

RUTGERS

New Jersey Medical School

ELECTIVES for **Third Year Students** *2016-2017*

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

FOREWORD

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

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

Best wishes for a rewarding and enjoyable year.

Heidi Schwalb
Registrar
B-640 Medical Sciences Building

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

ELECTIVES SCHEDULE – Third Year Students

ACADEMIC YEAR 2016-2017

	CALENDAR DATES			BROCHURE DESIGNATION
2016	July 18	to	July 29	July
	September 12	to	September 23	September
	November 7	to	November 18	November
	November 28	to	December 9	December/Shared
2017	January 30	to	February 10	February
	March 27	to	April 7	April
	May 22	to	June 2	May

All third year electives are graded PASS/FAIL.

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

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DEPARTMENT OF ANESTHESIOLOGY

ANES 9500 - ANESTHESIOLOGY

Elective Director: Name: Lawrence Chinn, M.D. Email: chinnlw@njms.rutgers.edu
Phone: 973-972-0470
Elective Coordinator: Name: Lisa Chappelle Email: chappeld@njms.rutgers.edu
Phone: 973-972-0470

When offered: June, August - May

Max number of NJMS third year students per rotation: 5

Max total number of 3rd and 4th year students per rotation: 5

Prior approval required: NO

Course Description: 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 and administration of anesthesia and postoperative follow-up of patients. Application of cardiac, respiratory, metabolic, renal and fluid/electrolyte physiology to clinical conditions are emphasized. The basic skills of tracheal intubations and airway maintenance are learned in the operating room. The students will also be exposed to the fundamentals of regional anesthesia. All anesthetic procedures are done under the supervision of faculty anesthesiologists. Opportunities for anesthetics for specialties as cardiothoracic surgery, neurosurgery and obstetrics exist for the well motivated students. A lecture series designed specifically for the medical students will enhance the knowledge gained from "hands on" experience in the operating room.

Learning outcomes & evaluation methods:

The standard NJMS evaluation form is used. Factors taken into consideration include motivation, punctuality, basic science and clinical knowledge, the ability to apply that knowledge to the practice of anesthesia and technical skills. Also included in the evaluation process is a series of 10 questions designed to:

1. Help to initiate discussion in the operating room
2. Cover the basic principles of pharmacology, physiology and technology related to the practice of Anesthesia
3. Evaluate the student's understanding of the information derived from the OR experience, from lecture material and from independent reading.

Key responsibilities of the student while on elective:

Patients are scheduled for the OR between 07:15am and 07:30am. Students should arrive by 6:45 a.m. to take note of the anesthesia set-up and to see the patient pre-operatively.

1. An attempt will be made to schedule students to a room on the prior afternoon. However, due to cancellations and additions to the schedule, students may be reassigned to a different room.
2. It is understood that students have other commitments, and it is their responsibility to notify the Anesthesia Department if they will not be available on a particular day.
3. Student lectures are given Monday, Wednesday, Thursday and Friday at 10:00am or 1:30 pm in MSB-E545 unless stated otherwise. The schedule is distributed at the beginning of the elective and attendance is mandatory. Students are also strongly recommended to attend the resident didactic sessions which are held on Tuesday at 1:00-5:00 pm and Thursday at 1:00-4:00 pm in MSB-E545. Grand Rounds are held each Wednesday morning in MSB B552 at 7:00 am.
4. The NJMS attendance policy for clinical elective is as follows: Attendance is expected at all scheduled activities. The elective director may grant a student an excused absence for:
 - a. Severe personal illness
 - b. Mandatory jury duty

- c. Death of an immediate family member
- d. By approval of the Associate Dean for Students Affairs

Students must notify the respective director or coordinator of the expected absence on or before the scheduled start time of the rotation. He or she must speak to the director or coordinator and be granted the excused absence. The director may require appropriate documentation. In the event that the director or coordinator is unavailable, the student must email the coordinator and contact the Associate Dean for Student Affairs. Unexcused absences are not permitted and will result in failure and repetition of the rotation.

First Day Reporting Instructions: Students should report to MSB-E545 at 6:45 AM and then report to Lisa Chappelle in MSB E-547 at 10:00 am to receive elective items (textbook, lecture schedule, scrubs, etc.).

ANES 9520 - ANESTHESIOLOGY at Hackensack University Medical Center

Elective Director: Name: Dr. Mark Schlesinger Title: Chairman, Anesthesiology

Administrative Contact: Nina Gallori, (551) 996-2419

When offered: Throughout the academic year

Max number of NJMS third year students per rotation: 4

Max total number of 3rd and 4th year students per rotation: 4

Prior approval required: NO

Course Description: 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 and administration of anesthesia and postoperative follow-up of patients. Application of cardiac, respiratory, metabolic, renal and fluid/electrolyte physiology to clinical conditions are emphasized. The basic skills of tracheal intubations and airway maintenance are learned in the operating room. The students will also be exposed to the fundamentals of regional anesthesia. All anesthetic procedures are done under the supervision of faculty anesthesiologists. Opportunities for anesthetics for specialties as cardiothoracic surgery, neurosurgery and obstetrics exist for the well motivated students. A lecture series designed specifically for the medical students will enhance the knowledge gained from "hands on" experience in the operating room.

Learning outcomes & evaluation methods: The standard NJMS evaluation form is used. Factors taken into consideration include motivation, punctuality, basic science and clinical knowledge, the ability to apply that knowledge to the practice of anesthesia and technical skills.

The NJMS attendance policy for clinical elective is as follows: Attendance is expected at all scheduled activities. The elective director may grant a student an excused absence for:

- a. Severe personal illness
- b. Mandatory jury duty
- c. Death of an immediate family member
- d. By approval of the Associate Dean for Students Affairs

Students must notify the respective director or coordinator of the expected absence on or before the scheduled start time of the rotation. He or she must speak to the director or coordinator and be granted the excused absence. The director may require appropriate documentation. In the event that the director or coordinator is unavailable, the student must contact the Associate Dean for Student Affairs. Unexcused absences are not permitted and will result in failure and repetition of the rotation.

First day reporting instructions: Students are expected to report to the Office of Academic Affairs, Alfred N. Sanzari Building, 360 Essex Street, 4th Floor, Suite 402, Hackensack, NJ 07601 at 8:00 a.m. on the first day of the rotation. Contact number: (551) 996-2016.

ANES 9530 - INTRODUCTION TO ANESTHESIOLOGY @ St. Barnabas Healthcare Center

Site(s) of Elective: St. Barnabas Health Care Center (Livingston)
Elective Director: Name: Richard Pitera, M.D. Title: Assistant Program Director
Phone: 973-322-5512 Email: anmiller@sbhcs.com

Contact Information: Debbie Likon, Medical Student Coordinator, dlikon@barnabashealth.org,
973-322-5548

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 5
Max number of 3rd and 4th year students per rotation: 5
Prior approval required: NO

Course Description: 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 and administration of anesthesia and postoperative follow-up of patients. Application of cardiac, respiratory, metabolic, renal and fluid/electrolyte physiology to clinical conditions are emphasized. The basic skills of tracheal intubations and airway maintenance are learned in the operating room. The students will also be exposed to the fundamentals of regional anesthesia. All anesthetic procedures are done under the supervision of faculty anesthesiologists. Students will rotate through various anesthesia services including, but not limited to: Pediatrics, Cardiothoracic, Obstetrics and Ambulatory Services. Medical students will attend the resident run 3:00-5:00pm daily lectures as well as 6:00am attending lectures and Journal Club. A booklet complete with a course syllabus will be distributed at the beginning of the rotation.

Learning outcomes & evaluation methods: The standard NJMS evaluation form is used. Factors taken into consideration include motivation, punctuality, basic science and clinical knowledge, the ability to apply that knowledge to the practice of anesthesia and technical skills. Also included in the evaluation process is a series of 10 questions designed to:

1. Help to initiate discussion in the operating room
2. Cover the basic principles of pharmacology, physiology and technology related to the practice of Anesthesia
3. Evaluate the student's understanding of the information derived from the OR experience, from lecture material and from independent reading.
4. There is also a written exam that is administered in the beginning and at the end of the rotation.

Key responsibilities of the student while on elective:

1. Patients are scheduled for the OR at 7:30am. Students should arrive at 6:45am in time to take note of the anesthesia set-up and to see the patient pre-operatively.
2. An attempt will be made to schedule students to a room on the prior afternoon. However, due to cancellations and additions to the schedule, students may be reassigned to a different room.
3. It is understood that students have other commitments, and it is their responsibility to notify the Anesthesia Department if they will not be available on a particular day.
4. Students will attend the 3pm-5pm resident run conference.
5. Students will also be assigned a reading schedule they will follow. There are twice weekly 6am attending lectures the student should attend.

6. The NJMS attendance policy for clinical elective is as follows: Attendance is expected at all scheduled activities. The elective director may grant a student an excused absence for:
 - a. Severe personal illness
 - b. Mandatory jury duty
 - c. Death of an immediate family member
 - d. By approval of the Associate Dean for Students Affairs

Students must notify the respective director or coordinator of the expected absence on or before the scheduled start time of the rotation. He or she must speak to the director or coordinator and be granted the excused absence. The director may require appropriate documentation. In the event that the director or coordinator is unavailable, the student must contact the Associate Dean for Student Affairs. Unexcused absences are not permitted and will result in failure and repetition of the rotation.

DEPARTMENT OF EMERGENCY MEDICINE

EMED 9500 - EMERGENCY MEDICINE

Site(s) of Elective: University Hospital
Elective Directors: Name: Michael Anana, M.D. Title: Assistant Professor
Sangeeta Lamba, M.D. Phone: 973-972-5128
Email: ananami@njms.rutgers.edu
lambasa@njms.rutgers.edu

Administrative Contact: Anjana White, whitean@njms.rutgers.edu, (973) 972-2489

When offered: Designated third year elective time.
Max number of NJMS third year students per rotation: 5
Max total number of 3rd and 4th year students per rotation: 12
Prior approval required: NO

Course Description: This course is a two week clinical rotation in the Emergency Department (ED) at University Hospital. The course is offered to third year medical students. Students must complete six 12-hour shifts. Shifts will be a combination of 7a-7p and 7p-7a. At least two shifts should be weekend shifts and two should be overnight shifts. This elective is designed to introduce third year students to the practice of Emergency Medicine in an urban hospital setting. Students will be responsible for performing focused history and physical examinations, creating a differential diagnosis list, planning the diagnostic work-up, and participating in the final disposition plan. All of the student's responsibilities will be under the direct guidance of an attending physician in the ED. Students will also be encouraged to perform many of the therapeutic procedures that may be necessary under direct supervision. Students are expected to learn the appropriate use of consultation services in patient evaluation and care. Clinical evaluations will be completed at the end of each shift by the attending on duty.

Students are required to attend the EM residency conferences which are held every Wednesday from 8 a.m. to 12 noon. Students are also required to hand in a case write up based on a case they managed in the ED. This write-up should include the following: History, ROS, PE, ED Management, Decision-Making Analysis. A relevant evidence-based article related to the case should be included as well as a discussion of this article.

Learning outcomes & evaluation methods:

Evaluation: Students will receive a written evaluation for each shift completed. The final clinical grade and comments will be a composite of evaluations submitted by faculty in the ED and the course director. At the conclusion of the elective, students are required to submit a written case report based on an actual case seen during the elective. The case reports will be graded pass/fail. This elective is graded pass/fail per NJMS grading policy.

Outcomes: Outcome measures are adequate performance in the clinical area as determined by shift evaluations and a case report that is appropriate for the third year level of training.

Key responsibilities of the student while on elective: The students responsibilities include: obtaining history and physical exams on ED patients, formulation of a differential diagnosis for each patient seen, participation in the diagnostic work-up and final disposition, be present during resuscitations which occur during their shift, and include a discussion of the patients current psycho-social factors during ED case presentations.

Learning outcomes & evaluation methods: Learning will be variable based upon cases seen. Feedback from EMS personnel will be given to the course director.

Key responsibilities of the student while on elective:

Arrive on time for the designated shift and appropriately dressed with University ID

Read/complete assignments when given

Ask questions of EMS personnel

Demonstrate respect for patients and EMS personnel

First Day Reporting Instructions: The student MUST contact Mr. O'Brien at obrienwe@uhnj.org AT LEAST 2 weeks prior to the start of the rotation to discuss meeting time and location. Further reporting information will be provided by email.

DEPARTMENT OF FAMILY MEDICINE

FMED 9500 - AMBULATORY FAMILY MEDICINE

Site(s) of Elective: Mountainside Family Practice Residency Program, St. Mary's Residency Program, Somerset Residency Program, or other residency or community family practice approved sites by the course director.

Elective Director: Name: Chantal Brazeau, M.D. Title: Director, Predoctoral Education
Phone: 973-972-2494 Email: brazeacm@njms.rutgers.edu

When offered: During designated third year elective time

Max number of NJMS third year students per rotation: 4

Max total number of 3rd and 4th year students per rotation: 6

Prior approval required: YES

Special instructions: The student should contact Ms. Norma Hernandez, 973-972-3188, norma.hernandez@rutgers.edu, at least 6 weeks before the beginning of the elective, to organize elective locations and scheduling, and to process approval requests for preceptors and the elective.

Course Description: The elective 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. Under the supervision of clinical faculty, the student will have the opportunity to practice in a private community practice or at the outpatient care facility of a family medicine residency program. Depending on location and their assigned faculty preceptor, the students may participate in additional activities such as nursing home or hospital rounds, home visits or school visits. In addition some residency programs have clinics in women's health, HIV and eating disorders. This elective will provide the student with a better understanding of the discipline of family medicine and familiarize the students with that portion (about 90%) of medical problems that never reach the hospital, with emphasis on their diagnosis and management by the family physician using a patient and family centered biopsychosocial approach. Because of the variety of sites we can customize the elective to the student's interest. This elective is available to any student who wishes to increase his/her exposure to family medicine as well as for students who are enrolled in the family medicine scholar's program. To best customize the experience we require 6 weeks notice prior to the start of the elective.

Learning outcomes & evaluation methods:

Outcomes: During this elective, it is expected that a student will conduct patient interviews and physical examinations and present these findings to clinical faculty throughout the course of each clinical sessions, commensurate to the student's ability and knowledge level. The presentations must include differential diagnosis and management using a patient and family centered, biopsychosocial approach to care. The faculty preceptors will provide mid-elective feedback to the student.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. The clinical grade will be 100% of the final grade. This elective is pass/fail per NJMS grading policy.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty throughout the clinical session.
2. The student will write notes on the patients he/she sees.
3. If the faculty/preceptor has irregular hours, such as no Wednesday afternoon hours and evening hours, the student is expected to modify his/her schedule to fit their preceptor's schedule such that the minimum requirement of 37.5 hours is met.

First Day Reporting Instructions: The student will report to the selected outpatient location on the first day of the elective. The time of arrival will depend on the location and preceptor since patient care schedules vary between locations. The student must contact the preceptor the week prior to the beginning of the rotation to confirm time of arrival. The student must wear his/her white coat and bring his/her ID, stethoscope, reflex hammer and PDA.

DEPARTMENT OF MEDICINE

MED 9510 - CLINICAL GASTROENTEROLOGY

Site(s) of Elective: University Hospital, E178
Elective Director: Name: Zamir Brelvi, M.D., Ph.D. Title: Director, Division of Gastroenterology & Hepatology
Phone: 973-972-4434 Email: brelvz@njms.rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 3
Prior approval required: NO

Course Description: The course is designed to introduce medical students to clinical gastroenterology. The division sees a broad range of digestive disease disorders including diseases of the esophagus, stomach, small and large intestine, liver and pancreas. Student will participate in the management of both inpatients at University Hospital, as well as outpatients at GI Clinic. They will understand the evaluation and management and learn the pathophysiology of a diverse range of gastrointestinal disorders. Students will be exposed to emergent and elective endoscopic procedures including upper endoscopy, colonoscopy, push enteroscopy, ERCP, endoscopic ultrasound, and capsule endoscopy. They will also be able to observe other diagnostic modalities such as GI motility testing, breath testing, radiologic studies, and nutritional evaluation.

During the elective students will be expected to perform focused GI interviews and physical exams on patients and present these findings each day to the GI consult attending. Students will get feed back from the attending at the end of the elective. Also, students will become familiar with the use of endoscopy and other GI diagnostic tests to evaluate patients.

Learning outcomes & evaluation methods:

Students clinical grades will be computed using the New Jersey Medical School evaluation form. The students will be evaluated by the assigned GI Attending of the month at the end of the rotation.

First Day Reporting Instructions: Students should report to University Hospital (E178), Medical Special Procedures at 8:00 AM. The phone number is 973-972-6077.

MED 9515 - DERMATOLOGY

Site(s) of Elective: University Hospital
Elective Director: Name: R.A. Schwartz, MD, MPH Title: Professor & Head, Dermatology
Phone: (973) 972-6255 Email: hesselld@njms.rutgers.edu

When offered: Throughout the academic year.
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 4
Prior approval required: NO

Course Description: We welcome you to Dermatology, which is not a medical subspecialty. In addition, it is one that sees both children and adults. It is a dynamic and academically rigorous primary specialty involving the recognition and management of disorders of the skin, accessible mucosal surfaces, and adnexal structures. A rotating student should learn how to examine the skin, how to describe

cutaneous findings, and how to recognize common skin disorders. We hope to provide you with an educationally rewarding and enjoyable experience.

Learning outcomes & evaluation methods: Learn to describe cutaneous findings employing the specialized dermatology vocabulary. Attempt to recognize some common dermatologic disease processes. Faculty will evaluate students based on their mastery of the objectives as demonstrated in the clinical setting.

Key responsibilities of the student while on elective:

1. Interpersonal and communication skills: learn to interact with colleagues in another specialty
2. Be sensitive to the special cosmetic/body image concerns of dermatology patient
3. Professionalism: Demonstrate a sense of personal altruism by consistently acting in the patient's best interest; demonstrate the gracious conduct appropriate for a physician.

First Day Reporting Instructions: Please report to F-level, Dermatology Clinic, Ambulatory Care Building @ 9:00 AM Monday.

MED 9520 - CLINICAL NEPHROLOGY

Site(s) of Elective:	University Hospital		
Elective Director:	Name: Dr. Alluru Reddi	Title: Professor	
	Phone: 973-972-4100	Email: reddias@njms.rutgers.edu	

Administrative Contact: Vivian Romero, (973) 972-4100

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 3
Max total number of 3rd and 4th year students per rotation: 4
Prior approval required: NO

Course Description: This elective will expose the student to the clinical practice of nephrology in both inpatient and outpatient settings. The students will work closely with attending physicians and nephrology fellows, performing histories and physicals on nephrology consultations. The students will make daily rounds with the nephrology team on the inpatient consult service, will attend outpatient nephrology clinic two half days a week, and will make rounds on chronic hemodialysis patients in an outpatient unit. Each student will make a formal presentation on a topic relevant to clinical nephrology.

Learning outcomes & evaluation methods:

Outcomes: During this elective it is expected that a student will conduct patient interviews and physical exams and present these findings to clinical faculty on a daily basis. Students will gain competency in evaluating and managing electrolyte disorders, acute renal failure, and issues relating to chronic kidney disease and end stage renal disease. Clinical faculty will provide mid-elective feedback to the student. The student will also be required to make a formal presentation on a topic relevant to clinical nephrology.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. The formal presentation will be graded pass/fail. The clinical grade is weighted at 80% of the final grade, and the presentation is weighted 20%. This elective is graded pass/fail per NJMS grading policy.

Key responsibilities of the student while on elective:

1. The student is expected to report to all activities on time.
2. The student is expected to see patients daily in the clinical setting, write notes on the patients, and present findings to clinical faculty.

3. The student is expected to review current and recent literature on nephrology, with guidance from clinical faculty.
4. The student is expected to make one formal presentation on a topic in clinical nephrology.

First day reporting instructions: On the first day of the elective, the student should report to MSB I-524 and see Ms. Vivian Romero at 9:30 a.m. (romerovi@njms.rutgers.edu)

MED 9525 - LIVER DISEASE AND TRANSPLANT

Site(s) of Elective:	University Hospital	
Elective Director:	Name: Nikolaos Pyrsopoulos, MD	Title: Director of Gastroenterology and Hepatology
	Phone: 973-972-5252	Email: pyrsopni@njms.rutgers.edu

Administrative Contact: Cassandra Edwards (arisedck@njms.rutgers.edu, 972-5252)

When offered: Throughout the academic year

Max number of NJMS third year students per rotation: 2

Max total number of 3rd and 4th year students per rotation: 2

Prior approval required: No

Course Description: The course is designed to introduce third year medical students to liver diseases program at New Jersey Medical School. It will focus on the spectrum of liver diseases seen in non-transplant and transplant setting. Students will gain knowledge in the clinical evaluation of patients with various liver diseases including physical assessment, identification of clinical problems, formulating a differential diagnosis, utilizing appropriate diagnostic tools and managing such patients. Students will learn about non-transplant medical management of liver diseases as well as indications and work-up of patients with liver diseases for transplant and the timing of liver transplant. This elective will provide students with better understanding of various liver diseases and their management, including liver transplant.

Learning outcomes & evaluation methods:

During this elective it is expected that a student will conduct patient interviews and physical exams and present these findings to clinical faculty on a daily basis. Clinical faculty will provide mid-elective feedback to the student. The student will also be required to present two case reports during this elective. At the conclusion of this elective, the student will be required to submit a one-page essay summarizing his/her experience on the elective. The essay must reference elective objectives.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. The case reports will be graded pass/fail, as will the paper and the essay. The clinical grade is weighted at 60% of the final grade, and the case reports and essay are weighted 10% each. A student cannot pass the elective without submission of the case reports and essay. This elective is graded pass/fail per NJMS grading policy.

Key responsibilities of the student while on elective: The student will be expected to see patients in the clinical setting and present findings to clinical faculty on a daily basis. The student will write notes on the patients he/she sees. While on hospital rounds, the student will be expected to review patient's charts prior to rounds. The student is expected to review current literature on selected topics. Two written case reports and one essay are required to be completed.

First day reporting instructions: Student should report to Cassandra Edwards' office, MSB H-538, at 9:00 a.m. on the first day of the rotation. An overall introduction will be provided at that time.

MED 9530 - CRITICAL CARE MEDICINE

Site(s) of Elective: Internal Medicine, Division of Pulmonary and Critical Care Medicine
Elective Director: Name: Anne Sutherland, MD Title: Assistant Professor, MICU Director
Phone: 973-972-6111 Email: aks199@njms.rutgers.edu

When offered: Throughout the academic year
Maximum number of NJMS third year students per rotation: 3
Maximum total number of 3rd and 4th year students per rotation: 3
Prior approval required: NO

NEJM–Specialties and Topics-Critical Care

Mandatory Reading:

Severe Sepsis and Septic Shock, August 29, 2013; D.C. Angus and T. van der Poll
Resuscitation Fluids, September 26, 2013; J.A. Myburgh and M.G. Mythen
Circulatory Shock, October 31, 2013; J.L. Vincent and D. De Backer
Ventilator-Induced Lung Injury, November 28, 2013; A.S. Slutsky and V.M. Ranieri
Dying with Dignity in the Intensive Care Unit, June 26, 2014; D. Cook and G. Rocker

Strongly Suggested Reading:

Sedation and Delirium in the Intensive Care Unit, January 30, 2014; M.C. Reade and S. Finfer
Bleeding and Coagulopathies in Critical Care; February 27, 2014; B.J. Hunt
Nutrition in the Acute Phase of Critical Illness, March 27, 2014; M.P. Casaer
ICU-Acquired Weakness and Recovery from Critical Illness, April 24, 2014; J.P. Kress and J.B. Hall

Recommended Texts:

- Manual of Critical Care, edited by Suhail Raof
- Critical Care Medicine, 4th ed., authored by John J. Marini and Arthur P. Wheeler

Course Description: This is an intense immersion into critical care medicine with a focus on severe sepsis and septic shock, respiratory failure and the acute respiratory distress syndrome (ARDS). Other common conditions that might be encountered include: 1) venous thromboembolism, 2) metabolic disarray from uncontrolled diabetes, 3) gastrointestinal hemorrhage, 4) acute renal failure, 5) congestive heart failure, 6) hypertensive urgencies & emergencies, and 7) acute liver failure. The students are expected to round with the MICU teams, to assist in the care of the patients, to present cases and to attend the teaching sessions.

Learning outcomes & evaluation methods: The student will be expected to perform initial, as well as daily patient interviews, physical examinations and review of pertinent ancillary studies. The student will then present this information to the supervising faculty during morning rounds. The student's ability to collect, analyze, summarize and succinctly present the relevant medical information, together with the demonstration of overall medical knowledge, interpersonal skills, professionalism, etc. will be the basis of the final examination/grade.

Key responsibilities of the student while on elective:

- The student will review the chart and examine the patient prior to the work rounds
- Student will collect, analyze, summarize and present medically relevant patient information
- Student will be able to perform literature search on the appropriate topic and apply the results to the patient care
- Overnight call is NOT expected

First day reporting instructions: Student should report to the MICU (phone: 973-972-6072) at 8:00 AM on the first day of rotation.

MED 9540 - ENDOCRINOLOGY, DIABETES & METABOLISM

Site(s) of Elective: University Hospital and East Orange VA Medical Center
Elective Director: Name: David Bleich, M.D. Title: Division Chief
Phone: 973-972-6170 Email: bleichda@njms.rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 1
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: NO

Course Description: This elective is designed to introduce third year students to the practice of endocrinology, diabetes, and metabolism in an inner city setting and a veteran's population. Under the supervision of clinical faculty, students will participate fully in our out-patient and in-patient clinical services. Particular emphasis on system-based practice occurs in our diabetes clinics. This elective will provide students with an opportunity to learn about a wide spectrum of endocrine disease and develop clinical skills in managing simple and complex patients. The student will also have the opportunity to integrate clinical medicine with molecular pathophysiology of disease.

Learning outcomes & evaluation methods:

Outcomes: During this elective it is expected that a student will conduct patient interviews and physical exams and present these findings to clinical faculty on a daily basis. Systems based practice will be assessed by faculty in diabetes clinic using the following scale: 1 = superior, 2=average 3 = unsatisfactory. Clinical faculty will provide mid-elective feedback to the student. The student will also be required to make two or more oral case presentations during our clinical case conference. At the conclusion of this elective, the student will have the option to make a short PowerPoint presentation on a topic of interest in endocrinology.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. The oral case reports will be graded on a 3-point scale as above. The PowerPoint presentation and oral presentations will be weighted equally 40% and 40%. The remaining 20% will be faculty assessment of professionalism and systems-based knowledge. This elective is graded pass/fail per NJMS grading policy.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty on a daily basis. The student will write notes on the patients he/she sees.
2. While on hospital rounds, the student will be expected to review patient charts prior to rounds and make case presentations to the attending faculty.
3. The student is expected to report all activities on time.
4. The student is expected to review current literature or review designated section on endocrinology.
5. One oral PowerPoint presentation is optional.

First day reporting instructions: On the first day of the elective the student should report to the East Orange VA Hospital. Instructions and schedule will be delivered by e-mail 1-2 weeks prior to the beginning of the elective. The student must wear his/her white coat and bring his/her ID, stethoscope, reflex hammer, and PDA.

MED 9550 - HEMATOLOGY & ONCOLOGY

Site(s) of Elective: University Hospital Cancer Center/B Level, Room 1120
Elective Director: Name: Pankhoori Saraf, M.D. Title: Assistant Professor of Medicine
Phone: (973) 972-6257 Email: ps857@njms.rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: NO

Course Description: This elective is designed to introduce 3rd year students to the multi-disciplinary practices of Oncology and Hematology. The students will have an opportunity to practice in the University Hospital Hematology/Oncology clinic, as well as gain experience in outpatient and inpatient consultations. Students will also have the opportunity to attend multidisciplinary conferences in Head and Neck Oncology, Lung Cancer, GYN Oncology, Hepatobiliary Cancer and Musculoskeletal Oncology. Emphasis is placed on pathologic diagnosis, staging, and therapeutic decision-making, as well as learning about common toxicities of chemotherapeutic agents. Emphasis is also placed on learning about transitioning patients to palliative/end-of-life care.

Learning outcomes & evaluation methods:

1. Informal evaluations on one-to-one basis
2. Formal Evaluations

Key responsibilities of the student while on elective:

1. Interviewing and examining patients in the outpatient clinic setting
2. Participation in clinical inpatient consultations and procedures.
3. Attendance at conferences and tumor boards

First day reporting instructions-VERY IMPORTANT: Report to the division assistant, Jennifer Ahmad, located at CC A-1115 (Cancer Center) to receive instructions to the elective and schedule of departmental activities and then meet Elective Director.

MED 9560 - INFECTIOUS DISEASES

Site(s) of Elective: University Hospital, VA New Jersey Health Care System (VANJHCS), and Hackensack University Medical Center (HUMC)
Elective Director: Name: Lisa L. Dever, M.D. Title: Program Director, Infectious Diseases Fellowship
Phone: 973-972-7837 Email: deverll@njms.rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 3
Prior approval required: NO

Course Description: This elective is designed to introduce students to the broad practice of Infectious Diseases in a hospital and ambulatory setting. Students will round with the Infectious Diseases Inpatient Consult Service under supervision of a Fellow and an Attending Physician. They will be assigned inpatients to evaluate and follow and will also participate in the care of patients in the emergency department and ambulatory setting as well. They will be asked to review the literature related to their

patients' infections and present their findings. They will attend and participate in all Infectious Diseases related conferences and journal clubs. In special circumstances and with the permission of the Elective Director, the student may elect to participate in ongoing basic science or clinical infectious diseases research.

Learning outcomes & evaluation methods: The student will conduct patient interviews and physical examinations and present their findings to the ID Fellow and Attending Physician on a daily basis. Student consultation notes and progress notes will be reviewed and signed by the Attending Physician. Feedback will be provided to the student on an ongoing basis and will include at a minimum a mid-rotation and end of rotation verbal feedback session. In addition, a written evaluation will be provided at the end of the rotation using the NJMS Student Evaluation Form.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present their findings to the ID Fellow and Attending Physician and document their findings in consult and progress notes. They will see a minimum of 5 new patients each week.
2. The student will be expected to review pertinent medical literature as it relates to the practice of infectious diseases and the patients they are following. They will succinctly present their findings to the ID Consult Service.
3. The student is expected to review the microbiology laboratory data for each of the patients they are following. This will include a review of gram stains and blood smears in the microbiology or hematology laboratories.

The student is required to attend and participate in all ID Conferences and journal clubs.

First day reporting instructions: The student should call Ms. Lisa Wade in the ID Division Office at 973-972-7837 or email her at wadeli@njms.rutgers.edu at least one day in advance to obtain instructions of where to report. They will be provided with the pager number for the ID Fellow on the Consult Service who will instruct them where to meet in the hospital.

MED 9563 – INFECTIOUS DISEASES

Site(s) of Elective:	Newark Beth Israel Medical Center		
Elective Director:	Name: Eliahu Bishburg	Title:	Director of Infectious Disease
	Phone: 973-926-5212	Email:	Ebishburg@sbhcs.com

When offered: During designated third year elective time
Max number of NJMS third year students per rotation: 1
Max total number of 3rd and 4th year students per rotation: 1
Prior approval required: YES

Course Description:

This elective is designed to introduce students to the broad practice of Infectious Diseases in a hospital and ambulatory setting. Students will round with the Infectious Diseases Inpatient Consult Service under supervision of a Fellow and an Attending Physician. They will be assigned inpatients to evaluate and follow and will also participate in the care of patients in the emergency department and ambulatory setting as well. They will be asked to review the literature related to their patients' infections and present their findings. They will attend and participate in all Infectious Diseases related conferences and journal clubs. In special circumstances and with the permission of the Elective Director, the student may elect to participate in ongoing basic science or clinical infectious diseases research.

Learning outcomes & evaluation methods:

The student will conduct patient interviews and physical examinations and present their findings to the ID Fellow and Attending Physician on a daily basis. Student consultation notes and progress notes will be reviewed and signed by the Attending Physician. Feedback will be provided to the student on an ongoing basis and will include at a minimum a mid-rotation and end of rotation verbal feedback session. In addition, a written evaluation will be provided at the end of the rotation using the NJMS Student Evaluation Form.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present their findings to the ID Fellow and Attending Physician and document their findings in consult and progress notes. They will see a minimum of 5 new patients each week.
2. The student will be expected to review pertinent medical literature as it relates to the practice of infectious diseases and the patients they are following. They will succinctly present their findings to the ID Consult Service.
3. The student is expected to review the microbiology laboratory data for each of the patients they are following. This will include a review of gram stains and blood smears in the microbiology or hematology laboratories.
4. The student is required to attend and participate in all ID Conferences and journal clubs.

First day reporting instructions: Student should report at 9:00 a.m. to Cheryl Ruffin in the Medical Education Department, telephone number 973-926-7471, email cruffin@sbhcs.com.

MED 9570 - PULMONARY CONSULT

Site(s) of Elective: Internal Medicine, Division of Pulmonary and Critical Care Medicine
 Elective Director: Name: Andrew Berman, MD Title: Professor, Division Director
 Phone: 973-972-6111 Email: bermanar@njms.rutgers.edu

When offered: Throughout the academic year.

Max number of NJMS third year students per rotation: 3

Max total number of 3rd and 4th year students per rotation: 3

Prior approval required: NO

Course Description: The Pulmonary Consult elective exposes the student to daily rounds on pulmonary consultation service. Students work closely with fellows and attending physicians, and will be assigned patients from whom they are expected to obtain an appropriate history and physical examination, as well as to keep track of on-going care and test results. They will make daily rounds with the consulting physician and house staff assigned to the elective, and will participate in an outpatient clinic. In addition, pulmonary function tests will be reviewed throughout the rotation. The student will also be exposed to pulmonary procedures such as thoracentesis and bronchoscopy. Participation in special procedures under supervision will take place at the discretion of the attending. Students should expect to see a wide variety of pulmonary diseases and develop proficiency reading chest x-rays, understanding ventilator management, interpreting pulmonary function tests, and analyzing arterial blood gases. Pulmonary pathophysiology and pulmonary pharmacology will be reviewed throughout the rotation, in the frame work of patient care. Ample time is provided for students to read about their cases.

Learning outcomes & evaluation methods: The student will be expected to perform the initial and the follow up patient interviews and physical examinations. Students are also expected to review pertinent ancillary studies. History, exam and study result findings will then be presented to the supervising faculty. Final evaluation/grade will be based on the student's ability to collect, analyze,

summarize and succinctly present the relevant medical information, while demonstrating interpersonal skills and professionalism.

Key responsibilities of the student while on elective:

1. Review charts and examine patient prior to the work rounds
2. Collect, analyze, summarize and present medically relevant patient information
3. Perform literature search on topics relevant to consult rounds and discuss findings
4. Overnight call is NOT expected

First day reporting instructions: Report to University Hospital, I-354, at 9:00 AM on the first day of the rotation. Phone (973) 972-6111, fax (973) 972-6228.

MED 9580 - TUBERCULOSIS

Site(s) of Elective: NJMS – Global Tuberculosis Institute
Elective Director: Alfred Lardizabal, M.D.

Administrative Contact: Patricia Woods, RN Phone: (973) 972-0978, Email: patty.woods@rutgers.edu

When offered: September and March, by arrangement only
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: YES

Course Description: This elective will introduce third year medical students to the interdisciplinary approach necessary for learning about public health practices using TB as an example and will include various educational activities in clinical management, patient education, and disease control. Learning opportunities available in the ambulatory setting (clinic, field, epidemiology and laboratory) and in-patient setting (hospital rounds with TB attending and hospital surveillance with public health staff).

Learning outcomes & evaluation methods:

Prior to this elective, students will complete the CDC Interactive Core Curriculum on Tuberculosis: What the Clinician Should Know described above. During this elective, students will acquire expertise in the clinical evaluation of patients with potential pulmonary and extrapulmonary TB.

Evaluations: This elective is graded pass/fail per NJMS grading policy. The grade will be computed using the NJMS Student Evaluation Form (salmon form). Weighting: Clinical = 70%, CDC Core Curriculum Online Course = 20%, Preparation for 1:1 sessions = 10%

Key responsibilities of the student while on elective:

1. Review clinic charts and present findings to clinical faculty (1:1)
2. Review Chest Roentgenology and discuss interpretation of radiographic studies
3. While in the clinic or on hospital rounds, student will review patient's chart prior
4. Prepare for 1:1 sessions by doing assigned readings or viewing online
5. Bring questions for 1:1 meetings with clinical, nursing and public health staff
6. Attend TB Grand Rounds (Tuesday 12:30 – 2:00 PM)

First day reporting instructions: Students should plan to arrive at the Global TB Institute in the ICPH Building – 225 Warren Street at 9:00 AM and report to the Education & Training Office, 1st floor – West Wing. Bring white lab coat, stethoscope and ID. There is limited parking in the lot across from the building (gate is on Newark St.). Please note that you must have a parking hang tag. On street parking

may also be available, but there are parking restrictions for street cleaning on Mondays and Tuesdays between 12:00 p.m. and 4:00 p.m.

MED 9590 - CUTTING EDGE CARDIOLOGY IN THE 21st CENTURY

Site(s) of Elective: University Hospital
Elective Director: Name: Christine Gerula, M.D. Title: Associate Professor
Phone: 973-972-5291 Email: gerula@njms.rutgers.edu

Administrative contact: Jacquie Johnson Phone: (973) 972-5291, Email: johnsojr@njms.rutgers.edu

When offered: June, September - May
Max number of NJMS third year students per rotation: 6
Max number of 3rd and 4th year students per rotation: 6
Prior approval required: NO

Course Description: Cardiovascular disease remains the leading cause of morbidity and mortality in the United States. With the aging of our population, the number of patients with proven or suspected cardiovascular disease presenting to primary and specialty physicians is expected to rise significantly.

The program is designed to meet the needs not only of those students with a special interest in cardiology, but also those who have other career plans in medicine. The elective has 3 sets of educational sessions: clinical rotations, didactic sessions, and oral presentations.

Clinical Rotations:

This elective rotation will provide students with an opportunity to learn and observe how the cardiovascular disease patients are interviewed, diagnosed and treated. During morning sessions, students will attend teaching rounds of clinical services; students will rotate on alternate weeks through the Coronary Care Unit and Telemetry Services.

Didactic Sessions:

Afternoon sessions are devoted to cardiovascular diagnostics and therapeutics. Students will have at least two sessions on how to interpret electrocardiograms (EKG's). Separate afternoon sessions are designed to provide exposure to the latest in cardiovascular diagnostics; echocardiography, stress testing, cardiac catheterization, nuclear cardiology, cardiac CT and MRI. Students will also have opportunities to observe therapeutic interventions such as percutaneous coronary interventions and cardiac surgery.

Lectures and Talks:

Students will have ample opportunity to attend medical and cardiology grand rounds, clinical case PowerPoint presentations by cardiology fellows, cardiac catheterization conferences, and cardiology fellowship lecture series.

First day reporting instructions: If the rotation starts on Monday, please report to UH H-342 at 8:00 a.m. for conference. If the rotation starts on Tuesday, please report to UH I-102 at 9:30 a.m. on the first day of the rotation. On the first day of the rotation, students will receive final assignments of their rotation (University Hospital vs. East Orange VA Hospital).

MED 9593 – CARDIOLOGY

Site(s) of Elective: Newark Beth Israel Medical Center
Elective Director: Name: Marc Cohen, M.D. Title: Director of Cardiology
Phone: 973-926-7852 Email: MARCohen@barnabashealth.org

When offered: During designated third year elective time.
Max number of NJMS third year students per rotation: 1
Max number of 3rd and 4th year students per rotation: 2
Prior approval required: YES

Course Description:

The goal is to strengthen the student's ability in the evaluation of cardiac patients. This course is designed to expand clinical skills in the physical diagnosis and management of patients with cardiovascular disease. The student experience will include a better understanding of the various testing modalities to further define cardiac pathology.

At the conclusion of this elective, the student will be able to: 1) obtain a cardiac history and physical examination, 2) be familiar with laboratory data pertinent to diagnose cardiac disease, 3) have an in-depth understanding of ekg interpretations, 4) be familiar with the various types of stress testing modalities, 5) be familiar with the information obtained from echocardiography, and 6) be familiar with the information obtained from the cardiac catheterization laboratory.

Learning outcomes & evaluation methods:

During this elective it is expected that a student will conduct patient interviews and physical exams and present these findings to clinical faculty on a daily basis. Clinical faculty will provide mid-elective feedback to the student. The student will also be required to present two case reports during this elective. At the conclusion of the elective, the student will be required to submit a one-page essay summarizing his/her experience on the elective. The essay must reference elective objectives.

Key responsibilities of the student while on elective:

1. The student is expected to attend daily rounds the telemetry service for the first week and the CCU service the second week.
2. The student is expected to see patients on the in-patient service and present findings to the clinical faculty on a daily basis.
3. The student is expected to attend twice weekly ekg sessions and to have prepared interpretations on at least 10 ekgs for each session.
4. The student is expected to attend general cardiology clinic sessions and prepare concise H&P's.
5. To attend an echocardiography reading session once a week.
6. To attend a stress testing session once a week.
7. To attend a cardiac catheterization session once a week.
8. To attend Cardiology Clinical Case Conference once a week.
9. To attend Cath Conference once a week.

Reporting instructions: On the first day of the rotation, students should report to the Cardiac Cath Lab registration, 2nd floor bridge, Newark Beth Israel at 6:15 a.m. They should confirm their attendance one week prior by calling Dr. Marc Cohen directly at (973) 985-9314.

DEPARTMENT OF NEUROLOGICAL SURGERY

NSUR 9500 - INTRODUCTION TO NEUROLOGICAL SURGERY

Site(s) of Elective: University Hospital
Elective Director: Name: Antonios Mammis, M.D. Title: Assistant Professor
Phone: 973-972-4836 Email: antonios.mammis@rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year student per rotation: 2
Prior approval required: YES
Prerequisites: General Surgery, Neurology are required; Medicine is preferred, but not required

Course Description: A 2 week elective where the student is introduced to the care and treatment of neurosurgical disease. The student will be able to follow patients through admission to the hospital, operative care, post operative care and discharge. Time will be spent in observation of Neurological procedures in the operating room, conducting a neurological exam, reading of diagnostic studies including CT scans and MRI scans, performing consultations and delivering critical care. The student will be exposed to Neurosurgical critical care that encompasses patients with brain tumors, cerebrovascular disease, neurotrauma, spine, peripheral nerve and pediatric related issues. The student will attend daily morning rounds in the Neuro ICU, attend operative procedures and attend a series of lectures given by the faculty covering all aspects of Neurological Surgery. They will attend the Grand Rounds proceedings and the educational conferences scheduled weekly as well as participate in clinical evaluation of patients.

Learning outcomes & evaluation methods: Attendance, patient write up, faculty and resident evaluations.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting
2. While on hospital rounds, the student will be expected to review patients' charts.
3. One night call is recommended.
4. The student is expected to review current literature regarding the practice of Neurosurgery.

First day reporting instructions: On the first day of the elective the student should report to University Hospital, Neuro ICU at 7:00 a.m.

NSUR 9510 – INTERVENTIONAL NEUROLOGY/ENDOVASCULAR NEUROSURGERY/ NEUROINTERVENTIONAL RADIOLOGY

Site(s) of Elective: University Hospital
Elective Director: Name: Paul Singh, M.D., M.P.H. Title: Assistant Professor
Phone: 973-972-4744 Email: paul.singh@njms.rutgers.edu
Administrative Contact: Patricia King

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: YES
Prerequisites: General Surgery, Neurology are required; Medicine is preferred, but not required

Special instructions: Student must receive approval from elective director at least 5 weeks prior to start of rotation.

Course Description: Interventional Neurology/Endovascular Neurosurgery/Neurointerventional Radiology is a subspecialty that uses minimally invasive approaches through catheters and radiological imaging to treat a broad variety of cranial and spinal vascular pathologies including aneurysms, arteriovenous malformations, ischemic stroke, and head/neck tumors. This two week elective is intended to expose the student to the diagnosis and treatment of patients with vascular pathologies of the brain and spinal cord. Students will be able to see patients at the time of admission, participate in the discussion of the pathology including interpretation of CT/MRI/angiographic imaging, and be allowed to observe interventional procedures. Post-treatment, the student will continue to follow the clinical progress of patients through the hospitalization. In addition, the students will be able to participate in weekly neurointerventional teaching rounds and conferences and have exposure to both residents and fellows in the field.

Key responsibilities of the student while on elective:

1. Perform history and neurological examination.
2. Present and discuss cases including treatment options.
3. Observe Neurovascular procedures and understand the basics of catheter based treatments.
4. Prepare a brief (10 minute) presentation for faculty and fellows (Neurovascular topic TBA).

Reporting Instructions: On the first day of the rotation, students should report to the DOC 8100 at 8:30 a.m. to meet the elective director.

NSUR 9550 - ADVANCED NEUROLOGICAL SURGERY

Site(s) of Elective:	University Hospital	
Elective Director:	Name: Antonios Mammis, M.D.	Title: Assistant Professor
	Phone: 973-972-4836	Email: antonios.mammis@rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: YES
Prerequisites: General Surgery, Neurology are required; Medicine is preferred, but not required

Course Description: Students act as members of the neurosurgical team, they will participate with the residents and attending on hospital rounds, evaluate patients in the neurological surgery outpatient department, take some night calls 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.

Key responsibilities of the student while on elective:

1. Responsible for history and neurosurgical patient workup.
2. Scrub in on cases.
3. Be available for some night calls with the residents.
4. Student will be expected to be prepared to present a topic at conferences.

Reporting Instructions: Students should report to the Neuro ICU at 7:00 a.m. on the first day of the rotation.

DEPARTMENT OF NEUROLOGY & NEUROSCIENCES

NEUR 9500 - NEUROLOGY PRECEPTORSHIP

Site(s) of Elective: Private offices and hospitals of participating neurologists.
Elective Director: Name: Stephen S. Kamin, M.D. Title: Associate Professor
Phone: 973-972-7153 Email: kaminst@njms.rutgers.edu

When offered: Throughout academic year.

Max number of NJMS third year students per rotation: 1

Max total number of 3rd and 4th year students per rotation: 1

Prior approval required: YES

Special instructions: Must be arranged at least 3 months in advance. Prerequisite: Neurology

Course Description: Taken after the neurology clerkship, this elective gives the student interested in neurological training the opportunity to participate in a closely supervised experience by the clinical faculty in the private practice of neurology.

Learning outcomes & evaluation methods: Student will be directly supervised and given day to day feedback by the neurology preceptor.

Key responsibilities of the student while on elective:

Perform histories and neurological examinations under the supervision of the neurology preceptor.

Present and discuss cases. Research and discuss topics in neurology as assigned by the preceptor.

First day 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 9510 - PEDIATRIC NEUROLOGY

Site(s) of Elective: University Hospital
Elective Director: Name: Caroline Hayes-Rosen, M.D. Title: Assistant Professor
Phone: 973-972-2922 Email: hayesrca@njms.rutgers.edu

When offered: Throughout the academic year

Max number of NJMS third year students per rotation: 2

Max total number of 3rd and 4th year student per rotation: 4

Prior approval required: NO

Prerequisite: Neurology or Pediatrics

Course Description: Students will become part of the pediatric neurology team and will evaluate children with known or suspected neurologic disorders in both inpatient and outpatient settings. Students can expect to see a wide variety of disorders such as autism, ADHD, learning disabilities, cerebral palsy, seizures, neuromuscular disorders, headaches, and metabolic disorders. Customization of clinic schedule available for students with particular interests.

Learning outcomes & evaluation methods: Direct supervision and evaluation by an attending physician, patient presentations to an attending physician.

Key responsibilities of the student while on elective: Function as part of the pediatric neurology team. Perform histories and examinations, and present patients during rounds and in the pediatric

neurology clinic and the pediatric epilepsy clinic.

First day reporting instructions: Page the pediatric neurology fellow assigned to the service (973-281-3351). Students may contact Dr. Hayes-Rosen prior to starting their elective to determine areas of interest and customize schedule.

DEPARTMENT OF OBSTETRICS, GYNECOLOGY AND WOMEN'S HEALTH

OBG 9500 - WOMEN'S HEALTH AMBULATORY CARE

Site(s) of Elective: University OB/GYN Associates, University Hospital, Newark, NJ
Elective Director: Name: Lisa Pompeo, MD Title: Associate Professor
Phone: (973) 972-5957 Email: pompeoli@njms.rutgers.edu

When offered: Throughout the academic year.

Max number of NJMS third year students per rotation: 1

Max total number of 3rd and 4th year students per rotation: 2

Prior approval required: YES

Course Description: 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 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 preventive 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 work-up of patients and formulate appropriate assessment/plans for patient management.

Learning outcomes & evaluation methods:

Outcomes: During the elective it is expected that a student will conduct patient interviews and physical exams as well as generate differential diagnosis and begin to formulate a treatment plan. It is expected that the student will present these findings to clinical faculty on a patient by patient basis receiving immediate feedback and guidance from supervising residents and faculty.

Evaluation methods: The student's clinical grade will be computed using the NJMS Student Evaluation Form (salmon form). This elective is graded pass/fail.

Key responsibilities of the student while on elective:

1. The student is expected to see patients in the outpatient setting and present findings to clinical faculty on a daily basis.
2. The student is expected to document all findings, assessments and plans in the patient's EMR.
3. The student is expected to keep a log of all patients seen to include the patient's diagnosis.

First day reporting instructions: On the first day of the elective the student should report to Dr. Pompeo at the ACC C-level, University OB/GYN Associates at 9:00 am. The student must wear his/her white coat and bring his/her ID, stethoscope.

OBG 9510 - GYNECOLOGIC ONCOLOGY

Site(s) of Elective: University OB/GYN Associates, University Hospital, Newark, NJ
Elective Director: Name: Bernadette Cracchiolo, MD Title: Associate Professor
Phone: 973-972-5055 Email: cracchbm@njms.rutgers.edu

When offered: During designated third year elective time.

Max number of NJMS third year students per rotation: 2

Max total number of 3rd and 4th year students per rotation: 2

Prior approval required: YES

Course Description: Students will develop a deeper understanding of cancer care for gynecologic malignancies by participating in outpatient activities, 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.

Learning outcomes & evaluation methods:

Outcomes: During the elective it is expected that a student will conduct patient interviews and physical exams as well as generate differential diagnosis and begin to formulate a treatment plan. It is expected that the student will present these findings to clinical faculty on a patient by patient basis receiving immediate feedback and guidance from supervising residents and faculty. It is expected that the student will participate in any family/ team meetings regarding patients under their care, including but not limited to discussions of end of life care.

Evaluation methods: The student's clinical grade will be computed using the NJMS Student Evaluation Form (salmon form). This elective is graded pass/fail.

Key responsibilities of the student while on elective:

1. The student will be expected to participate in all gynecologic oncology outpatient clinics.
2. The student will be expected to participate in all gynecology oncology operative cases.
3. The student will be expected to round and document in the medical records daily progress notes for all patients under the care of the gynecological oncology service, including consultations from other services.
4. The student will be expected to participate in all tumor boards and pathology conferences, including preparation of materials used during conference as assigned by the chief resident or attending gynecological oncologist.

First day reporting instructions: The student is expected to report to the chief resident of the gynecology service in the OB/GYN resident lounge at 6:30am on the first Monday of the rotation.

OBG 9511 – GYNECOLOGIC ONCOLOGY

Site(s) of Elective: The Cancer Center at Hackensack University Medical Center
Elective Director: Name: Ami P. Vaidya, MD Title: Director, Minimally Invasive Gynecologic Surgery
Phone: (551) 996-5374

When offered: October - May

Max number of NJMS third year students per rotation: 1

Max total number of 3rd and 4th year students per rotation: 1

Prior approval required: YES

Special instructions: The student must have successfully completed the 3rd year clerkship in ob/gyn.

Course Description: Students will develop a deeper understanding of cancer care for gynecologic malignancies by participating in outpatient activities, 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.

Objectives:

1. Be able to describe diagnostic techniques for gynecological malignancies.
2. Be able to describe various management plans for gynecological malignancies, including surgery, chemotherapy, and radiation therapy.
3. Be able to describe risks and benefits of various management strategies, as well as, toxicities and their management.

4. Understand basic principles of palliative care/end of life care.

Learning Outcomes & Evaluation Methods:

Outcomes: During the elective it is expected that a student will conduct patient interviews and physical exams as well as generate differential diagnosis and begin to formulate a treatment plan. It is expected that the student will present these findings to clinical faculty on a patient by patient basis receiving immediate feedback and guidance from supervising residents and faculty. It is expected that the student will participate in any family/team meetings regarding patients under their care, including but not limited to discussions of end of life care.

Evaluation methods: The student's clinical grade will be computed using the NJMS Evaluation Form (salmon form). This elective is graded pass/fail.

Key Responsibilities of the Student while on Elective:

1. The student will be expected to participate in gynecologic oncology outpatient assessments.
2. The student will be expected to participate in gynecology oncology operative cases.
3. The student will be expected to round and document in the medical records daily progress notes for patients under the care of the gynecological oncology service, including consultations from other services.
4. The student will be expected to participate in all tumor boards and pathology conferences, including preparation of materials used during conference as assigned by the attending gynecological oncologist.

First Day Reporting Instructions: The student is expected to report to the Office of Academic Affairs, Hackensack University Medical Center, Alfred N. Sanzari Building, 360 Essex Street, 4th Floor, Suite 402, Hackensack, NJ 07601 at 8:00 a.m. on the first day of the rotation. Contact number: (551) 996-2016.

OBG 9520 - LABOR AND DELIVERY

Site(s) of Elective:	University Hospital, Newark, NJ	
Elective Director:	Name: Lisa Pompeo, M.D. Phone: 973-972-5957	Title: Associate Professor Email: pompeoli@njms.rutgers.edu

When offered: During designated third year elective time.

Max number of NJMS third year students per rotation: 2

Max total number of 3rd and 4th year students per rotation: 2

Prior approval required: YES

Special instructions: Students must have completed the OB/GYN clerkship prior to participating in this elective.

Course Description: This elective will give the student an opportunity to spend a significant amount of time in Labor and Delivery. The student will participate in daily board turnover rounds, will attend laboring patients, as well as, participate in the delivery of those same patients.

Learning outcomes & evaluation methods:

Outcomes: During this elective it is expected that a student will conduct patient interviews, physical exams and follow patients in labor, presenting findings to clinical faculty on a continual basis. The student will also be expected to present patients under their care at daily board turnover. The student will be expected to participate in no less than 15 vaginal deliveries by the conclusion of this elective, the student will be required to perform one vaginal delivery independently under the direct and immediate supervision of either the obstetrical chief resident or supervising attending. One the last day of the

rotation, the student will be expected to submit one case report, which will be presented to the L&D team, discussing one patient's labor and delivery course.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. The case report will be graded pass/fail. The clinical grade is weighted at 90% of the final grade, and the case report is weighted 10%. A student cannot pass the elective without submission of the case report. This elective is graded pass/fail.

Key responsibilities of the student while on elective:

1. The student will be expected to see and follow patients in the labor and delivery, documenting their course of labor at least every 2 hours. The student will be expected to present findings to clinical faculty on a continual basis.
2. The student is expected to attend both morning and evening turnover rounds.
3. One night call is expected.
4. The student is expected to attend at least 15 vaginal deliveries and 5 cesarean sections during the course of the elective.
5. The student is expected to review current literature regarding parturition.
6. One written case report is required.

First day reporting instructions: On the first day of the elective the student must report to Labor and Delivery F-level, University Hospital at 6:30 am. On the Friday prior to the start of the rotation the student must see Ms. Valerie Taylor in the departmental office MSB E-506 between 8am and 4pm to obtain a scrub card for surgical scrubs during the rotation. The student must wear his/her white coat and bring his/her ID, stethoscope, reflex hammer. Only surgical scrubs obtained from the scrub machines on F-level in University Hospital are acceptable for use in L&D – no other will be permitted.

OBG 9540 - WOMEN'S REPRODUCTIVE CHOICES

Site(s) of Elective:	Newark Campus - UH & ACC	Title: Assistant Professor
Elective Director:	Dr. Natalie Roche	Email: rochene@njms.rutgers.edu
	Phone: 973-972-5840	

When offered: Throughout the academic year with permission
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: YES
Prerequisite: Students must have completed 3rd year Ob/Gyn clerkship, unless approved by course director.

Course Description: 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 counseling, pregnancy termination and sterilization. Students will participate in patient care in ambulatory and inpatient setting. Teaching will take place in the operating room, the ambulatory care center clinic, ultrasound suite and inpatient hospital setting. Students will be involved with total service from intake to discharge following patients through the system of care.

Learning outcomes & evaluation methods:

Outcomes: During this elective it is expected that a student will conduct patient interviews, intakes and physical exams and present these findings to clinical faculty on a daily basis. Clinical faculty and staff will provide feedback to the student. The student will also be required to participate in the OR during surgical procedures. At the conclusion of this elective, the student will be required to submit a post-rotation survey and complete a quiz.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. A student cannot pass the elective without completing the two week elective training, the pre- and post-rotation surveys, and the final quiz. This elective is graded pass/fail per NJMS grading policy.

Key responsibilities of the student while on elective:

1. The student will be expected to interact with patients in the clinical setting and discuss intake with clinical staff on a daily basis.
2. While in the OR, the student will be expected to participate and assist physician and staff as requested.
3. The student is expected to be on time and follow their two week rotation agenda.
4. The student is expected to read and review the curriculum, including VHS, DVD and CD Rom literature regarding the practice of termination of pregnancy and contraception.
5. A pre-rotation, post-rotation and final quiz will be administered.

First day reporting instructions: On the first day of the elective the student should report to UH F-level, room 245 at 10:00am. The student should wear his/her white coat and bring his/her ID. All other materials will be provided to student.

DEPARTMENT OF OPHTHALMOLOGY AND VISUAL SCIENCES

OPH 9500 - OPHTHALMOLOGY

Site(s) of Elective: Ophthalmology, DOC 6th floor, New Jersey Medical School
Elective Director: Name: Sugin Guo, M.D. Title: Associate Professor
Phone: 973-972-2031

Elective Faculty Members: N. Bhagat, MD; A. Cohen, MD; D. Chu, MD; R. Fechtner, MD; L. Frohman, MD; S. Guo, MD; P. Hersh, MD; A. Khouri, MD; P. Langer, MD; R. Rescigno, MD; M. Roy, MD; R. Turbin, MD; M. Zarbin, MD

When offered: During designated third year elective time
Max number of NJMS third year students per rotation: 5
Max total number of 3rd and 4th year students per rotation: 5
Prior approval required: NO

Course Description: This elective course is to introduce third year students to clinical ophthalmology. Under supervision of clinical faculty members and eye residents, students will observe most common ocular disorders, especially ocular emergencies and eye trauma. Students will also have opportunity to learn basic ocular exams including visual acuity, pupil, slit lamp and fundus exam. Students will rotate through General Eye, Corneal, Cataract, Oculoplastic, Glaucoma, Pediatric Ophthalmology, Neuro-ophthalmology, and Retina subspecialties.

Learning outcomes & evaluation methods: The students' grade will be computed using NJMS Student Evaluation Form. It will be graded pass/fail. A quiz will be given at the end of rotation. The clinical grade is weighted at 85% of final grade and the score of the test is weighted 15%

Key responsibilities of the student while on elective:

1. The students are expected to review Ophthalmology book throughout the rotation.
2. The students are expected to attend 1 hour lectures on CD daily before they go to eye clinics.
3. The students will be signed to eye residents in subspecialty Eye Clinics daily which are supervised by faculty members.
4. The students are expected to review patient's record and understand symptoms and signs of common eye disorders after eye exam is completed.

First day reporting instructions: On the first day of the elective, the student should report to Ms. Sue Niedzinski in the DOC Suite 6100 at the administrative area (located at the rear of the department) at 8:45 am. The student must be wearing his/her white coat along with his/her I.D. and MUST have his/her ophthalmoscope.

DEPARTMENT OF ORTHOPAEDIC SURGERY

ORPS 9500 - ORTHOPAEDIC SURGERY

Site(s) of Elective: University Hospital
Elective Director: Name: Francis Patterson, M.D. Title: Assistant Professor
Phone: 973-972-2151 Email: patterfr@njms.rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year student per rotation: 2
Prior approval required: NO

Course Description: The elective is designed to give the best exposure possible with various members of the Orthopaedic Department and provide a broad overview of orthopaedic surgery at New Jersey Medical School and its affiliates. Exposure includes, but is not limited to, orthopaedic trauma, reconstructive surgery, pediatrics, hand, foot, ankle, oncology, spine, arthroscopy, shoulder surgery, and sports medicine. The interaction with faculty and residents is designed to be clinically oriented. This means that a large portion of the students' orthopaedic education will arise from facing orthopaedic problems with the residents and faculty in the emergency room, orthopaedic clinics, private physicians' offices, and operating room. During the rotation, all students will have the opportunity to have interchanges with all full-time members of the faculty and will have extensive opportunities to demonstrate their baseline knowledge of anatomy and developing skills in orthopaedic examination. Overnight orthopaedic call is not mandatory, but can be arranged during this rotation in order to allow the medical students to have a closer working interaction with the orthopaedic resident and provide better opportunities for the student to learn emergency orthopaedic management principles.

Learning outcomes & evaluation methods:

1. Grade of at least Pass on Checklist for eliciting appropriate subspecialty history during each clinic
2. Grade of at least Pass on Checklist for performing appropriate subspecialty physical examination during each clinic.
3. Grade of at least Pass on Checklist for subspecialty radiographic evaluation during each clinic
4. Final written multiple choice examination score of at least 65%.
5. Evaluation of professionalism of at least acceptable on final evaluation.
6. Completion of all the above as well as submission of signed attendance sheets will allow for a grade of pass. The final grade will be sent to the registrar's office.

Key responsibilities of the student while on elective:

1. The student will attend all clinic assignments and conferences.
2. The student will be expected to see patients in the clinical setting and present findings to clinical faculty on a daily basis. The student will write notes on the patients he/she sees.
3. The student is expected to review handouts/topics given to him/her at the start of the rotation.
4. Two written case reports and one essay are required.

First day 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 9510 - PEDIATRIC ORTHOPAEDICS

Site(s) of Elective: University Hospital
Elective Director: Name: Sanjeev Sabharwal, MD, MPH Title: Professor
Phone: 973-972-0246 Email: sabharsa@njms.rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: NO

Course Description: During this rotation, the student will receive a broad exposure to various aspects of children's orthopedic problems. He/she will gain insight into common pediatric orthopedic disorders through lectures and conferences, patient evaluation in the clinical setting as well as in the operating room. As this is a short rotation, taking call with the residents is an option that can be arranged by speaking with the chief residents. However taking call is not mandatory. The rotation schedule has been arranged to allow a broad exposure to pediatric orthopedics, both in the operating room and in the outpatient setting. If there is a specific surgery or other event that the student wishes to observe that is not pertaining to pediatric orthopedics, arrangements can be made through the chief residents, though it must have the approval of Dr. Sabharwal.

Learning outcomes & evaluation methods:

Outcomes: During this elective it is expected that the student will participate in patient interviews and physical exams and participate in discussions with the clinical team. The student will also be required to present a 15 minute talk with a handout on a pediatric orthopedic topic during this elective. At the conclusion of this elective, the student will be required to submit a feedback of his/her experience on the elective and any suggestions of improving the format of the rotation.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. The student presentation will be graded pass/fail. A student cannot pass the elective without presenting the talk and submitting the feedback. This elective is graded pass/fail per NJMS grading policy. The final grade will be sent to the registrar's office.

Key responsibilities of the student while on elective:

1. The student will attend all clinic assignments, morning conference, Thursday CORE lectures (7-10am) and two pediatric orthopedic conferences each week.
2. The student will be expected to see patients in the clinical setting, along with residents and attending staff of the Division of Pediatric Orthopaedics, and present findings to clinical faculty on a daily basis.
3. The student is expected to review handouts/topics given to him/her at the start of the rotation.
4. The student will give a 15 minute talk on a pediatric orthopedic topic.

First day 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 and the senior resident on the Pediatric Orthopaedic service.

DEPARTMENT OF OTOLARYNGOLOGY

OTOL 9550 - OTOLARYNGOLOGY – HEAD & NECK SURGERY, ACTING INTERNSHIP

Site(s) of Elective: University Hospital
Elective Co-Directors: Name: Chan Park, M.D. Title: Assistant Professor, Department of Otolaryngology-Head and Neck Surgery
Phone: 973-972-4588 Email richard.park@rutgers.edu
Name: Evelyn Kalyoussef, M.D. Title: Assistant Professor, Department of Otolaryngology -Head and Neck Surgery
Phone: 973-972-4588 Email kalyouev@njms.rutgers.edu

When offered: Throughout the academic year.

Max number of NJMS third year students per rotation: 4

Max total number of 3rd and 4th year students per rotation: 6

Prior approval required: No

Course Description: 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, pediatric otolaryngology, and endoscopic skull base surgery. The elective can be modified to accommodate the student's interest in a given aspect of otolaryngology.

Learning outcomes & evaluation methods: The student will be evaluated from feedback from the resident and attending staff based on their performance in the clinic and inpatient floors. We will use the Salmon form.

Key responsibilities of the student while on elective:

- Student will be expected to see patients in the clinical setting and present findings to the clinical faculty and residents.
- Students will be expected to attend daily hospital rounds. While on hospital rounds the students will be expected to review patient charts prior to rounds.
- Students will be expected to write notes on patients they evaluate in the clinic and hospital.
- Students may be given the opportunity to assist in the operating room.
- Students will be required to give a brief presentation or prepare a patient information form at the end of their rotation.

First day reporting instructions: Call the ENT department at 973-972-4588 or email Dr. Park or Dr. Kalyoussef the week prior to find out where to report on the first day of the rotation.

PATH 9510 - TRANSLATIONAL EXPERIENCE IN LABORATORY MEDICINE

Site(s) of Elective: New Jersey Medical School, Room C545-547
Elective Director: Name: GP Studzinski Title: Professor
Phone: 973-972-5869 Email: studzins@njms.rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 2
Max number of 3rd and 4th year students per rotation: 2
Prior approval required: YES, permission from course director

Course Description: Students within this elective will actively participate in translational research projects related to topics in laboratory medicine. The laboratory of Dr Studzinski is actively involved in of research projects supported by the National Cancer Institute of NIH and other cancer-related research funding agencies for laboratory models that investigate novel approaches to cancer treatment. Currently, these approaches include induction of cell differentiation, and mechanisms responsible for resistance of leukemia cells to chemotherapeutic agents. The laboratory has special focus on utilization of non-toxic therapeutic agents, and is funded for studies of vitamin D and plant antioxidants in this setting. There are often academic projects being prepared for medical publication (contribution to research papers, poster presentations, review articles, etc.) in which the students may actively participate. Students should contact the course director in advance of the start date to make arrangements for their participation in ongoing projects.

Learning outcomes & evaluation methods: Students will be graded on their level of interest, work ethic, and contribution to the translational medicine research projects that they work on. Relevant factors will include the student's teamwork, follow-through, initiative, and understanding of the goals, objectives, and context of the research project on which they are working.

Key responsibilities of the student while on elective:

The student is expected to review relevant literature that represents the research focus of the preceptor, preferably prior to the start of the rotation.

1. The student will be expected to learn the research issues pertaining to the problem under study.
2. The student will be expected to discuss with the preceptor or in a research conference the organization, structure, design, appropriateness of methods, clinical relevance, importance, and conclusions of any report that is being prepared in the laboratory for publication or a national meeting presentation.
3. The student may actively participate in bench research activities during the rotation, depending on the level of previous training in laboratory procedures.

First day reporting instructions: Approximately 2 to 4 weeks prior to the start of the student's rotation, the student should discuss with the Preceptor the intent to take this rotation. On the first day the student should report to Dr Studzinski in room C543, MSB, NJMS.

DEPARTMENT OF PEDIATRICS

PEDS 9510 - PEDIATRIC ALLERGY, IMMUNOLOGY and INFECTIOUS DISEASES

Site(s) of Elective: FXB Clinic, G102 University Hospital
Elective Director: Name: James M. Oleske, M.D. Title: Professor of Pediatrics
Phone: 973-972-5066/1504 Email: oleskej@njms.rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: YES

Course Description: This two week elective is only available to third year medical students in order that they can have exposure to the broad range of problems encountered in the practice of Pediatric Allergy Immunology and Infectious Diseases. Students will have the opportunity to participate in the clinical care, including diagnostic evaluation and treatment planning, of pediatric patients having an abnormality in immunological, host defense mechanisms and recurrent infections. This exposure will include inpatient rounds with pediatric residents on elective in our program and attending. Students will also attend ambulatory clinics weekly including a pediatric HIV follow-up clinic as well as Dr. Oleske's Allergy/Immunology Clinic. Each student will be exposed to the CLI Laboratory in order to appreciate the importance of flow Cytometry and other qualitative and quantitative immune studies in the diagnosis of a child with recurrent infections and the importance of PCR in diagnosing viral infections.

Learning outcomes & evaluation methods: During this elective it is expected that a student will conduct patient interviews and physical exams and present these findings to clinical faculty on a daily basis. Clinical faculty will provide mid-elective feedback to the student. Clinical performance will be evaluated by observation of daily interaction with residents, attending, nurses and patients/families, and the provision of supervised patient care using the standard NJMS form. This elective is graded on a Pass/Fail basis as per NJMS policy.

Key responsibilities of the student while on elective: The student will be expected to see patients in the clinical setting and present findings to supervising faculty on a daily basis. The student will review patient records before each clinical encounter. It is expected that students will locate, assimilate and present to team members evidence related to evaluation and management of patient problems.

First day reporting instructions: Report at 9AM to Dr. Oleske's office MSB F-572.

PEDS 9530 - PEDIATRIC GASTROENTEROLOGY

Site(s) of Elective: University Hospital
Elective Director: Name: Iona Monteiro, M.D. Title: Associate Professor
Phone: 973-972-5779 Email: monteim@njms.rutgers.edu

When offered: By arrangement with Dr. Monteiro
Max number of NJMS third year students per rotation: 3
Max total number of 3rd and 4th year students per rotation: 4
Prior approval required: YES
Special instructions: Prerequisite-Pediatric Clerkship

Course Description: This elective will give the student exposure to various common gastrointestinal

and liver diseases in infants and children. Under faculty supervision, students will participate in the practice of pediatric gastroenterology in both inpatient and ambulatory settings. They will observe specialty-specific procedures, including endoscopy.

Learning outcomes & evaluation methods: During this elective it is expected that a student will conduct patient interviews and physical exams and present these findings to clinical faculty on a daily basis. Clinical faculty will provide mid-elective feedback to the student.

The student's grade will be based on clinical performance as evaluated by supervising faculty using the standard NJMS form. Grading for this elective will be Pass/fail per NJMS policy.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty.
2. The student will write notes on the patients he/she sees.
3. While on hospital rounds, the student will be expected to review patient charts prior to rounds.
4. The student is expected to review the Pediatric Gastroenterology section of a Pediatric textbook.
5. Student is expected to prepare and give presentations on common GI problems in children.

First day reporting instructions: Contact Dr. Monteiro via e-mail (monteiim@njms.rutgers.edu) one week prior to start.

PEDS 9540 - PEDIATRIC HEMATOLOGY & ONCOLOGY

Site(s) of Elective: Tomorrow's Children's Institute, Hackensack University Medical Center
Elective Director: Name: Michael Harris, M.D. Title: Director, TCI
Phone: (201) 996-5437

When offered: Throughout the academic year.

Max number of NJMS third year students per rotation: 1

Max number of 3rd and 4th year students per rotation: 1

Prior approval required: NO

Special instructions: Prerequisite: Pediatric clerkship.

Course Description: This elective is designed to introduce students to the practice of Pediatric Hematology and Oncology in a suburban tertiary care teaching hospital. Under faculty supervision, students will interact with patients in both the inpatient and ambulatory setting. 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 also attend weekly Tumor Board meetings and review blood smear and bone marrow pathology.

Learning outcomes & evaluation methods: During this elective it is expected that a student will conduct patient interviews and physical exams and present these findings to clinical faculty on a daily basis. Clinical faculty will provide mid-elective feedback to the student. The student's grade will be based on clinical performance as evaluated by supervising faculty using the standard NJMS form. Grading for this elective will be Pass/fail per NJMS policy.

PEDS 9560 - PEDIATRIC OPHTHALMOLOGY

Site(s) of Elective: Pediatric Clinic 6th Floor DOC and/or DOC at Rutgers at Newark Campus and/or at Clara Maass Hospital, Belleville, NJ
Elective Director: Name: Rudolph S. Wagner, M.D. Title: Director, Pediatric Ophthalmology
Phone: 973-751-1702 Email: wagdoc@comcast.net

When offered: During designated third year elective time.
Max number of NJMS third year students per rotation: 1
Max total number of 3rd and 4th year students per rotation: 1
Prior approval required: NO
Special instructions: Prerequisite-Pediatric Clerkship.

Course Description: 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.

Learning outcomes & evaluation methods: During this elective it is expected that a student will conduct patient interviews and physical exams and present these findings to clinical faculty on a daily basis. Clinical faculty will provide mid-elective feedback to the student.

The student's grade will be based on clinical performance as evaluated by supervising faculty using the standard NJMS form. Grading for this elective will be Pass/fail per NJMS policy.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty.
2. While on hospital rounds, the student will be expected to review patient charts prior to rounds.
3. The student is expected to obtain a copy of the book *Curbside Consultation in Pediatric Ophthalmology* – Wagner RS, which is held on reserve in the Rutgers – NJMS Library.
4. Student is expected to prepare and give a presentation on the pediatric eye exam and common ocular problems encountered in the practice of Pediatrics.

First day reporting instructions: On the first day of the elective, students should report to the 6th floor of the DOC at 8:30 am. to the Department of Ophthalmology Medical Education secretary. Please contact Dr. Wagner by email (wagdoc@comcast.net) during the week prior to the elective for additional instructions as the schedule may vary.

PEDS 9565 - PEDIATRIC DERMATOLOGY

Site(s) of Elective: University Hospital
Elective Director: Name: R.A. Schwartz, MD, MPH Title: Professor & Head, Dermatology
Phone: (973) 972-6255 Email: roschwar@njms.rutgers.edu

When offered: Throughout the academic year.
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: YES
Prerequisite: Student must have taken MED9515-Dermatology first.

presenting current information on selected health topics to pre-teens and adolescents in various community settings, utilizing developmentally appropriate language and multi-media resources to maximize learning.

First day reporting instructions: Student must email Dr. Padilla two weeks prior to start of elective to confirm first-day report time/location and elective schedule.

DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION

REHB 9500 - BRAIN INJURY REHABILITATION

Site(s) of Elective: Please contact department
Elective Director: Name: Peter Yonclas, M.D.
Email: yonclape@njms.rutgers.edu

When offered: July, November, November/Shared, and May only
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: NO

Course Description: This elective is designed to give 3rd year students exposure to the field of traumatic brain injury. The two weeks will be spent either at University Hospital or Kessler in West Orange, an acute inpatient rehabilitation facility. In both facilities, time will be divided between in- and outpatient services, giving the student exposure to the spectrum of rehabilitation settings for the traumatic brain injured patient. This elective would be of particular interest to students considering careers in physical medicine and rehabilitation, neurology, trauma surgery or neurosurgery.

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

Learning outcomes & evaluation methods:

Outcomes: During this elective it is expected that a student will follow assigned patients on the traumatic brain injury service. Each day, students will be required to perform physical exams on their assigned patients and present these findings to clinical faculty on a daily basis. At the conclusion of this elective, the student will be required to perform their own consultations or history and physicals on new traumatic brain injured patients and present these findings to the attending.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. This elective is graded pass/fail per NJMS grading policy. This grade will be primarily determined by attendance and participation in activities, clinical histories, and evaluation of bedside clinical skills.

Key responsibilities of the student while on elective:

1. The student is expected to see patients in the clinical setting and present findings to clinical faculty on a daily basis. The student will write notes on the patients he/she sees.
2. The student is expected to review patient charts prior to rounds.
3. The student is expected to review current literature regarding practice of rehabilitation of the traumatic brain injured patient.
4. At least two full consultations or history and physicals are required by the end of the rotation.

First day reporting instructions: Approximately 1 to 2 weeks prior to the start of the student's rotation, he/she will receive an email from the department with their site assignment and reporting instructions.

REHB 9510 - GERIATRIC REHABILITATION

Site(s) of Elective: Kessler Institute for Rehabilitation - Saddlebrook
Elective Director: Name: Dr. Bruce Pomeranz
Phone: 201-587-8500

When offered: July, November, November/Shared, and May only
Max number of NJMS third year students per rotation: 1
Max total number of 3rd and 4th year students per rotation: 1
Prior approval required: NO

Course Description: This elective is designed to give 3rd year students exposure to the field of geriatric physical medicine and rehabilitation. The student will spend two weeks in an in- and outpatient setting, giving the student exposure to the difference between in- and outpatient rehabilitation in the geriatric population. This elective would be of particular interest to students considering careers in physical medicine and rehabilitation, neurology, or geriatrics.

Format: The medical student will be assigned to an attending physiatrist and possibly a resident physiatrist. They will attend daily patient rounds, outpatient visits, rehabilitation team meetings and lectures.

Learning outcomes & evaluation methods:

Outcomes: During this elective it is expected that a student will follow assigned patients on the geriatric rehabilitation service. Each day, students will be required to perform physical exams on their assigned patients and present these findings to clinical faculty on a daily basis. At the conclusion of this elective, the student will be required to perform their own history and physicals on new patients and present these findings to the attending. The student will also be expected to interview patients during outpatient visits and present their findings to the clinical faculty.

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

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty on a daily basis. The student will write notes on the patients he/she sees.
2. For inpatient care, the student will be expected to review patient charts and participate in discussions regarding care of the patient.
3. For outpatient care, the student will be expected to perform a history and physical and present these findings to the attending physician.
4. The student is expected to review current literature regarding the practice of geriatric rehabilitation medicine.

First day reporting instructions: Approximately 1 to 2 weeks prior to the start of the student's rotation, he/she will receive an email from the department with their site assignment and reporting instructions.

REHB 9515 – NEUROMUSCULAR AND PULMONARY REHABILITATION

Site(s) of Elective: University Hospital
Elective Director: Name: John R. Bach, M.D.
Email: bachjr@njms.rutgers.edu

When offered: July, November, November/Shared, and May only
Max number of NJMS third year students per rotation: 1
Max number of 3rd and 4th year students per rotation: 1
Prior approval required: NO

Course Description: This elective is designed to introduce third year students to the practice of neuromuscular and rehabilitation medicine. Under the supervision of clinical faculty, students will learn differential diagnosis of neuromuscular disease and both the medical and physical medicine treatment options. They will learn cardiopulmonary, orthopedic, nutrition, and other therapeutic interventions and equipment that affect survival and quality of life. Students will also round with preceptor in University Hospital to observe the use of noninvasive physical medicine aids in extubation and decanulation of patients with ventilatory failure due to neuromuscular conditions and perform inpatient rehabilitation consultations with the PM&R residents.

Learning outcomes & evaluation methods: At mid-way of the rotation the student will be quizzed regarding the objectives. The quiz will be repeated at the end of the rotation for the pass/fail grade.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and describe findings and management strategies to clinical faculty.
2. The student will be expected to review patients' charts, specifically for rehabilitation concerns.
3. The student will be expected to have read material provided by the clinical faculty and to present the important points on inpatient and outpatient rounds.
4. The student will attend Wednesday morning resident lectures.

First day reporting instructions: Approximately 1 to 2 weeks prior to the start of the student's rotation, he/she will receive an email from the department with their site assignment and reporting instructions.

REHB 9520 - INTRODUCTION TO PHYSICAL MEDICINE AND REHABILITATION

Site(s) of Elective: University Hospital; NJMS Doctor's Office Center; Kessler Institute - West, Saddlebrook and Chester; VA New Jersey Healthcare System - East Orange; private physicians' offices.

Elective Director: Patrick Foye, M.D.

When offered: July, November, November/Shared, and May only

Max number of NJMS third year students per rotation: 2

Max total number of 3rd and 4th year students per rotation: 2

Prior approval required: NO

Course Description: 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.

Learning outcomes & evaluation methods:

Outcomes: During this elective it is expected that a student will conduct patient interviews and physical exams and present these findings to clinical faculty on a daily basis. Clinical faculty will provide mid-elective feedback to the student. The student will also be required to present verbal case presentations during this elective, as well as writing medical notes on patients being followed by the student.

Key Responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty via a verbal patient presentations. The student will write notes on the patients he/she sees.
2. No overnight call is typically required.
3. The student is expected to read appropriate resource materials to increase their knowledge base throughout the rotation and to supplement the educational knowledge gained through direct patient care.
4. The student may be asked to research, review and present current literature regarding clinical diagnoses that are seen in our patients during the rotation.

First day reporting instructions: Approximately 1 to 2 weeks prior to the start of the student's rotation, he/she will receive an email from the department with their site assignment and reporting instructions.

REHB 9525 - PAIN MANAGEMENT: INTERVENTIONAL PROCEDURES CLINICAL ROTATION

Site(s) of Elective: Doctors Office Center (DOC) Suite 3100 and 3300, Newark
Elective Director: Name: Todd Stitik, M.D. and Patrick Foye, M.D.
Phone: 973-972-7199 Email: foyepm@njms.rutgers.edu

When offered: July, November, November/Shared, and May only

Max number of NJMS third year students per rotation: 2

Max number of 3rd and 4th year students per rotation: 4

Prior approval required: NO

Course Description: Students will directly participate in pre-procedural evaluation visits, interventional procedures, and post-procedural evaluation visits of patients with various musculoskeletal and neurological conditions who are in need of interventional pain management procedures. Students will be encouraged to directly participate in the procedures to the degree that they are interested and capable of doing so. These procedures include but are not limited to the following: fluoroscopic-guided spinal injection procedures (e.g. epidurals), fluoroscopic-guided joint injection procedures, ultrasound-guided tendon sheath/bursa/joint injection procedures, office-based joint/soft tissue/bursa injection procedures, trigger point injections, EMG guided nerve block and intramuscular injection procedures, etc. Basic principles of fluoroscopy, musculoskeletal ultrasound, and EMG will also be taught. This course should be particularly helpful for students interested in pursuing a career in Physical Medicine and Rehabilitation, Pain Management, Anesthesia, Orthopedics, Neurology, Radiology, Rheumatology, and Primary Care.

Learning outcomes & evaluation methods:

Outcomes: During this elective it is expected that a student will assist with evaluations (patient interviews and physical exams) on patients with various pain - related conditions and present these findings to clinical faculty. Also, the student will actively participate in observing and performing various pain management procedures, including fluoroscopically-guided injections. Clinical faculty will provide feedback to the student. The student will also be required to write medical notes on patients that the student interacts with during the rotation.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty via a verbal patient presentations. The student will write notes on the patients he/she sees.
2. The student will observe, assist with, and in many cases be given the opportunity to perform various injections and other pain management interventional procedures.
3. The student is expected to read appropriate resource materials to increase their knowledge base throughout the rotation and to supplement the educational knowledge gained through direct patient care.
4. The student may be asked to research, review and present current literature regarding clinical diagnoses that are seen in our patients during the rotation.
5. No overnight call is required.

First day reporting instructions: Approximately 1 to 2 weeks prior to the start of the student's rotation, he/she will receive an email from the department with their site assignment and reporting instructions.

REHB 9540 - PEDIATRIC REHABILITATION

Site(s) of Elective: Children's Specialized Hospital
 Elective Director: Michael Armento, M.D.

When offered: July, November, November/Shared, and May only
 Max number of NJMS third year students per rotation: 1
 Max total number of 3rd and 4th year students per rotation: 1
 Prior approval required: NO

Course Description: During this elective, two weeks will be spent at Children's Specialized Hospital, a pediatric rehabilitation facility in Mountainside, N.J. Time will be spent in outpatient services, giving the student the opportunity to evaluate and follow the management of children with neuromuscular, musculoskeletal and developmental disorders. The student may have the opportunity to attend specialty clinics in orthopaedics, as well as observe the performance of diagnostic and management techniques including electrodiagnosis and peripheral nerve blocks. This elective would be of particular interest to students thinking of careers in either Physical Medicine and Rehabilitation or Developmental Pediatrics.

Format/Activities: Daily patient care involvement in an outpatient setting. There may be opportunity to observe and evaluate children at special needs schools.

Learning outcomes & evaluation methods:

Outcomes: During this elective, it is expected that students will be able to perform histories and physicals on patients in an in- and outpatient setting. These will be presented and discussed with the attending physician.

Evaluations: Student evaluations will be based on overall interest, enthusiasm and clinical performance.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty on a routine basis. The student will write notes on the patients he/she sees.
2. The student is expected to review current literature regarding the practice of pediatric rehabilitation medicine.

First day reporting instructions: Approximately 1 to 2 weeks prior to the start of the student's rotation, he/she will receive an email from the department with their site assignment and reporting instructions.

REHB 9550 - REHABILITATION IN PRIVATE PRACTICE

Site(s) of Elective: Physicians' offices in the Dover, West Orange, and Hoboken, NJ areas
Elective Director: Name: Drs. Robert Vrablik and Thomas Cava

When offered: July, November, November/Shared, and May only
Max number of NJMS third year students per rotation 2
Max total number of 3rd and 4th year students per rotation 2
Prior approval required NO

Course Description: This elective is designed to give 3rd year students exposure to the field of outpatient rehabilitation medicine. The two weeks will be spent either at physician offices in the West Orange, Dover or Chester locations. In all locations, time will be spent with an attending in an outpatient setting with the potential for involvement in the practice's inpatient care as well. This elective would be of particular interest to students considering careers in physical medicine and rehabilitation, sports medicine or neurology.

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

Learning outcomes & evaluation methods:

Outcomes: During this elective, it is expected that students will be able to perform histories and physicals on patients in an outpatient setting. These will be presented and discussed with the attending physician.

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

Key Responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty on a daily basis. The student will write notes on the patients he/she sees.
2. If participating in inpatient care as well, the student will be expected to review patients' charts prior to rounds.
3. The student is expected to review current literature regarding the practice of outpatient rehabilitation medicine.

First day reporting instructions: Approximately 1 to 2 weeks prior to the start of the student's rotation, he/she will receive an email from the department with their site assignment and reporting instructions.

REHB 9570 - SPINAL CORD INJURY

Site(s) of Elective: Kessler Institute for Rehabilitation – West, University Hospital and VA NJ Healthcare System – East Orange.
Elective Director: Name: Drs. Steven Kirshblum (Kessler Institute for Rehabilitation – West Orange facility) and Carol Gill (VANJHCS-East Orange)

When offered: July, November, November/Shared, and May only
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: NO

Course Description: This elective is designed to give 3rd year students exposure to the field of spinal cord injury in rehabilitation medicine. The two weeks will be spent rotating on an inpatient spinal cord service as well as participating in chronic spinal cord injured outpatient visits. This elective would be of particular interest to students considering careers in physical medicine and rehabilitation, neurology, or neurosurgery.

Format: Daily patient round; rehabilitation meetings; behavioral management rounds; outpatient visits; lectures and other educational programs

Learning outcomes & evaluation methods:

Outcomes: During this elective, it is expected that the student will follow assigned patients on the spinal cord injury service. Each day, students will be required to perform physical exams on their assigned patients and present these findings to the clinical faculty. The student will also be expected to perform a focused history and physical and chronic outpatient spinal cord injury patients.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. This grade will be determined by attendance and participation in activities; clinical histories; evaluation of bedside clinical skills.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty on a daily basis. The student will write notes on the patients he/she sees.
2. The students will be expected to review their assigned patient's charts prior to rounds.
3. The student is expected to review current literature regarding the practice of rehabilitation the spinal cord injured patient.

First day reporting instructions: Approximately 1 to 2 weeks prior to the start of the student's rotation, he/she will receive an email from the department with their site assignment and reporting instructions.

REHB 9580 - MUSCULOSKELETAL MEDICINE CLINICAL ROTATION

Site(s) of Elective: NJMS Doctor's Office Center, Newark.
Elective Director: Name: Patrick Foye, M.D. and Todd Stitik, M.D.

When offered: July, November, November/Shared, and May only
Max number of NJMS third year students per rotation: 1
Max total number of 3rd and 4th year students per rotation: 1
Prior approval required: NO

Course Description: To learn how to diagnose and non-surgically treat a variety of 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.

Learning outcomes & evaluation methods:

Outcomes: During this elective it is expected that a student will conduct patient interviews and physical exams on patients with musculoskeletal conditions and present these findings to clinical faculty. Clinical faculty will provide feedback to the student. The student will also be required to write medical notes on patients.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty via a verbal patient presentation. The student will write notes on the patients he/she sees.
2. No overnight call is typically required.
3. The student is expected to read appropriate resource materials to increase their knowledge base throughout the rotation and to supplement the educational knowledge gained through direct patient care.
4. The student may be asked to research, review and present current literature regarding clinical diagnoses that are seen in our patients during the rotation.

First day reporting instructions: Approximately 1 to 2 weeks prior to the start of the student's rotation, he/she will receive an email from the department with their site assignment and reporting instructions.

REHB 9590 - MUSCULOSKELETAL MEDICINE RESEARCH

Site(s) of Elective: NJMS Doctors Office Center, Newark. Please contact Dr. Foye for other locations.
Elective Director: Name: Drs. Patrick Foye and Todd Stitik

When offered: July, November, November/Shared, and May only
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: NO

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

Learning outcomes & evaluation methods: Students will be graded on their level of interest, work ethic, and contribution to the musculoskeletal/sports medicine research projects that they work on.

Relevant factors will include the student's teamwork, follow-through, initiative, and understanding of the goals, objectives, and context of the research project on which they are working.

Key responsibilities of the student while on elective:

1. The student may be expected to see patients with musculoskeletal conditions in the clinical setting that represents the research focus of his/her preceptor.
2. The student will be expected to learn the research issues pertaining to the focused patient population.
3. The student will be expected to read research articles as directed by his preceptor and to discuss the organization, structure, design, appropriateness of methods, clinical relevance, importance, and conclusions.
4. The student will actively participate in academic and clinical research activities during the rotation, in areas related to musculoskeletal medicine and sports medicine.

First day reporting instructions: Approximately 1 to 2 weeks prior to the start of the student's rotation, he/she will receive an email from the department with their site assignment and reporting instructions.

DEPARTMENT OF PSYCHIATRY

PSYC 9500 - CLINICAL EXPERIENCE IN ELECTROCONVULSIVE THERAPY

Site(s) of Elective: Medical Special Procedures – University Hospital (includes G-Yellow UH)
Elective Director: Name: Ye-Ming Sun, MD Title: Instructor
Phone: 973-972-7708 Email: sunye@njms.rutgers.edu

When offered: Throughout the academic year.

Max number of NJMS third year students per rotation: 2

Max total number of 3rd and 4th year students per rotation: 3

Prior approval required: YES – contact Dr. Sun at 973-972-3078 or email (copy Dr. Kennedy kennedy@njms.rutgers.edu)

Course Description: The student will observe the delivery of ECT in the UH Medical Special Procedures (MSP) Unit and will participate in consultations for patients who are referred for ECT. The student will clerk on G Yellow with the ECT attending(s).

Learning outcomes & evaluation methods: Elective Faculty leader completes evaluation course by using clinical performance goals consistent with student's level of learning (NJMS Curriculum Goals) and how well the student performs in clinical write-ups of patients and how well student interacts with Psychiatric patients.

Key responsibilities of the student while on elective:

1. To be present during ECT service hours at the MSP.
2. Assist Attending Physician in conducting ECT consultations.
3. Clerk for ECT Attending on G Yellow.

First day reporting instructions: Report to Medical Special Procedures at 7:30 a.m. (PLEASE check with Dr. Sun day before to confirm schedule).

PSYC 9510 - CLINICAL EXPERIENCE IN VA PSYCHIATRY

Site(s) of Elective: East Orange VA Medical Center
Elective Director: Name: Manjula Chilakapati, MD Title: Director, Medical Student Educ.
Phone: 973-676-1000 x3122 or x3143 Email: manjula.chilakapati@va.gov

When offered: Throughout the academic year

Max number of NJMS third year students per rotation: 4

Max total number of 3rd and 4th year students per rotation: 6

Prior approval required: NO

Course Description: The student will function as 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 Attending Physician at the end of the two weeks utilizing criteria similar to junior house staff evaluation, as appropriate and in accordance with the student's learning level and NJMS Curriculum goals.

Learning outcomes & evaluation methods: It is expected that the student will conduct competent and comprehensive patient interviews, take patient histories, do a review of systems, and conduct

physical exams. Students will also present findings to Attending Physician on a daily basis. The attending will provide feedback to the students. The student is required to present at least 1 case report. Evaluations: Clinical grade will be computed with NJMS evaluation forms. The case report will be graded pass/fail.

Key responsibilities of the student while on elective: The student is expected to see patients in the inpatient unit and present findings to attending staff on a daily basis. The student will chart notes on the patients daily. The student is expected to attend morning report and treatment plan meetings. The student is expected to report at least 1 case report with detailed treatment plan. The student is also expected to attend all didactic lectures given at the VANJHC facility during the rotation.

First day reporting instructions: Please report to EOVMC room 12-058 to Remona Jones or Wanda George.

PSYC 9520 - CONSULTATION/LIAISON

Site(s) of Elective: University Hospital
Elective Director: Name: Cheryl Kennedy, M.D. Title: Associate Professor
Phone: 973-972-5598 Email: kennedy@njms.rutgers.edu

When offered: Throughout the academic year.
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 5
Prior approval required: NO

Course Description: Rotate with psychiatry consultation team in University Hospital.

Learning outcomes & evaluation methods: Learn to assess psychiatric illness signs and symptoms in the medical setting, including drug interaction signs and symptoms, drug intoxication or withdrawal signs and symptoms, develop a treatment plan for the Psychiatric patient or a patient with acute signs and symptoms of psychiatric disorder in the setting of acute medical/surgical illness.

Key responsibilities of the student while on elective: Work with C/L team to evaluate patients in a timely manner; write up consultations; give case presentations to team; contact auxiliary info sources and provide feedback to requesting team.

First day reporting instructions: Call Dr. Cheryl Kennedy for instructions.

PSYC 9530 – PSYCHIATRIC EMERGENCY SERVICES

Site(s) of Elective: University Hospital
Elective Director: Name: Cheryl Kennedy, M.D. Title: Clerkship Director
Phone: 973-972-5598 Email: kennedy@njms.rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 3
Max total number of 3rd and 4th year students per rotation: 4
Prior approval required: YES

Course Description: Rotate through Psychiatric Emergency Services and perform clinical assessments and evaluations.

Learning outcomes & evaluation methods: Be able to differentiate what is emergent, urgent or not and learn what emergency department psychiatry interventions are appropriate. Learn required documentation procedures and Department of Health regulations regarding treatment of patients in Emergency Department settings. Learn the details of Civil Commitment Procedures of individuals deemed to be dangerous or gravely disabled due to a mental illness.

Key responsibilities of the student while on elective: Work with emergency service team to provide timely and accurate patient care assessments and participate in planning acute interventions and discharge/disposition planning at University Hospital Psychiatric Emergency Services.

First day reporting instructions: Report to Psychiatric Emergency Services UH C-Level, Rom 224.

PSYC 9540 - INPATIENT PSYCHIATRY

Site(s) of Elective: University Hospital G-Yellow
Elective Director: Name: Najeeb Hussain, M.D. Phone: 973-972-6122 Email: hussaina@njms.rutgers.edu

When offered: Throughout the academic year.
Max number of NJMS third year students per rotation: 4
Max total number of 3rd and 4th year students per rotation: 6
Prior approval required: NO

Course Description: Acute Inpatient Psychiatry.

Learning outcomes & evaluation methods: Learning outcomes –Diagnosis and treatment of acute disorders; Evaluation methods - Attending assessments.

Key responsibilities of the student while on elective: Learn to assess acute psychiatric disorder, learn to treat acute psychiatric disorders, learn to work in a treatment team.

First day reporting instructions: Report to University Hospital G Yellow.

PSYC 9550 - SUBSTANCE ABUSE RESIDENTIAL, OUTPATIENT AND METHADONE

Site(s) of Elective: VA New Jersey-East Orange New Jersey 385 Tremont Ave, East Orange, NJ
Elective Director: Name: Sam Spinelli, Ph.D. Title: Clinical Psychologist
Phone: (973) 676-1000 Email: sam.spinelli2@aol.com

When offered: During designated elective time.
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: NO

Course Description: To introduce students to a variety of treatment modalities for residential and outpatient substance abuse and methadone clinics. Through mentoring, supervision and participation in treatment, therapy, psycho-educational and twelve step groups, intakes, evaluations and team meetings and interviews, students will be introduced to the problems of substance abuse treatment as well as the experimental and motivational factors that lead to addiction and recovery.

Learning outcomes & evaluation methods: Preceptorship, attendance, observation and clinical

assessment according to student's level of learning and NJMS Curriculum goals.

Key responsibilities of the student while on elective: Attend Residential UNIT 8:30AM Unit meeting 5 days a week, Residential 11AM team meeting and patient interview 3 days/week, participate in intakes and evaluations PRN, meet with team psychiatrist at least once per week, participate in selected 5 day a week therapy groups and various psycho-educational groups, attend 1PM out patient team meeting 2/week.

First day reporting instructions: Report before 8:15AM on first day of elective to Dr. Sam Spinelli, Room 18-143 VA New Jersey-East Orange Campus

DEPARTMENT OF RADIOLOGY

RAD 9500 - DIAGNOSTIC RADIOLOGY

Site(s) of Elective: University Hospital
Elective Director: Name: Pierre Maldjian, M.D. Title: Professor of Radiology
Phone: 973-972-5188 E-mail: maldjipd@njms.rutgers.edu

When offered: During designated elective time
Max number of NJMS third year students per rotation: 4
Max total number of 3rd and 4th year students per rotation: 6
Prior approval required: NO

Course Description: The elective provides the medical student with an introduction to the specialty of Radiology. Emphasis is on chest, abdomen, musculoskeletal and neurologic imaging as well as emergency radiological evaluation. The student will be introduced to the imaging modalities, along with their advantages and limitations.

Learning outcomes & evaluation methods:

The elective is Pass/Fail. Students will be evaluated based on attendance, presentation of cases and performance during daily film interpretation sessions.

Outcomes: At the end of the elective student should:

1. Know the appearance of major vessels and organs on radiographs and CT scans.
2. Recognize the appearance of common pathologic entities on radiographs of the chest and abdomen including but not limited to: pneumonia, pleural effusions, pneumothorax, large masses, pneumoperitoneum, bowel obstruction gallstones, and renal stones.
3. Know the appearance and proper location on radiographs of feeding tubes and commonly used vascular catheters.
4. Identify conspicuous fractures, dislocations and subluxations on radiographs of the extremities.
5. Identify and localize acute hemorrhage on CT of the brain.

Key responsibilities of the student while on elective:

1. The required text is "Learning Radiology: Recognizing the Basics" by William Herring (2nd Ed., 2011).
2. Students are expected to arrive by 8:00 a.m. Students will receive a rotation list indicating a suggested rotational assignment in different subspecialty areas of Radiology for each day of the rotation. Students will observe interpretation of studies by the Radiology attending physicians and residents and will receive teaching at the viewbox.
3. Students should attend all 12:30PM and 4PM Radiology conferences held in UH, Room H-350. The MICU film reading sessions, held on I-level each morning at 8:00AM, are also mandatory for all students. Students should also attend Radiology Conference with the admitting medical teams at 9:00 AM held in UH Room H-350.
4. Students will meet periodically as a group with the course director during the rotation to discuss interesting cases. During each of these sessions each student will present one interesting case and discuss it.

First day reporting instructions: Report to Pietro Antonelli in Radiology office (UH C-318) at 8:30 AM on the first day of the rotation.

DEPARTMENT OF RADIATION ONCOLOGY

RADO 9530 – RADIATION ONCOLOGY

Site(s) of Elective: University Hospital
Elective Director: Name: Sabin B. Motwani, M.D. Title: Clinical Director, Radiation Oncology
Phone: 973-972-5053 E-mail: motwansa@cinj.rutgers.edu

When offered: During designated elective time
Max number of NJMS third year students per rotation: 1
Max total number of 3rd and 4th year students per rotation: 1
Prior approval required: NO
Prerequisite: Medicine Clerkship

Course Description: This elective is designed to introduce third year medical students to the field of Radiation Oncology. Under the supervision of attending physicians in an inner-city radiation oncology department, students will have the opportunity to see all aspects of pertinent patient care. Students will be able to see initial consultations of cancer patients, followed by simulation and treatment planning. The students will also participate in the routine activities surrounding daily treatments with radiotherapy. Students will attend all departmental patient care meetings (including tumor boards), reviewing patient charts and imaging (CT, MRI, PET/CT, bone scan, etc). This elective will provide students with a better understanding of cancer care in general and radiation therapy specifically.

Learning outcomes & evaluation methods:

Outcomes: During this elective, it is expected that the student will conduct patient interviews and physical exams and present the findings to clinical faculty. The student will present at least two patients during the two week rotation. Feedback from the attending physician will be immediate, and an assessment and plan for the patient will be generated. Participation in all aspects of patient care will be expected.

Evaluation: The case reports will be graded pass/fail and make up 40% of the grade. Participation will be graded pass/fail and make up 60% of the grade. The student's final grade will be computed using the NJMS Student Evaluation Form. The elective is graded pass/fail per NJMS grading policy.

Didactic lectures: The radiation oncology department at NJMS and RWJMS is a joint department, under the leadership of Dr. Bruce Haffty, and the residents rotate at both centers. On Fridays, all residents have an academic day, where they learn about physics, radiobiology, and clinical radiation oncology. NJMS students are more than welcome to participate in the lectures held at RWJMS. The day starts at 8 am Friday in the G2 conference room at RWJUH.

Key responsibilities of the student while on elective:

1. The student will be expected to see all in-patient consultations and present the findings to faculty
2. The student is expected to attend all departmental meetings and tumor boards
3. The student is expected to observe patient treatments
4. The student is expected to observe the construction of an immobilization device
5. The student is expected to witness computer treatment planning, including how to contour target volumes and critical structures
6. The student is expected to observe a patient simulation

First day reporting instructions: The Student should report to the ENT conference room in the Cancer Center F 1196 level at 8 am on the first Monday of the rotation. The student should wear a white coat and bring his/her ID. The student should introduce themselves to the radiation oncology resident and/or Dr. Kim, the attending head and neck radiation oncologist.

DEPARTMENT OF SURGERY

SURG 9520 - GENERAL & THORACIC PEDIATRIC SURGERY

Site(s) of Elective: Hackensack University Medical Center
Elective Director: Name: Keith Kuenzler, MD Title: Chief Pediatric Surgery
Phone: 551-996-2921 Email: kkuenzler@hackensackumc.org

When offered: Throughout the academic year.

Max number of NJMS third year students per rotation: 2

Max total number of 3rd and 4th year students per rotation: 2

Prior approval required: NO

Special instructions: Please contact Wanda Harvey, Clerkship Assistant, phone 201-996-2625, email wharvey@hackensackumc.org one month in advance of start date of elective.

Course Description: Students will participate in all aspects of the care of the pediatric patient including inpatient and outpatient postoperative management.

Learning outcomes & evaluation methods: There will be a mid-rotation informal evaluation and feedback. There will be an end of week dialogue between the student and the staff as to their performance. This elective is graded pass/fail per NJMS grading policy. The student's clinical grade will be computed using the NJMS Student Evaluation Form.

Key responsibilities of the student while on elective:

1. Student will familiarize him/herself with all patients on the surgical service at HUMC. At the discretion of the chief resident and/or staff the student will be assigned one to two patients to follow closely throughout the rotation.
2. A case log will be kept by the student for all formal encounters both inpatient, outpatient and operatively.
3. Student will have one formal patient presentation and lead the discussion centering on a case currently on the surgical service. This will be performed during the last Wednesday morning staff teaching rounds.
4. Student is expected to attend daily AM and PM rounds with the chief resident as well as weekly Wednesday morning staff rounds
5. When appropriate there will be attendance at the surgical M&M Conference and formal staff rounds at HUMC.
6. Depending on caseload, students will have the opportunity to attend outpatient clinics held by the staff and nurse practitioners at HUMC
7. Student will observe and participate in operative cases at HUMC.

First Day Reporting Instructions: The student is expected to report to the Office of Academic Affairs, Hackensack University Medical Center, Alfred N. Sanzari Building, 360 Essex Street, 4th Floor, Suite 402, Hackensack, NJ 07601 at 8:00 a.m. on the first day of the rotation. Contact number: (551) 996-2016.

SURG 9545 - INTRODUCTION TO UROLOGY

Site(s) of Elective: University Hospital and Department of Veterans Affairs Medical Center – *students will be assigned on a first come basis by the elective director*
Elective Director: Name: Robert Weiss, M.D. Title: Professor and Chief, Urology
Phone: 973-972-4488 Email: weissre@cinj.rutgers.edu

When offered: Throughout the academic year.
Max number of NJMS third year students per rotation: 3
Max number of 3rd and 4th year students per rotation: 4
Prior approval required: NO

Course Description: Students will work closely with the urology team which is comprised of a chief resident, a junior resident and a PA. Students will also describe indications for operative intervention vs. medical management of different urologic diseases.

Learning outcomes & evaluation methods:

Outcomes: During this rotation, students are expected to conduct patient interviews and physical exams and present these findings to the clinical faculty on a daily basis. The student will also be expected to present a case report at the end of the elective.

Evaluation: Students will be evaluated by a clinical evaluation distributed to the faculty and residents as well as by an exam at the conclusion of their rotation. This grade is pass/fail per NJMS grading policy.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients in the clinical setting and present findings to clinical faculty on a daily basis.
2. The student will write notes on the patients he/she sees.
3. While on hospital rounds, the student will be expected to review patient charts prior to rounds.
4. The student is expected to report to the OR for cases during the elective.

First day reporting instructions: Registration for this elective will occur through NJMS Office of the Registrar. Once registered, the student must contact Shaniqua Mitchell by email at mitches1@njms.rutgers.edu at least one month prior to the start date of the rotation for further instructions. Students should report to ACC Suite G1680 at 8:30 a.m. Office phone number to call is (973) 972-4488.

SURG 9560 - PLASTIC SURGERY

Site(s) of Elective: 140 Bergen Street. Room E1620
Elective Director: Name: Edward Lee, MD Title: Assistant Professor, Program Director
Phone: 973-972-3229 Email: leee9@njms.rutgers.edu

When is this elective offered? Throughout the academic year
Max number of NJMS third year students per rotation 4
Max total number of 3rd and 4th year students per rotation 4
Required Text: Grabb and Smith, "Plastic Surgery" Lippincott Raven, Chapters 1 and 2 prior to beginning rotation.
Prior approval required: YES

Course Description: 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 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.

Learning outcomes & evaluation methods:

The student will attend plastic surgery conferences and participate in ward rounds and operating room teaching sessions. The student will present a clinical case at a plastic surgery conference.

Key responsibilities of the student while on elective:

The student will prepare a case report for presentation. The student will evaluate and report on patients in clinic, in the ER and in the Hospital. The student will observe and assist in the OR.

First day reporting instructions: Students should contact Ms. Amy Stolar prior to the first day of the rotation for meeting time and location. Phone number (973) 972-3229.

SURG 9565 – ORAL AND MAXILLOFACIAL SURGERY

Site(s) of Elective:	University Hospital	
Elective Director:	Name: Vincent Ziccardi, DDS, MD	Title: Program Director and Chair
	Phone: (973) 972-3126	Email: ziccarvb@sdm.rutgers.edu

When offered: Throughout the academic year.

Max number of NJMS third year students per rotation: 2

Max total number of 3rd and 4th year students per rotation: 2

Prior approval required: NO

Course Description: This elective will introduce the student to the field of oral and maxillofacial surgery. University Hospital is a Level 1 Trauma Center with the oral and maxillofacial surgery division managing 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 jaw, performs reconstruction of jaws, manages patients with severe odontogenic infections, 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. The elective is recommended for students interested in oral and maxillofacial surgery, otolaryngology, plastic surgery and general surgery.

Learning outcomes & evaluation methods: The student will be evaluated by the attending surgeon and residents on service at the time. Evaluation criteria will include attendance, fund of knowledge, level of participation in clinical activities, history and physical exam skills, and effectiveness as a member of the healthcare team. The student's clinical grade will be computed using the NJMS Student Evaluation Form. The elective is graded pass/fail per NJMS grading policy.

Key responsibilities of the student while on elective:

1. Attendance at all patient rounds and didactic conferences
2. Direct participation in OR cases
3. Evaluate, diagnose and treatment plan of our outpatients
4. Assist residents and faculty in the delivery of care to our patients
5. On-call participation in-house with residents optional

First day reporting instructions: On the first day of the elective, the student should meet the team in the Dental Clinic, C-level, University Hospital, at 6:45 a.m.

SURG 9570 - PODIATRIC SURGERY

Site(s) of Elective: University Hospital
Elective Director: Name: Warren A. Chiodo, DPM Title: Director, Podiatric Medical Education
Phone: (973) 972-5088 Email: chiodowa@uhnj.org

When offered: Throughout the academic year.
Max number of NJMS third year students per rotation: 1
Max total number of 3rd and 4th year students per rotation: 2
Prior approval required: NO

Course Description: This elective is designed to introduce the third year student to podiatric foot and ankle surgery. It 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 foot and ankle trauma, reconstructive surgery, diabetic foot care including Charcot neuroarthropathy reconstruction, pediatric deformities, vascular, dermatologic, and neurologic disorders of the foot and leg.

Learning outcomes & evaluation methods: During the elective it is expected that a student will conduct patient interviews and physical exams and present these findings to clinical faculty. The student will be expected to attend all rounds, surgery, clinics, and patient discussions. At the conclusion of this elective, students will also provide a 15 minute academic presentation pertinent to foot and ankle pathology.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. The academic presentation will be graded pass/fail. The clinical grade is weighted 80% of the final grade, and the case logs and presentation are weighted 20%.

Key responsibilities of the student while on elective:

During this elective it is expected that a student will:

1. See patients in the clinical setting and present findings to clinician.
2. Pre-round on in-house patients and assist the resident with EMR notes.
3. Obtain radiographic, laboratory, and diagnostic study results on patients.
4. Write notes on the patients he/she sees and review with the attending upon completion of rounds.
5. Assist with peri-operative management of the surgical patients as directed.
6. Provide one academic presentation.

First day reporting instructions: Call the residents office (973) 972-6043 prior to the start of the rotation. Students should report to UH G-142 at 6:30 a.m. on the first day of the rotation.

SURG 9590 - TRANSPLANTATION AND HEPATOBILIARY SURGERY

Site(s) of Elective: University Hospital
Elective Director: Name: Dorian Wilson, MD Title: Professor of Surgery
Phone: (973) 972-8088 Email: wilsondo@njms.rutgers.edu

When is this elective offered? Throughout the academic year
Max number of NJMS third year students per rotation: 1
Max total number of 3rd and 4th year students per rotation: 1
Prior approval required: NO

Course Description: During their rotation on the Transplant Surgery Service, students will be able to participate in all the surgical procedures performed in this 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 resulting in surgical pathology. There is also a strong emphasis on bedside and operating room teaching regarding the various aspects of hepatic surgery and transplantation science.

Learning outcomes & evaluation methods: During the elective it is expected that a student will conduct patient interviews and physical exams and present these findings to the Chief Resident and/or clinical faculty during daily rounds. The student can present at least one case report or topic of interest during this elective (optional).

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. The clinical presentations, clinical participation, operative presence and overall decorum will be considered in the final grade. There is no written examination and the final grade will be in the format of Pass/Fail. Student participation on the Liver Transplant Service is valued.

Key responsibilities of the student while on elective:

1. The student will be expected to see patients admitted to the hospital on the Transplant Surgery service (no more than a total of 3 at a time) and present these findings to the Chief Resident and clinical faculty during clinical rounds on a daily basis. Written notes are not required; however, the student is expected to have a firm grasp on the status of the patient(s) that he/she is following, particularly if the patient has rare or unusual pathology or an interesting clinical course. The student should be prepared to comment intelligently on such patients, demonstrating understanding or appreciation for salient points of care. On this rotation, the students will be expected to be available 24 hours a day, since the timing of most organ procurements and transplant procedures is unpredictable. Weekends are optional. Communication will be via cellular phone. The student can make at least one brief presentation, i.e., case report, presentation on a topic of interest pertaining to transplantation, liver disorders, etc. This presentation may be given verbally or in PowerPoint format. In either format, the presentation should readily exhibit substantial thought and inquiry
2. The student is expected to review topics discussed during daily rounds to reinforce and add to teaching efforts made by the attending and resident staff.
3. The student will accompany the residents on all consults, in order to gain information about patients with chronic liver disease and hepatobiliary neoplasms.
4. Circumstances that limit availability or cause absences while on the Service should be reported in a timely and professional manner to the Chief Resident on the Service.

First day 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. An email should be sent to Dr. Wilson (wilsondo@njms.rutgers.edu) no later than the Friday preceding the start date for the elective. This notification will allow Dr. Wilson to alert the team of the student's arrival in the event that the service attending is in the operating room and unable to participate in the initial introduction process. Additionally, an electronic manual will be sent to facilitate the introduction to the Service.