through problem based didactic teaching and directed reading. Specific objectives, the activities performed to achieve them, and the methods of assessing whether they were achieved include:

- Identify conditions for which critical care intervention or consultation is necessary
- Understand the scope and limitations of surgical therapy for ICU diagnosis
- Understand key components of the physiology, pathophysiology and supportive measures in critical care and how they affect outcomes
- Understand the principles of postoperative care
- Communicate clinical information in an efficient and reliable manner
- Appreciate fundamental technical skills necessary for surgical care
- Acquire the knowledge necessary for the care of the critically ill patient
- Establish an effective relationship with patients, and patients' families.

**Feedback/Evaluation:** By the attending preceptor.

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

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

MMH Contact: Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open for international medical students.**

## **SURG 9243 - RESEARCH IN HISTORICAL MEDICINE**

DIRECTOR: Dr. Kenneth Swan

LOCATION: Medical Sciences Building G-590, Ext 5016

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: None

**DESCRIPTION OF ELECTIVE:** This elective is designed to permit those students with an interest in the history of medicine to pursue an in-depth investigation of a particular subject or individual. These students are to prepare an original manuscript suitable for publication on their area of interest. As this type of research frequently entails extensive travel and document search time, four weeks are to be credited. A research mentor must be selected and approved prior to initiation of this elective.

This elective is not open to students from other U.S. medical schools.

### **SURG 9245 - GASTROINTESTINAL SURGERY**

DIRECTOR: Dr. Rolando H. Rolandelli

LOCATION: Morristown Memorial Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITES: Medicine, General Surgery, approval signature required

**Description:** This elective will expose the medical student to a variety of gastrointestinal diseases requiring surgery.

**Learning experience:** The student will become an integral part of the team, managing patients undergoing GI surgery. Daily bedside rounds will be made with the attending staff. During these rounds, each student will be responsible for presentation of at least one patient per day. This verbal presentation and the required notation in the chart will be based on a systems review with daily planning and decision making within this structure. The student will be expected to suggest clinical management decisions with approval of the supervising resident or attending. The student will be directly supervised by the surgical attending as well as the teaching resident assigned to B Service. Didactic teaching will center around a monthly conference with varied topics; a monthly Journal Club; Surgical Grand Rounds for the Department of Surgery as well as Surgical Morbidity and Mortality. In addition, the student will be required to organize a twenty-minute presentation on a topic of his/her choice during the rotation. The student will also be responsible for interacting with the consults and the primary surgical attending. Mechanical skills will be included: e.g. pulmonary artery and arterial line insertion.

#### **Goals and Objectives:**

- Participate in daily patient rounds
- Prepare verbal patient presentations daily
- Recommend clinical management with approval of supervising resident
- Attend didactic lectures, journal clubs, rounds, etc.
- Interact with primary surgeon and consultants
- Apply mechanical skills as needed

**Feedback/ Evaluation:** By the attending preceptor.

**PLEASE NOTE:** The first day of the elective, students are to report at 8:15AM to the Department of Surgery of Morristown Memorial Hospital, located on Franklin B. From there they will be directed to the Medical Education Department on Simon 3.

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5315 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international students.**

### **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 or 4 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 or 4 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, in-

cluding vascular and cardiovascular surgery. A research project which may be of a clinical nature will be encouraged.

### **SURG 9261 - NONINVASIVE VASCULAR LABORATORY**

DIRECTORS: Dr. Brajesh K. Lal and Dr. Frank Padberg

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

DURATION: 2 or 4 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 will be allowed to scrub on selected surgical procedures on patients they have examined in the vascular laboratory.

REPORTING INSTRUCTIONS: For VA elective: Dr. Padberg is located in Room: 2-110, VA East Orange, (973) 676-1000 Ext 1208. For UH elective: Students must contact Ms. Annie McDonald in advance of the start date and meet with Dr. Lal on the first day of the rotation (972-5596, MSB G-570).

### **SURG 9264 - VASCULAR SURGERY**

DIRECTOR: Dr. Charles Moss

LOCATION: Hackensack University Medical Center

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 2

PREREQUISITE: General Surgery

DESCRIPTION OF ELECTIVE: The objective of this program is to provide internship experience on a vascular surgical service with a wide variety of clinical material. Formal rounds with residents and the director are held as well as a series of conferences which the student will 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.

### **SURG 9265 - VASCULAR SURGERY AND VASCULAR DIAGNOSTIC LABORATORY**

DIRECTOR: Dr. Mark Cockburn

LOCATION: Morristown Memorial Hospital

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year, with permission from Jennifer DiLauri, MMH Medical Education, 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: Medicine, General Surgery, approval signature required

**Course Description:** This four-week elective will provide the student with an introduction to peripheral and non-coronary vascular disease. It will provide a multi-disciplinary approach to the non-invasive and radiologic diagnosis as well as surgical and medical management of thrombotic and occlusive disease affecting the peripheral arteries and veins will be provided. Special areas of interest include extracranial cerebrovascular disease, deep venous thrombophlebitis and new catheter-based techniques of therapy in peripheral arterial disease.

**Goals and objectives:**

- Overview of peripheral and non-coronary vascular disease
- Develop a multidisciplinary approach to non-invasive and radiographic diagnosis
- Provide insight into medical and surgical management of these disease processes

**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 3<sup>rd</sup> floor and follow sign to Medical Education.

For electives taken in June, arrangements are to be made through Jennifer DiLauri, Medical Education Department at 973-971-5316.

**MMH Contact:** Jennifer DiLauri, Medical Education 973-971-5316 [jennifer.dilauri@ahsys.org](mailto:jennifer.dilauri@ahsys.org)

**This elective is not open to international medical students.**

## **SURG 9270 - RESEARCH PROJECT IN UROLOGY**

DIRECTOR: Mark L. Jordan, M.D.  
[jordanml@umdnj.edu](mailto:jordanml@umdnj.edu)

ADMINISTRATIVE CONTACT: **Rosemarie Puig**, [puiglaro@umdnj.edu](mailto:puiglaro@umdnj.edu)

LOCATION: Medical Sciences Building G-536

DURATION: 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITES: None

**DESCRIPTION OF ELECTIVE:** At least four weeks will be spent in the lab of Mark Jordan. The student will be involved in a research project. Under the guidance of Dr. Jordan, the student will learn and be given the opportunity to perform experimental techniques. These techniques will include methods of cell line culturing and growth, small animal cellular protein analysis via gel electrophoresis and immunochemistry and mRNA

investigation via Northern blotting with cDNA hybridization. The student will have weekly sessions with Dr. Jordan to plan and complete a research project. The project will be designed by Dr. Jordan based on the individual interests of the student.

This elective offers exposure to basic science research related to the field of urology, and provides the student with the opportunity to master research techniques, as well as to write and publish a paper or abstract.

Students are evaluated on the basis of their enthusiasm, interest, and completion of their project. Students are required to write up their research activities in either formal paper or abstract form.

REPORTING INSTRUCTIONS: Students should report to MSB B-536 at 7:30 a.m. for location assignment.

### **SURG 9271 - RESEARCH IN VASCULAR SURGERY**

DIRECTOR: Dr. Peter Pappas

DURATION: 4 weeks

LOCATIONS: University Hospital

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 1

PREREQUISITE: Surgery

DESCRIPTION OF ELECTIVE: This elective will focus on the diagnosis, evaluation and treatment of patients with peripheral vascular disease. The student will be exposed to the non-invasive vascular imaging center, and participate in the outpatient vascular clinic. In addition, hands-on experience with open and endovascular cases will be provided to the student.

REPORTING INSTRUCTIONS: Student should report to UH Suite E-401 at 8:30 a.m. on the first day of the elective. Contact Dr. Pappas (director) - [pappaspi@umdnj.edu](mailto:pappaspi@umdnj.edu), (973) 972-4599 or Stephanie Westee (coordinator) - [westeest@umdnj.edu](mailto:westeest@umdnj.edu), (973) 972-6295.

### **SURG 9300 - ORAL AND MAXILLOFACIAL SURGERY**

DIRECTOR: Dr. Vincent Ziccardi

LOCATION: University Hospital

DURATION: 2 - 4 weeks

WHEN OFFERED: Throughout the academic year

NUMBER OF STUDENTS PER ROTATION: 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 of 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, plastic surgery and general surgery.