RUTGERS
New Jersey Medical School

ELECTIVES
for
Third Year Students
2026-2027

Office of the Registrar
Medical Sciences Building
MSB B-640

Rutgers, The State University of New Jersey

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 2026-2027

	CALENDAR DATES			BROCHURE DESIGNATION
2026	April 20	to	May 1	April/Shared
	June 15	to	June 26	June
	August 10	to	August 21	August
	October 5	to	October 16	October
	November 30	to	December 11	December
2027	February 15	to	February 26	February
	April 12	to	April 23	April

All third year electives are graded PASS/FAIL.

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DEPARTMENT OF ANESTHESIOLOGY

ANES 9500 – ANESTHESIOLOGY

Elective Director: Name: Olga Martins, M.D. Email: omartins@njms.rutgers.edu

Elective Coordinator: Name: Steve Demas Email: demasst@njms.rutgers.edu

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 6
Max total number of 3rd and 4th year students per rotation: 6
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.

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 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. Students are also strongly recommended to attend the resident didactic sessions which are held on Wednesday at 8:00 AM-12:00 PM in MSB-E545. Grand Rounds are held each Wednesday morning in MSB B552 at 7:00 am. Webex links for virtual participation will be emailed during the pandemic. Attendance is mandatory.
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 6:30 AM. All materials will be emailed electronically by Steve Demas in advance of the rotation.

ANES 9530 - INTRODUCTION TO ANESTHESIOLOGY @ Cooperman Barnabas Medical Center

Site(s) of Elective: Cooperman Barnabas Health Care Center (Livingston)
Elective Director: Name: Michael Akerman, M.D. Title: Program Director
Phone: 973-322-5512 Email: Perri.Sheffield-Lee@rwjbh.org

Contact Information: Debbie Paciga, Medical Student Coordinator, debbie.paciga@rwjbh.org, 973-322-5548

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: 3
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 as well as IV placement and fluid management. All anesthetic procedures are done under the supervision of faculty anesthesiologists. Students will rotate through various anesthesia services including, but not limited to: General, Acute pain, Pediatrics, Cardiothoracic, Obstetrics and Ambulatory Services. Medical students will attend the resident run lectures as well morning lectures and Journal Club, when available.

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/topics 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.

Reporting Instructions: Students should report to the main Anesthesia office on the first floor at 7:00 a.m. on the first day of the rotation. You will meet with Dr. Akerman or one of the senior residents.

DEPARTMENT OF EDUCATION

EDUC 9500 – RESEARCH: MEDICAL STUDENT MENTORING IN SCHOLARSHIP PROGRAM

Site(s) of Elective: University Hospital

Elective Directors: Name: Dr. Daniel Jones Title: Asst Dean for Simulation, Innovation and Research
Email: dj477@njms.rutgers.edu Phone: 973-972-8251

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: Unlimited
Prior approval required: YES- Please reach out to Edmer Martinez, Program Coordinator for Medical Student Mentoring in Scholarship Program, at eam277@njms.rutgers.edu or 973-972-8251 for approval prior to registration. He will work with you to identify a faculty mentor in your specialty of choice.

Course Description: This elective is designed to teach 3rd year medical students about research processes as they occur in clinical medicine. The elective will allow them to practice and demonstrate the ability to plan a research project, from the concept to implementation stage, including the IRB process. This will provide students a comprehensive foundation to implement their own research project as future residents and faculty. Students will be assigned a faculty mentor based on specialty interest.

Learning outcomes & evaluation methods:
The student must attend required progress meetings as designed by the faculty advisor. The student is expected to review the literature in order to outline the research question and plan. They will then formulate a specific hypothesis and study design. All of these will be detailed in an IRB protocol, ready for submission by the end of the two-week elective. The elective will be graded Pass/Fail.

Objectives:
At the conclusion of this elective, the student will be able to:
1. Perform a comprehensive literature review on a research topic.
2. Outline the research question and plan.
3. Formulate a specific hypothesis and determine an appropriate study design and analysis method.
4. Complete an IRB protocol.

First Day Reporting Instructions: Students should contact Edmer Martinez, Program Coordinator for Medical Student Mentoring in Scholarship Program, at eam277@njms.rutgers.edu or 973-972-8251.

EDUC 9533 – GLOBAL HEALTH ELECTIVE

Site(s) of Elective: Rutgers NJMS & varied International Locations

Elective Directors: Name: Ziad Sifri, M.D. Title: Director
Harsh Sule, M.D., MPP Associate Director – Office of Global Health
Email: sifrizi@njms.rutgers.edu Phone: 973-972-6653
harsh.sule@rutgers.njms.edu 973-972-9263

When offered: 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: 4
Prior approval required: YES

Course Description: This two-week elective is designed for students that are pursuing a Distinction in Global Health to further experiential learning related to global health. Under the supervision of the course directors, and other faculty mentors engaged as required, the student will build on an existing global health project that s/he has been actively involved with. The global health experience is further subject to review and approval by the Office of the Registrar and the Office of the Dean of NJMS. To be considered qualified, at a minimum, the student must have prior global health experience, must have a project that s/he is working on and must be in good standing as part of the Distinction in Global Health program. The project must be in accordance with NJMS curricular goals, objectives and educational policies, and must afford the student meaningful exposure to medical care systems and/or public health problems and programmatic interventions in the host country.

If the elective includes international travel, each student will be required to have a travel consultation with a physician from the Student Health and Wellness Center prior to departure. Additionally, travel must be considered safe by the Rutgers Office of Risk and Claims. This determination is made in conjunction with the NJMS Office of the Registrar, NJMS Office of Global Health and is based upon the U.S. Department of State travel alerts, advisories, safety and security statements. The safety decision made by these offices is considered final. Travel expenses are the responsibility of each student. Following participation in the host country, each student will also be required to complete a standard student feedback evaluation form about their learning experience at the global health site.

Learning outcomes & evaluation methods:
Outcomes: Each student's elective will be assigned unique outcomes that will be pre-determined in conjunction with the course directors. These outcomes will be based on their individual global health project and can vary from history/physical exams to administration of survey, completions of needs-assessments, analysis of data, etc. Upon completion of the elective period the student will be required to submit a brief paper summarizing the student's experience, as well as goals accomplished over the two-week period in the context of the overall global health project s/he is working on.

Evaluation: The course will be graded Pass/Fail. Submission and approval of the summary paper is required to complete the course. The grade is determined by the elective directors based on the summary paper and feedback from relevant faculty mentors.

Key responsibilities of the student while on elective: Students must follow all Registrar's Office procedures concerning international travel, including the purchase of international health insurance, enrollment in the International SOS program, and registration for the Rutgers MyTrips program. Information regarding these requirements will be provided by the Registrar's Office prior to the student's trip. Furthermore, students should be advised that Rutgers University/Rutgers NJMS will not approve travel to any country listed on the U.S. Department of State's Travel Warnings or Travel Advisories. Students are expected to monitor this information through the website: http://travel.state.gov/content/passports/english/alertswarnings.html.

The student must contact the course directors at minimum 90 days prior to the start of the elective to coordinate specific objectives for the elective. Key objectives, responsibilities and expected outcomes of the student will be finalized in conjunction with the course directors at least 30 days prior to the start of the elective.

First Day Reporting Instructions: Students should contact the course directors on the first day of the elective.

DEPARTMENT OF EMERGENCY MEDICINE

EMED 9525 – MEDICAL TOXICOLOGY

Elective Director: Name: Anita Mudan, MD Title: Assistant Professor
Phone: 973-972-9280 Email: am4220@njms.rutgers.edu

Managing Directors: Name: Bruce Ruck, Pharm.D. DABAT
Phone: 973-972-9280 Email: ruckbe@njms.rutgers.edu

Additional faculty: Dr. Christopher Meaden, Dr. Mehruba Parris, Dr. Howard Greller, and Dr. Jessica Krueger
When offered: Throughout the academic year, EXCEPT AUGUST
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2

Course Description: The individual will function as both student and participant in the daily operations of the New Jersey Poison Information and Education System, the regional poison center and AIDS/STD/Hepatitis Hotline for the state of New Jersey. The individual will learn the history of poison centers and how they currently operate and their place in public health and disaster preparedness. The student will participate in daily rounds and is expected to be prepared to discuss cases every morning and afternoon at sign out rounds. Medical toxicologists will accompany the student to evaluate poisoned patients at the bedside. Students will read and discuss interesting toxicology articles during journal club and will learn research study design and toxicology investigation principles. The student will have the opportunity to complete a scholarly project at the completion of the experience.

At the completion of the elective, the student will be able to:
1. Describe the role of poison centers in prevention, primary through tertiary, of poisonings.
2. Evaluate a poisoned patient, recognize toxidromes, develop a differential diagnosis, and an appropriate care plan for a variety of overdose situations.
3. Demonstrate a working knowledge of antidotes used for poisoned patients and when they are indicated.
4. Interpret toxicological laboratory studies, understand pharmaceutical principles, and research study designs in toxicology.
6. Complete an end-of-the-rotation presentation on a toxicology topic of their choosing.

First day reporting instructions: Please contact Dr. Bruce Ruck (ruckbe@njms.rutgers.edu) at least two weeks in advance to confirm the schedule for the first day of the elective. Students who are unable to enroll in the course because the course is full are encouraged to reapply for another block and contact Bruce Ruck to determine if a slot can be made available or other arrangements can be made.

EMED 9530 - INTRODUCTION TO EMERGENCY MEDICAL SERVICES (EMS)

Site(s) of Elective: University Hospital EMS

Elective Director: Timothy Satty, MD, Medical Director, UHEMS
Email: sattytm@njms.rutgers.edu
Name: Tung-lin Jesse Yuan, DO
Email: tung-lin.yuan@rutgers.edu

When offered: Throughout the academic year (November-February by permission 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: Only students wishing to rotate November - February

Course Description: This rotation is based at University Hospital Emergency Medical Services, in Newark, New Jersey. The elective will afford the medical student a general overview of Emergency Medical Services, with a focus on busy urban systems. Primary areas of study are ground based Basic and Advanced Life Support and Emergency Medical Dispatch and communications, with secondary concentration on CQI, protocol development, medical direction and EMS research. In addition, the student will understand the role of state government in EMS in New Jersey by attending state meetings when possible. Students will complete a total of 6 EMS shifts including one shift with our dispatch center.

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 a University ID
Read/complete assignments
Ask questions of EMS personnel
Demonstrate respect for patients and EMS personnel

First Day Reporting Instructions: Students must contact course directors at least two weeks prior to the start of the rotation to receive rotation expectations, and to discuss meeting time and location. Further reporting information will be provided by email.

EMED 9550 – HEALTHCARE LEADERSHIP AND OPERATIONS IN EMERGENCY MEDICINE

Site(s) of Elective: University Hospital

Elective Director: Name: Brian Kenny, DO, MA
Email: bk547@njms.rutgers.edu

When offered: 6/15-6/26 and 4/12-4/23 only
Max number of NJMS third year students per rotation: 4 (minimum 2 students)
Max total number of 3rd and 4th year students per rotation: 4
Prior approval required: NO

Course Description: The delivery of healthcare has become increasingly complex, and future physician leaders should be equipped with leadership and administrative skills to ensure that they can provide care efficiently with the highest quality. The goal of this elective is to provide an opportunity for medical students to experience various aspects of healthcare administration, including clinical quality, patient safety, leadership, communication, and clinical operations management. Additionally, medical students will learn and apply frameworks for dealing with systems issues in the hospital. These issues will be of critical significance to a growing proportion of physician practice, and therefore, are an important part of the medical education experience. Topics covered may include but are not limited to lean/six sigma, change management, systems thinking, negotiation, emotional intelligence, and presentation skills. The course will include daily didactics, small group learning, participation in relevant departmental and hospital committee meetings, and presentation development.

Learning outcomes & evaluation methods: Students will be evaluated using the NJMS Student Evaluation form. Evaluation will be based on the ability of the student to satisfactorily meet all requirements and assignments of the elective and assimilate and apply information learned to actual

systems issues. Students will be expected to develop short presentations for discussion and respond to feedback. Grading will be Pass/Fail.

Key responsibilities of the student while on elective:
1) The student will participate in daily conferences presented by course directors and experts from different sectors of ED leadership. Students may also be assigned online modules intended to augment the conferences.
2) The student will be prepared to engage in the discussion during didactic sessions.
3) Along with the preceptor, student will choose a selection of hospital or departmental committees to attend, at least 3 departmental and 2 hospital committee meetings per week. These may include, but are not limited to: Peer Review, Hospital Informatics, Patient Safety, Throughput/Flow.
4) The student will formally prepare for and lead daily discussions on assigned topics in healthcare leadership and/or operations
5) The student will give final presentation on last day on QA topic

First Day Reporting Instructions: The student will report to the UH Emergency Department Mezzanine offices.

DEPARTMENT OF FAMILY MEDICINE

FMED 9500 - AMBULATORY FAMILY MEDICINE

Site(s) of Elective: New Jersey Family Practice Center (90 Bergen St, LL 0300)

Elective Director: Name: Dr. Rachel Rosenberg
Email: rr1254@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: The student should contact the Family Medicine department at least 4 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 see patients in a family medicine setting. Students will help provide primary care to patients of all ages and life circumstances. 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. This elective is available to any student who wishes to increase their exposure to family medicine.

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.

First Day Reporting Instructions: The student will report to New Jersey Family Practice on the first day of the rotation. The time of arrival will depend on the location and preceptor since patient care schedules. The student must contact the preceptor the week prior to the beginning of the rotation to confirm time of arrival. The student must wear professional attire and their white coat, and bring their ID & stethoscope.

DEPARTMENT OF MEDICINE

MED 9505 – GENERAL AMBULATORY MEDICINE (NBIMC)

Site(s) of Elective: Newark Beth Israel Medical Center
Elective Director: Dr. Jose Bustillo

Contact Information: rotators@rwjbh.org, 973-926-3233

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
Prerequisites: Medicine Clerkship

Course Description: Under the supervision of clinical faculty, students will have the opportunity to practice in a private practice model that delivers care to the underserved patients in Newark. This elective will provide students with a better understanding of the scope and practice of outpatient Internal Medicine, with a focus on preventive care and chronic disease management, while highlighting the health needs of Newark's underserved population. Discussions will be based on patient encounters and include the most common conditions presenting in adults.

Objectives:
1. Perform a thorough, accurate and focused history that includes the medical, behavioral, psychosocial and environmental aspect of illness, as well as physical exam
2. Describe indications for consultation and referral for common diseases encountered in ambulatory internal medicine.
3. Interpret common imaging studies in the outpatient setting.
4. Present patient data thoroughly in both written and verbal formats
5. Perform counseling for patients and families: nutrition, smoking cessation, diabetes, depression, asthma, COPD and hypertension.
6. Communicate effectively with other members of the healthcare team, including nurses, social workers, attendings and consultants

REPORTING INSTRUCTIONS: On the first day of the elective the student should report to the Student Coordinator, at NBIMC in the Newark Strong Lobby. E-mail: rotators@rwjbh.org; Phone: 973-926-3233.

MED 9510 - CLINICAL GASTROENTEROLOGY

Site(s) of Elective: University Hospital, E178
Elective Director: Name: Ahmed Al-Khazraji, MD Title: Program Director, Division of Gastroenterology
Phone: 973-972-3042 Email: aa2758@njms.rutgers.edu

Administrative Contact: Paul Savage (paul.savage@njms.rutgers.edu, 973-972-5252)
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: 4
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 the 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 feedback 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 9516 – DERMATOLOGY (VA)

Site(s) of Elective: East Orange Veterans Affairs
Elective Directors: Name: Chinmoy Bhate, MD and Philip Cohen, MD
Email: chinmoy.bhate@va.gov & Philip.cohen@va.gov

When offered: Throughout the year *EXCEPT June and July*
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: In this program, the student is assigned to work with the faculty in dermatology. The program is arranged to provide experience in the recognition and treatment of common dermatologic disorders. Attention is focused on an understanding of cutaneous physiology, pathology and pharmacology as well as experience in clinical dermatology. This is obtained at inpatient and outpatient services at the East Orange Veterans Affairs. A rotating student should learn how to examine the skin, how to describe cutaneous findings, and how to recognize common skin disorders.

Learning outcomes & evaluation methods:
While on this rotation, the student will rotate within the outpatient clinics as well as participate in inpatient consultation.

Objectives:
1. Describe cutaneous findings employing the dermatology vocabulary.
2. Recognize common dermatologic disease processes.
3. Communicate effectively with other members of the healthcare team.

Key responsibilities of the student while on elective:
1. The student will be expected to see patients within the dermatology clinic.
2. The student is expected to report to all activities on time.
3. The student is expected to review current literature in dermatology.

First Day Reporting Instructions: Prior to the first date, the student should coordinate on-boarding with the VA Education Affairs; E-mail: VANJEDGroup@va.gov; Phone: 973-676-1000 X1305. On the first day of the elective, the student should report to the VA Dermatology clinic at 8:00 am. The Dermatology Clinic is located in the VA main building, A-level, Blue wing.

MED 9520 – CLINICAL NEPHROLOGY

Site(s) of Elective: University Hospital
Elective Director: Name: Dr. Julius Gardin Title: Professor
Phone: 973-972-9000 Email: jg1326@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: 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 at 9:30 a.m.

MED 9525 - LIVER DISEASE AND TRANSPLANT

Site(s) of Elective: University Hospital

Elective Directors: Dr. Lucia Romero Socorro and Dr. Vivek Lingiah

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

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

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 clinical scenarios related to managing liver disease complications.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form

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

First day reporting instructions: Student should report to University Hospital D yellow at 8 AM on the first day of the elective. **Questions: please call 973-972-5252 or contact Administrative Coordinator Julia Torres jmt303@njms.rutgers.edu**

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: 1
Maximum total number of 3rd and 4th year students per rotation: 1
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 Raoof
- 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 9533 - CRITICAL CARE MEDICINE-COOPERMAN BARNABAS MEDICAL CENTER

Site(s) of Elective:	Cooperman Barnabas Medical Center		
Elective Director:	Name: Dr. Fariborz Rezai	Title:	Site Director/Attending
	Phone: 973-322-2782	Email:	fariborz.rezai@rwjbh.org

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

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

First day reporting instructions: Student should report to the Medical Education Office and contact Debbie Paciga (Debbie.paciga@rwjbh.org) prior to the rotation.

MED 9535 – HOSPITALIST MEDICINE

Site(s) of Elective: University Hospital
Elective Directors: Name: Enoc Fernandez, M.D. Phone: 973-972-6056
Sunil Patel, M.D. Phone: 973-972-5947
Email: matassdm@njms.rutgers.edu

When offered: 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

Course Description: This elective will provide students an introduction to hospitalist medicine. Students will have the opportunity to acquire knowledge, skills and other attributes required for successful evaluation and management of hospitalized patients. Students will be assigned to the hospitalist service at University Hospital and will participate in all patient care activities assigned to his/her preceptor. In addition, the student will study required reading material and will discuss with preceptor.

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 supervising faculty on a daily basis. Clinical faculty will provide mid-elective feedback to the student. Grading will be based on clinical performance as evaluated by supervising faculty. Grading will be on a Pass/Fail basis per NJMS policy.

Key responsibilities of the student while on elective: The student will be assigned patients to follow from admission to discharge, and will interview and examine each newly assigned patient. Students are expected to present new patients and update the progress of all assigned patients on attending rounds daily. Students will document patient progress daily in the medical record. Students will have a daily census of at least 3 patients. It is expected that students will demonstrate self-directed learning by locating, assimilating and presenting to their team evidence from texts and current literature related to the evaluation and management of their patients. Each student will present a 10-15 minute review of a topic chosen in consultation with their attending.

First Day Reporting Instructions: On the first day of the elective the student should report to University Hospital, room I-121 at 7:00 am.

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: 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 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 under direction of Dr. John Shin (347) 351-6770. 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 9545 – AMBULATORY MEDICINE

Site(s) of Elective: UH – Ambulatory Care Center
Elective Directors: Name: Mirela Feurdean, M.D. Title: Associate Professor
Email: feurdemi@njms.rutgers.edu Phone: 973-972-6056

When offered: **CURRENTLY NOT OFFERED – DO NOT REGISTER**
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 third year students to the practice of outpatient Internal Medicine (IM) in an urban community. Under the supervision of clinical faculty, students will have the opportunity to practice in a private practice model that delivers care to the underserved patients in Newark. This elective will provide students with a better understanding of the scope and practice of outpatient Internal Medicine, with a focus on preventive care and chronic disease management, while highlighting the tremendous health needs of Newark's underserved urban populations.

During this 2 week elective, students will:

- See various IM pathology and complex comorbid associations
- Receive 1:1 preceptorship from attending physicians
- Attend anticoagulation clinic once/week
- Observe patient intake by social worker and become aware of limitations in access to health care due to cost, lack of family and social support, etc.
- Observe consultations delivered by the behavioral health specialist embedded in the ambulatory care practice, and develop motivational interviewing skills
- Observe consultations by the nutritionist embedded in the ambulatory care practice
- Attend interdisciplinary rounds once per week in the heart failure clinic at the ACC
- 1 hr presentation and Q&A on practice management

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. \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 clinical grade is weighted at 100% of the final grade. A student cannot pass the elective without submission of the essay. 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 office 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 attend and participate in all activities listed in the course description.
3. The student is expected to review current literature regarding the practice of outpatient Internal Medicine.
4. One reflection essay must be submitted for review on the last Friday of the 2 week elective.

First Day Reporting Instructions: Please reach out via email (feurdemi@njms.rutgers.edu) at least 2 weeks in advance to receive the schedule of the activities and to meet with the elective director. On the

first day of the elective the student should report to UH I-121 (resident conference room) at 8:00 am. 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: Anupama Nehra, M.D. Email: an607@cinj.rutgers.edu
Phone: (973) 972-6257

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: YES

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 patents 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 9555 – HEMATOLOGY/ONCOLOGY (NBIMC)

Site(s) of Elective: Newark Beth Israel Medical Center
Elective Director: Dr. Alice Cohen

Contact Information: rotators@rwjbh.org, 973-926-3233

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
Prerequisites: Medicine Clerkship

Course Description: This elective is designed to introduce students to the practice of Hematology/oncology. Students will attend weekly divisional and research conferences, tumor and

hematopathology seminars, as well as participating in outpatient clinics and inpatient consultations and patient care. The student will be evaluated at the end of the rotation on the basis of their performance and participation in clinical activities, case presentations, and knowledge acquired. Emphasis will be placed on the comprehensive approach to the cancer patient, including: diagnosis, staging, surgical management, radiation, chemotherapy, psychosocial implication of cancer, death and dying, pain control and hospice. It is expected that this elective will demystify cancer and cancer patients and expose the student to an exciting, challenging and rewarding subspecialty.

Objectives:
1. Perform a thorough, accurate and focused history that includes the medical, behavioral, psychosocial and environmental aspect of illness, as well as physical exam
2. Identify common hematology/oncology diagnoses and propose appropriate management plans.
3. Demonstrate review of appropriate hematology/oncology literature on rounds and in a formal presentation.
3. Present patient data thoroughly in both written and verbal formats
4. Communicate effectively with other members of the healthcare team, including nurses, social workers, attendings and consultants

REPORTING INSTRUCTIONS: On the first day of the elective the student should report to the Student Coordinator, at NBIMC in the Newark Strong Lobby. E-mail: rotators@rwjbh.org; Phone: 973-926-3233.

MED 9560 - INFECTIOUS DISEASES

Site(s) of Elective: University Hospital and VA New Jersey Health Care System (VANJHCS)

Elective Director: Name: Diana Finkel, M.D. Title: Program Director, Infectious Diseases Fellowship
Phone: 973-972-7837 Email finkeldi@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 9565 – INFECTIOUS DISEASES (NBIMC)

Site(s) of Elective: Newark Beth Israel Medical Center
Elective Director: Dr. Madhu Suryadevara

Contact Information: rotators@rwjbh.org, 973-926-3233

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: YES
Prerequisites: Medicine Clerkship

Course Description: This elective is designed to introduce students to the practice of infectious diseases. Students will obtain further knowledge of pathophysiology, diagnosis and treatment of infectious diseases due to bacteria, mycobacteria, fungi, viruses, rickettsia and parasites. The student is required to comprehensively evaluate and follow a minimum of 5 patients per week and to keep an account of appropriate data and diagnosis for review at the end of the rotation. Patients will be seen by the student in the hospital and emergency department. Students will also acquire expertise in interpreting clinical microbiological data including smears, stains, cultures, and molecular and serologic studies. The student will increase their knowledge of the pharmacokinetics, toxicity, and spectrum of activity of antimicrobial agents used to treat infections.

Objectives:
1. Perform a thorough, accurate and focused history that includes the medical, behavioral, psychosocial and environmental aspect of illness, as well as physical exam
2. Identify common infectious diseases and propose appropriate management plans.
3. Demonstrate review of appropriate infectious disease literature on rounds and in a formal presentation.
4. Interpret imaging studies to diagnose infectious diseases and clinical microbiological data.
5. Present patient data thoroughly in both written and verbal formats
6. Communicate effectively with other members of the healthcare team, including nurses, social workers, attendings and consultants.

REPORTING INSTRUCTIONS: On the first day of the elective the student should report to the Student Coordinator, at NBIMC in the Newark Strong Lobby. E-mail: rotators@rwjbh.org; Phone: 973-926-3233.

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 fellow assigned to the elective and attend pulmonary conferences as scheduled. Pulmonary function tests, chest x-rays, chest CT scans, thoracic ultrasound and lung pathology when available, 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: Anita Khilall (lanita.khilall@rutgers.edu, 973-972-9102)

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 and public health) and in-patient setting (hospital rounds with TB attending).

Learning outcomes & evaluation methods:
Prior to this elective, students will complete the CDC's *Core Curriculum on Tuberculosis: What the Clinician Should Know* available at: https://www.cdc.gov/tb/hcp/education/core-curriculum-on-tuberculosis.html. 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 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 resources
5. Bring questions for 1:1 meetings with clinical, nursing and public health staff
6. Attend TB Grand Rounds (Friday 12:00 – 1:00 PM)

First day reporting instructions: Students should plan to arrive at the Global Tuberculosis Institute at the agreed upon time on the first day of the rotation, and report to the Education & Training Office – 1st floor, West Wing of the ICPH building located at 225 Warren Street, Newark, NJ. Phone: 973-972-9102 or -0979. Students should contact the Education & Training Office in advance to obtain information and clarify instructions for parking near or around the ICPH building.

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: 973-972-4731 Email: gerula@njms.rutgers.edu

Administrative Contact: Jessica Gonzalez Romero, jg1769@njms.rutgers.edu, 973-972-4731

When offered: Throughout the academic year
Max number of NJMS third year students per rotation: 4
Max number of 3rd and 4th year students per rotation: 4
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 I-102 Echo Lab at 9:00 a.m. for conference. If the rotation starts on Tuesday, please report to UH I-102 at 9:00 a.m. on the first day of the rotation. On the first day or the rotation, students will receive final assignments of their rotation (University Hospital vs. East Orange VA Hospital).

DEPARTMENT OF NEUROLOGICAL SURGERY

NSUR 9500 - INTRODUCTION TO NEUROLOGICAL SURGERY

Site(s) of Elective: University Hospital
Elective Director: Pankaj K. "P.K." Agarwalla, MD Title: Assistant Professor
Email (preferred): pk.agarwalla@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 student per rotation: 4
Prior approval required: YES

Mandatory Reading (please read prior to starting rotation): Essential Neurosurgery for Medical Students: https://www.societyns.org/essential-neurosurgery-book

Recommended Reading:
Haines' Neuoranatomy Atlas or another well-respected neuroanatomy textbook (ideally please read before starting rotation.)

Course Description: A 2-week elective where the student is introduced to the care and treatment of neurosurgical patients. The purpose of the course is to introduce third-year students to the field of neurosurgery primarily to help them gauge their interest and desire to pursue a career in neurosurgery. The student will work primarily with the resident team on a daily basis rounding on patients, participating in surgeries, and seeing consultations. Students will improve their neurosurgical examination, triage, and neuro-radiology abilities. Students will be exposed to the breadth of neurosurgery at University Hospital including trauma, brain tumors, cerebrovascular disease, spine, and neuro-critical care. Students will be expected to attend and participate in the academic and educational conferences. Of note, the rotation is limited strictly to University Hospital.

Learning outcomes & evaluation methods: Attendance and evaluations by faculty and residents. Written exam performance.

Key responsibilities of the student while on elective:

1. The student will be expected to interview, examine, and care for patients in the clinical setting.
2. While on hospital rounds, the student will be expected to review patients' charts.
3. One night call with a resident is recommended but not required.
4. The student is expected to review current literature regarding the practice of Neurosurgery.
5. All students are required to meet with course director for feedback prior to course end.
6. Students will be expected to have presented a case at case conference or journal article during journal club by the completion of their elective.

First day reporting instructions: It is the student's responsibility to contact the course director at the e-mail listed prior to the first day of the rotation for instructions.

DEPARTMENT OF NEUROLOGY & NEUROSCIENCES

NEUR 9500 - NEUROLOGY PRECEPTORSHIP

Site(s) of Elective: Private offices and hospitals of participating neurologists.
Elective Director: Name: Erin Feinstein, M.D. Title: Associate Professor
Email: feinster@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 (4th year students will receive priority)
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. Feinstein.

NEUR 9510 - PEDIATRIC NEUROLOGY

Site(s) of Elective: University Hospital
Elective Director: Name: Caroline Hayes-Rosen, M.D. Title: Associate 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

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: Contact the pediatric neurology fellow by text at 862-800-6737 by 8:00 a.m.

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: Dr. Damali Campbell Title: Associate Professor
Email: campbedm@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
Prerequisite: Successful completion of the Ob/Gyn clerkship
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: All clinics take place on the "C" level of the ACC. The student will receive a schedule prior to the first day of the rotation telling them which session to report to on their first day. The student should wear his/her white coat and bring his/her ID. All other materials will be provided to student.

OBG 9510 - GYNECOLOGIC ONCOLOGY

Site(s) of Elective: University OB/GYN Associates, University Hospital, Newark, NJ
Elective Director: Name: Dr. Nancy Zhou Email: Nancy.zhou@rutgers.edu

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

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 clinic sessions, daily rounds, surgical cases, work rounds, and multidisciplinary tumor board.

Learning outcomes & evaluation methods:
Outcomes: During the elective, it is expected that the student will conduct patient interviews and physical exams. They will develop their differential diagnoses and formulate treatment plans. 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. 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 assist with patient care for all patients on the gynecological oncology service, including consultations from other services.

First day reporting instructions: You will receive an email prior to the start of the rotation with contact information for the Gyn Oncology resident team. Please report to the Gyn resident lounge at 5:30AM.

OBG 9520 - LABOR AND DELIVERY

Site(s) of Elective:	University Hospital, Newark, NJ		
Elective Director:	Name: Dr. Talicia Jackson	Title:	Assistant Professor
	Phone: 973-972-6266	Email:	talicia.jackson@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: NO
Prerequisite: Students must have completed the OB/GYN clerkship prior to participating in this elective.

Course Description: This elective is designed to give the student an opportunity to spend a significant amount of time in Labor and Delivery. The student will participate in the management of obstetrical patients from admission to post delivery. They will be involved in daily rounds and turnovers, will attend to laboring patients and participate in the delivery and postpartum care 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, as well as generate differential diagnoses and begin to formulate treatment plans for triage patients. The student is expected to present findings to residents and faculty on a continual basis and to present patients under their care at daily board turnover offering opportunities for immediate feedback and guidance from supervising team members.

The student will be expected to participate in no less than 10 vaginal deliveries and 5 cesarean deliveries (case numbers permitting) by the conclusion of this elective and the student will be encouraged to

perform one vaginal delivery under the direct and immediate supervision of either the obstetrical chief resident or supervising attending. On 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 and postpartum 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 10 vaginal deliveries and 5 cesarean sections during the course of the elective (case numbers permitting).
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. 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 – COMPLEX FAMILY PLANNING

Site(s) of Elective: Newark Campus - UH & ACC
Elective Director: Dr. Lauren Naliboff — Title: Assistant Professor
Phone: 973-972-9659 — Email: lcn25@njms.rutgers.edu

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 their 3rd year Ob/Gyn clerkship

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, abortion 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. Rotation involves participation in both surgical abortion procedures and medication abortions.

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 expected to participate in the OR during surgical abortion procedures. At the conclusion of this elective, the student will be required to present a brief presentation on a topic of their choice related to family planning care.

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 presentation. 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.
5. A final presentation is required.

First day reporting instructions: The student will receive a schedule prior to the start date of their elective telling them where to present on the first day. 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: Suqin Guo, M.D.
Title: Professor
Phone: 973-972-2031

Elective Faculty Members D. Chu, MD; M Dastjerdi, MD; L. Frohman, MD; M. Habiel, MD; P. Iyer, MD; S. Guo, MD; P. Khouri, MD; P. Langer, 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 are given 1hour lecture on Thursday morning before going to eye clinic.
4. The students will be signed to eye residents in subspecialty Eye Clinics daily which are supervised by faculty members.
5. 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 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: Dr. Neil Kaushal

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. They should also contact Dr. Kaushal, at kaushank@njms.rutgers.edu, the week prior to the rotation to confirm there are no changes to the first day reporting instructions.

ORPS 9505 - ORTHOPAEDIC SURGERY (NBIMC)

Site(s) of Elective: Newark Beth Israel Medical Center
Elective Director: Name: Dr. Neil Kaushal

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

Course Description: This elective is designed to provide a broad overview of orthopaedic surgery. Exposure includes, but is not limited to, 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, and operating room. During the rotation, all students will have the opportunity to have interchanges with all full-time members of the faculty and will have extensive opportunities to demonstrate their baseline knowledge of anatomy and developing skills in orthopaedic examination in daily presentations of patient conditions and monthly formal diagnostic reviews.

Learning outcomes & evaluation methods:
The elective will be graded pass/fail. Students are evaluated by residents and attendings based on their overall progress in the OR, clinic, and emergency room. Evaluation is based on subjective assessment of knowledge, proficiency in history-taking and physical examination, clinical judgment, presentations, record-keeping and interpersonal skills.

Key responsibilities of the student while on elective:

1. The student will be expected to participate in patient assessments in the ER, inpatient units and clinics.
2. The student will be expected to participate in operative cases and rounds on the respective service.
3. The student will be expected to participate in weekly orthopaedic conference.

REPORTING INSTRUCTIONS: On the first day of the elective the student should report to the Student Coordinator, at NBIMC in the Newark Strong Lobby. E-mail: rotators@rwjbh.org; Phone: 973-926-3233.

ORPS 9508 - ORTHOPAEDIC SURGERY (CBMC and JCMC)

Site(s) of Elective: Cooperman Barnabas and Jersey City Medical Centers
Elective Director: Dr. Nicole Montero Lopez

Elective Administrator: Bertha (Tica) Orochena, 201-448-9552

When offered: January – May only
Max number of NJMS third year students per rotation: 4
Max total number of 3rd and 4th year student per rotation: 4
Prior approval required: Surgery Clerkship

Course Description: This elective is designed to provide a broad overview of orthopaedic surgery. Exposure includes, but is not limited to, 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, and operating room. During the rotation, all students will have the opportunity to have interchanges with all full-time members of the faculty and will have extensive opportunities to demonstrate their baseline knowledge of anatomy and developing skills in orthopaedic examination in daily presentations of patient conditions and monthly formal diagnostic reviews. Students will complete 1 week at CBMC and 1 week at JCMC to provide a diverse experience.

Learning outcomes & evaluation methods:
The elective will be graded pass/fail. Students are evaluated by residents and attendings based on their overall progress in the OR, clinic, and emergency room. Evaluation is based on subjective assessment of knowledge, proficiency in history-taking and physical examination, clinical judgment, presentations, record-keeping and interpersonal skills.

Key responsibilities of the student while on elective:

1. The student will be expected to participate in patient assessments in the ER, inpatient units and clinics.
2. The student will be expected to participate in operative cases and rounds on the respective service.
3. The student will be expected to participate in weekly orthopaedic conference.

First day reporting instructions: Students should reach out to Dr. Lopez (Nicole.lopez@rwjbh.org) prior to the 1st day of the rotation for reporting instructions.

ORPS 9510 - PEDIATRIC ORTHOPAEDICS

Site(s) of Elective: University Hospital
Elective Director: Dr. Neil Kaushal

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. Kaushal.

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 the senior resident on the Pediatric Orthopaedic service. They should also contact Dr. Kaushal, at kaushank@njms.rutgers.edu, the week prior to the rotation to confirm there are no changes to the first day reporting instructions.

DEPARTMENT OF OTOLARYNGOLOGY

OTOL 9550 - OTOLARYNGOLOGY – HEAD & NECK SURGERY

Site(s) of Elective: University Hospital

Elective Co-Directors:
Name: Ghayoour Mir, DO Title: Assistant Professor, Department of Otolaryngology-Head and Neck Surgery
Phone: 973-972-4588 Email mirgs@njms.rutgers.edu

Name: Evelyne Kalyoussef, MD Title: 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.

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. Kalyoussef or Dr. Mir the week prior to find out where to report on the first day of the rotation.

OTOL 9560 - OTOLARYNGOLOGY – HEAD & NECK SURGERY - COOPERMAN BARNABAS

Site(s) of Elective: Cooperman Barnabas Medical Center
Elective Director: Name: Yu-Lan Mary Ying, M.D.
Phone: 973-972-4588 Email yy348@njms.rutgers.edu

When offered: Throughout the academic year.
Max number of NJMS third year students per rotation: 8
Prior approval required: No

Course Description: During the two-week elective, the student becomes part of the team managing the patients on the outpatient and inpatient Otolaryngology services. Acquisition of basic otolaryngologic history taking and physical examination skills will be emphasized. Management of some common otolaryngologic disorders and understanding the role of otolaryngologist in the overall care of patients will be taught. 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. It is designed for students who have a possible interest in pursuing a career in otolaryngology and for those who want more exposure to the clinical aspects of the head and neck.

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: Students should call the ENT Department at 973-972-4588 or email Dr. Ying the week prior to find out where to report on the first day of the rotation.

DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE

PATH 9500 - SURGICAL AND AUTOPSY PATHOLOGY

Site(s) of Elective: University Hospital, Newark
Elective Director: Name: Dr. David Suster

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: 1
Prior approval required: NO

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

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

Evaluation: The student's powerpoint presentation will be graded pass/fail as will their performance in asking and answering questions during the signout sessions. A student cannot pass this elective without submitting a copy of their powerpoint presentation. This elective is graded Pass/Fail as per NJMS policy.

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

First day reporting instructions: Students should report to Room E-155, University Hospital @ 10:00 AM on the first day of the rotation.

DEPARTMENT OF PEDIATRICS

PEDS 9511 – INTRODUCTION TO NEONATAL ICU

Site(s) of Elective: University Hospital
Elective Directors: Name: Onajovwe Fofah, M.D. Title: Assistant Professor
Email: fofahon@njms.rutgers.edu Phone: 973-972-6753

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 is an introduction into Neonatal-Perinatal Medicine. The student will experience the impact of perinatal and neonatal care on mortality and morbidity. The student will participate in attendance at high-risk deliveries, transport of high risk infants, morning report, teaching rounds and sign out. The student will learn to diagnose and manage common newborn diseases and the sequelae.

Learning outcomes & evaluation methods: The student will be expected to evaluate NICU patients and present findings and proposed treatment plans to clinical faculty on a daily basis. Clinical faculty will provide continuous verbal feedback during rounds and at the mid-rotation point. The student will receive a grade of pass/fail based on the attending physician's clinical evaluation of the student's performance and knowledge base. Faculty may also evaluate student competency by reviewing student notes on Epic.

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. While on hospital rounds, the student will be expected to review patient records prior to rounds. The student will attend high risk deliveries. The student will review current literature regarding practice of neonatal medicine.

Reporting Instructions: The student should report to the F-level NICU at 7:00 a.m. on the first day of the rotation. The student must wear scrubs.

PEDS 9515 – NEONATOLOGY (NBIMC)

Site(s) of Elective: Newark Beth Israel Medical Center
Elective Director: Dr. Bellipady Rai

Contact Information: rotators@rwjbh.org, 973-926-3233

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

Course Description: This is an introduction into Neonatal-Perinatal Medicine. This will make the student aware of the impact of perinatal and neonatal care on mortality and morbidity. The student will participate in attendance at high-risk deliveries, transport of high risk infants, morning report, teaching rounds, endorsement rounds, and lectures. The student will learn to diagnose and manage common newborn diseases and the sequelae. A research project will be offered to interested students. Attending neonatologists and Pediatric Residents will participate in evaluating the student's performance.

Objectives:
1. Perform initial as well as daily physical examinations and review of pertinent ancillary studies.
2. Identify common newborn diagnoses, including complications of prematurity, infants of diabetic mothers, congenital heart disease, and other congenital anomalies.
3. Demonstrate the ability to collect, analyze, summarize and succinctly present the relevant medical information.
4. Demonstrate review of appropriate literature on rounds and in a formal presentation.
5. Present patient data thoroughly in both written and verbal formats
6. Communicate effectively with other members of the healthcare team, including nurses, social workers, attendings and consultants

REPORTING INSTRUCTIONS: On the first day of the elective the student should report to the Student Coordinator, at NBIMC in the Newark Strong Lobby. E-mail: rotators@rwjbh.org; Phone: 973-926-3233.

PEDS 9517 – MEDICINE/PEDIATRICS (NBIMC)

Site(s) of Elective: Newark Beth Israel Medical Center
Elective Director: Dr. Jon Sicat

Contact Information: rotators@rwjbh.org, 973-926-6946

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

Course Description: In this elective, medical students will be exposed to the combined field of Internal Medicine and Pediatrics by working with the Med-Peds faculty. Discussions will be based on patient encounters and include the most common conditions presenting in adults and children. This elective will provide students with a better understanding of the scope and practice of ambulatory medicine, with a focus on preventive care and chronic disease management, while highlighting the health needs of Newark's underserved population.

Objectives:
1. Perform a thorough, accurate and focused history that includes the medical, behavioral, psychosocial and environmental aspect of illness, as well as physical exam.
2. Identify and summarize a differential diagnosis of illnesses in both pediatric and adult patients: fever, vomiting, headache, chest pain, abdominal pain, wheezing, joint pain, backache.
3. Perform counseling for patients and families: anticipatory guidance, nutrition, school issues, smoking cessation, diabetes, depression, asthma, COPD and hypertension.
4. Describe indications for consultation and referral for the most common diseases affecting adult and pediatric patients.
5. Describe indications/criteria for admissions to the inpatient setting for adults and pediatric patients.
6. Communicate effectively with other members of the healthcare team, including nurses, social workers, attendings and consultants.

REPORTING INSTRUCTIONS: On the first day of the elective the student should report to the Student Coordinator, at NBIMC in the Newark Strong Lobby. E-mail: rotators@rwjbh.org; Phone: 973-926-3233.

PEDS 9520 - PEDIATRIC ENDOCRINOLOGY

Site(s) of Elective: University Hospital; Doctor's Office Center
Elective Director: Name: TBD
Title:
Phone: Email:

When offered: **NOT CURRENTLY OFFERED – DO NOT REGISTER**
Max number of NJMS third year students per rotation: 2
Max total number of 3rd and 4th year students per rotation: 2

Course Description: This elective is designed to introduce medical students to the practice of pediatric endocrinology. Under faculty supervision, the students will see pediatric endocrinology patients in the clinic and on the wards as consultants. This includes neonates, children and adolescents. The emphasis will be on common endocrinology problems such as diabetes (type 1 and type 2), short stature, obesity, pituitary and thyroid disorders. They will also be exposed to less common disorders such as congenital adrenal hyperplasia, precocious puberty, bone and calcium disorders, neonatal hypoglycemia, etc. They will get to observe in the gender care clinic and will get aquainted to gender affirming care.

Learning outcomes & evaluation methods: During the elective, the student will conduct patient interviews and perform physical examinations. Subsequently, the student will present these patients and the faculty will provide constructive criticism. The student will also be asked to give a 10 minute presentation on a topic of interest. Because the elective is only 2 weeks it will be offered only pass/fail.

Key responsibilities of the student while on elective:
- See patients in clinic and present findings to faculty.
- See patients as a consult and present findings to faculty.
- Write-up clinical consults with faculty input.
- Write-up outpatients visits after faculty input.
- Read 10-20 articles on pediatric endocrinology given to students before and during the rotation
- Read on topics concerning patients students have seen.
- Do a brief 10 minute research project and presentation on topic of interest mainly using texts and review articles.

First day reporting instructions: TBD

REPORTING INSTRUCTIONS: On the first day of the elective the student should report to the Student Coordinator, at NBIMC in the Newark Strong Lobby. E-mail: rotators@rwjbh.org; Phone: 973-926-3233.

PEDS 9530 - PEDIATRIC GASTROENTEROLOGY

Site(s) of Elective: University Hospital/DOC 5100
Elective Director: Name: Iona Monteiro, M.D. Title: Professor
Phone: 973-972-5779 Email: monteiim@njms.rutgers.edu

When offered: By arrangement with Dr. Monteiro, not offered in June
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: YES

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. 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 9535 – PEDIATRIC GASTROENTEROLOGY (NBIMC)

Site(s) of Elective: Newark Beth Israel Medical Center
Elective Director: Dr. Elise Foglio

Contact Information: rotators@rwjbh.org, 973-926-3233

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: YES, preapproval from NBI, email rotators@rwjbh.org

Course Description: This elective is designed to introduce students to pediatric gastroenterology. The student will be expected to perform initial patient interviews, and follow up on patient interviews, physical examinations and review of pertinent ancillary studies daily. The interested student will be afforded the opportunity to participate in consultative services and management of common GI disorders in the ambulatory and in-patient setting and observe GI procedures. The student is expected to review the Pediatric Gastroenterology section of a Pediatric textbook.

Objectives:
1. Perform a thorough, accurate and focused history that includes the medical, behavioral, psychosocial and environmental aspect of illness, as well as physical exam.
2. Identify the signs/symptoms of the most common pediatric gastroenterology disorders.
3. Describe indications for consultation in pediatric gastroenterology.
4. Describe the risks/benefits of upper and lower endoscopy.
5. Present patient data thoroughly in both written and verbal formats.
6. Communicate effectively with other members of the healthcare team, including nurses, social workers, attendings and consultants.

REPORTING INSTRUCTIONS: On the first day of the elective the student should report to the Student Coordinator, at NBIMC in the Newark Strong Lobby. E-mail: rotators@rwjbh.org; Phone: 973-926-3233.

PEDS 9545 – PEDIATRIC PULMONOLGY

Site(s) of Elective: Barnabas Health, Livingston, NJ
Elective Director: Name: Pending – elective on hold Title:
Email: Phone:

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: 1
Prior approval required: YES

Course Description: This elective is designed to introduce third year students to pediatric pulmonology. The student will be expected to perform initial patient interviews, and follow up on patient interviews, physical examinations and review of pertinent ancillary studies daily. In addition, the student will be expected to perform literature searches on topics relevant to the patients they are following. The student is expected to present this information to the supervising faculty during rounds. The student's ability to collect, analyze, and summarize relevant medical information, as well as interpersonal skills and professionalism, will be the basis of the final evaluation.

The following topics will be reviewed:

1. Structure and function of the normal and diseased lunch in children
2. Clinical evaluation of infants/children with pulmonary disease
3. Pulmonary function tests in children and chest radiographs
4. Diagnostic procedures such as Flexible Fiberoptic bronchoscopy
5. Children dependent on respiratory technology
6. Drug administration by inhalation in infants/children and home treatment plans

Learning outcomes & evaluation methods: Students are evaluated by the supervising attending. Evaluation is based on subjective assessment of knowledge, proficiency in history-taking and physical examination, clinical judgement, presentations, professionalism, and interpersonal skills.

Key responsibilities of the student while on elective:

1. The student will be expected to participate in inpatient and outpatient assessments.
2. The student will be expected to round and document in the medical records daily progress notes for pediatric pulmonology inpatient consultations.

First Day Reporting Instructions: Student should report to Sandy Bishara (sandy.bishara@rwjbh.org) at the Medical Education Office, St. Barnabas Medical Center, 5th Floor, East Wing., 973-322-5548.

PEDS 9550 - PEDIATRIC HOSPITAL MEDICINE

Site(s) of Elective: University Hospital, Newark Beth Israel Medical Center, and Cooperman Barnabas Medical Center
Elective Director: Name: Christin Traba, MD, MPH
Phone: 973-972-4823 Emails: morancm@njms.rutgers.edu

When offered: During designated 3rd year elective time
Max number of NJMS third year students per rotation: 4 for non-Pediatrics clerkship blocks
Max total number of 3rd and 4th year students per rotation: 4
Prior approval required: NO

Course Description: This elective will provide an educational experience which will afford students the opportunity to acquire knowledge, skills and other attributes required for successful evaluation and management of hospitalized infants, children and adolescents. Students will be assigned to either University Hospital, Newark Beth Israel Medical Center, and Cooperman

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 supervising faculty and residents on a daily basis. Grading will be based on clinical performance as evaluated by supervising faculty, using the standard NJMS form. Grading will be on a Pass/Fail basis per NJMS policy.

Key responsibilities of the student while on elective: The student will be assigned patients to follow from admission to discharge, and will interview and examine each newly assigned patient. Students are expected to present new patients and update the progress of all assigned patients on attending rounds daily. Students will document patient progress daily in the medical record. Students will have a daily census of at least 3 patients. It is expected that students will demonstrate self-directed learning by locating, assimilating and presenting to their team evidence from texts and current literature related to the evaluation and management of their patients.

First day reporting instructions: The student must contact Dr. Traba via email (morancm@njms.rutgers.edu) 2 weeks prior to the start of the rotation for team assignment.

PEDS 9555 – PEDIATRIC HEMATOLOGY/ONCOLOGY (NBIMC)

Site(s) of Elective: Newark Beth Israel Medical Center
Elective Director: Dr. Shalu Narang

Contact Information: rotators@rwjbh.org, 973-926-3233

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

Course Description: This elective is designed to introduce students to pediatric hematology/oncology. Students will spend the majority of their time in the outpatient clinic, learning about the evaluation and treatment of blood disorders and cancer. Opportunities will be available to attend inpatient rounds on the Hematology/Oncology service. Students will attend weekly Tumor Board meetings and review blood smear and bone marrow pathology.

Objectives:
1. Perform a thorough, accurate and focused history that includes the medical, behavioral, psychosocial and environmental aspect of illness, as well as physical exam.
2. Identify the signs/symptoms of the most common pediatric hematology/oncology disorders.
3. Describe indications for consultation in pediatric hematology/oncology.
4. Present patient data thoroughly in both written and verbal formats.
5. Communicate effectively with other members of the healthcare team, including nurses, social workers, attendings and consultants.

REPORTING INSTRUCTIONS: On the first day of the elective the student should report to the Student Coordinator, at NBIMC in the Newark Strong Lobby. E-mail: rotators@rwjbh.org; Phone: 973-926-3233.

PEDS 9560 - PEDIATRIC OPHTHALMOLOGY

Site(s) of Elective: Pediatric Clinic 6th Floor DOC and/or DOC at Rutgers at Newark Campus

Elective Director: Name: Suqin Guo, M.D.
Phone: 973-972-2036 and ask for Ms. Mary Carola

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. The student can contact Ms. Mary Carola by e-mail at carola@njms.rutgers.edu for any questions.

PEDS 9570 - COMMUNITY-BASED ADOLESCENT MEDICINE

Site(s) of Elective: Adolescent Medicine clinic at the Rutgers Doctors Office Center and various community sites integral in maintaining the health of adolescents in the Newark and Essex County area. Community sites include: Hetrick-Martin Institute, Essex County Family Court, Integrity House Inc., the Division of Adolescent & Young Adult Medicine mobile health unit, and several school-based male mentoring programs developed by the NJMS Division of Adolescent and Young Adult Medicine.

Elective Directors: Dominga Padilla, MD Email: dpadilla@njms.rutgers.edu
Phone: 973-972-1348/ C: 973-487-6837

When offered: September-November; January-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: Student must email Dr. Padilla 2 weeks prior to start of elective to confirm first-day report time/location and elective schedule.

Course Description: This structured, educational experience is designed to introduce students to the primary care aspects and subspeciality of Adolescent Medicine. Alongside the physician, students will see patients who present to the Adolescent Medicine clinic for any variety of reasons and learn about the health care issues unique to this population. Students are expected to provide care in a developmentally appropriate manner. In addition, students will work with Pediatrics residents to visit different community settings in Newark which are integral in understanding health disparities among adolescents. Students will be expected to present educational sessions to high-risk teens in these settings on a variety of topics including substance use risk reduction, healthy sexuality, and normal adolescent development. Students will also lead a journal club style presentation at the end of the rotation. Supervision is provided by Pediatric residents and program personnel at each site, with overall supervision by Pediatric faculty.

Learning outcomes & evaluation methods: At the end of the rotation, the student will have enhanced their knowledge of normal adolescent development and behavior in addition to recognizing adverse health outcomes and providing counseling on risk reduction. They will develop improved communication, teaching and advocacy skills and develop a foundation of evidence based medicine. Audience participants will evaluate student teaching skills using the department's standardized form. Grading will be based on clinical performance as evaluated by supervising residents and faculty, using the standard NJMS form. Grading will be on a Pass/Fail basis per NJMS policy.

Key responsibilities of the student while on elective:
It is expected that students will demonstrate self-directed learning by locating, assimilating and presenting current, evidence based information on selected health topics in various community settings utilizing developmentally appropriate language and multi-media resources to maximize learning. Teamwork is expected when working with the residents on various presentations. Students are upheld to the same professionalism expectations as all other rotations including dress, punctuality, and accurate communication with colleagues.

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.

PEDS 9580 – CLINICAL GENETICS

Site(s) of Elective: University Hospital
Elective Directors: Name: Peyman Bizargity, M.D.
Email: bp752@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: 1
Prior approval required: YES – contact Ms. Johanies Melendez and Dr. Bizargity for prior approval

Course Description: An elective in clinical genetics offers an overview of the field including exposure to a variety of common genetic disorders and birth defects. It provides an understanding of the reasons families seek genetic information and counseling. The specific learning experience will include familiarity with obtaining a genetic history and family pedigree, attention to human variation during physical examination, syndrome identification, process analysis into the cause of birth defects and congenital malformations, exposure to interpretation of cytogenetic, biochemical and molecular laboratory findings, and an understanding of the multi-disciplinary approach to the field including the roles of other medical disciplines (genetic counselors, ethics, obstetrics and dentistry). You will also have the opportunity to spend time in the Rutgers Genomic lab learning.

Objectives:
1. Describe a systematic approach to evaluate patients with a known or suspected genetic condition.
2. Construct and analyze a pedigree to determine possible modes of inheritance.
3. Recognize appropriate referrals for genetic counseling.
4. Identify common genetic and genomic testing technologies and their applications in the clinical setting.

Key responsibilities of the student while on elective:
1. The student will actively participate in all genetic consultation visits with the team.
2. The student will perform a literature search on the appropriate topic and present their findings to the team.
3. The student will spend several days in the Rutgers Genomic lab (on days where there are not patient clinics).

First Day Reporting Instructions: Please reach out to Ms. Johanies Melendez to confirm reporting time and location. (melendjo@njms.rutgers.edu).

DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION

REHB 9500 - BRAIN INJURY REHABILITATION

Site(s) of Elective: University Hospital, Doctors Office Center, Kessler Institute – West Orange, Saddlebrook
Elective Director: Drs. Neil Jasey, Peter Yonclas, Arline Edmond, and Jennifer Russo.

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

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 – West Orange, Saddlebrook
Elective Director: Drs. Uri Adler and Eleanor Anan

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

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: 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 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, Doctors Office Center
Elective Director: Dr. John Bach

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

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 and Doctor's Office Center (Newark campus); Kessler Institute for Rehabilitation – (West Orange, Saddlebrook); Department of VA New Jersey Healthcare System – (East Orange, Lyons); Children's Specialized Hospital (Mountainside); Jersey City Medical Center (Jersey City), St. Barnabas ACC (Livingston); Newark Beth Israel Medical Center (Newark); Bergen New Bridge Medical Center (Paramus); and private physicians' offices (northern NJ)

Elective Director: Dr. Steven Kirshblum

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: 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 9540 - PEDIATRIC REHABILITATION

Site(s) of Elective: Children's Specialized Hospital and affiliates (Mountainside, Clifton, or southern NJ if preferred)
Elective Director: Dr. Kate Bentley

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: 1

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 Chatham, Metuchen, West Orange, Livingston, Cedar Knolls, other northern NJ areas
Elective Directors: Dr's. Thomas Agesen, Jay Bowen, Boqing Chen, Brett Gertsman, and Ian Wendel

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

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 Orange, University Hospital, and VA NJ Healthcare System – East Orange.
Elective Director: Drs. Jeremiah Nieves and Brittany Snider (Kessler Institute for Rehabilitation – West Orange facility)

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

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 (MSK) MEDICINE CLINICAL ROTATION

Site(s) of Elective: University Hospital, Doctor's Office Center, Kessler Institute (West Orange, Saddlebrook); East Orange/Lyons VA; private physicians' offices (Northern NJ)
Elective Director: Drs. Steven Kirshblum. Attendings include Drs Roger Luo, Kathy Chou, Benjamin Levy.

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

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 (MSK) MEDICINE RESEARCH

Site(s) of Elective: University Hospital, Doctors Office Center, East Orange/Lyons VA, private physicians' offices (Northern NJ)
Elective Director: Drs. Steven Kirshblum. Attendings include Drs Roger Luo, Ziya Petrin, Benjamin Levy and Todd Stitik

When offered: Throughout the academic year by permission
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; Research request questionnaire required.

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. There is no clinical component to this rotation.

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 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: **NOT CURRENTLY AVAILABLE – DO NOT REGISTER**
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

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 EOVAMC room 12-058 to Remona Jones or Wanda George.

PSYC 9520 - CONSULTATION/LIAISON

Site(s) of Elective: University Hospital
Elective Director: Name: Eric Jarmon, D.O. Title: Assistant Professor
Phone: 973-972-4805 Email: erj26@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; document consultations in EHR; give case presentations to team; contact auxiliary info sources and provide feedback to requesting team.

First day reporting instructions: Students report to UH G 300 (room outside G Yellow inpatient unit) by 09:15 am on day rotation starts. Have EPIC credentials in order and wear a Rutgers ID Badge.

PSYC 9530 – PSYCHIATRIC EMERGENCY SERVICES

Site(s) of Elective: University Hospital
Elective Director: Name: Eric Jarmon, D.O. Title: Assistant Professor
Phone: 973-972-4805 Email: erj26@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 assessment; document encounters in EMR; 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 by 9:00 am to the physician on duty. Have EPIC credentials in order and wear a Rutgers ID Badge.

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, document encounters in HER, and learn to work in a treatment team. Have EPIC credentials in order and wear a Rutgers ID Badge.

First day reporting instructions: Report to University Hospital G Yellow Unit by 09:00 am to Dr. Hussain or his designee.

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: Christopher Gates, Ph.D.	Title:	Clinical Psychologist
	Phone: (973) 676-1000	Email:	christopher.gates@va.gov

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 out patient substance use disorder treatments & 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 8:15 AM 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; attend an AA or NA meeting in the community during elective rotation.

First day reporting instructions: Students should contact Kenneth Hopper at Kenneth.hopper3@va.gov for reporting instructions prior to the start of the rotation.

DEPARTMENT OF RADIOLOGY

RAD 9500 - DIAGNOSTIC RADIOLOGY

Site(s) of Elective: University Hospital
Elective Director: Name: Andrzej Jedynak, M.D. Title: Assistant Professor
Phone: 973-972-5188 E-mail: jedynaan@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 recommended text is "Learning Radiology: Recognizing the Basics" by William Herring 4th Ed., 2020) which is freely available as an e-book from the NJMS Library.
2. Students are expected to arrive by 9:00 a.m. Students will observe interpretation of studies by the Radiology attending physicians and residents and will receive teaching at the radiology reading stations.
3. Students should attend all 12:30PM departmental resident conferences.

First day reporting instructions: Report to the Radiology office (MSB F-506) at 9:00 AM on the first day of the rotation.

RAD 9510 – INTRODUCTION TO NEURORADIOLOGY

Site(s) of Elective: University Hospital, Radiology Reading Room
Elective Directors: Name: Dr. Esther Nimchinsky Phone: 917-863-6367
Email: nimchins@njms.rutgers.edu

When offered: Designated third year elective time.
Max number of NJMS third year students per rotation: 2

Prior approval required: YES – The student must meet with Dr. Nimchinsky prior to registering for the elective. Registration for this elective will occur through the NJMS Office of the Registrar. Once registered, the student MUST meet again with Dr. Nimchinsky to plan the elective and receive the book assignment. This meeting must occur at least two months prior to the start of the elective.

Course Description: This elective is designed to introduce third year students to clinical neuroradiology. They will review clinical neuroanatomy of the brain, spine, head and neck, and sit with a neuroradiologist as he or she reads CT and MRI scans from the hospital, emergency department and the outpatient setting. They will have the opportunity to read select scans on their own to understand the process of radiology reporting, and review them with the attending. They will follow the workflow of the reading room from consultations with clinical teams, annotation of scans, quality control, scan acquisition, postprocessing, radiology reading, and incorporating data from the medical record into the differential diagnoses. Finally, they will attend ENT and Brain/Spine tumor boards, as well as Neuropathology and Orbit conferences, to learn more about the role of Neuroradiology in conjunction with these affiliated services.

Learning outcomes & evaluation methods:
Outcomes: During this elective it is expected that the student will, having already read the assigned text, become more fluent in clinical neuroanatomy, and be able to describe neuroradiologic findings orally to the Neuroradiology attending and to the residents on rotation. The student will have the opportunity to read 10 studies on his or her own, and submit the reports to the attending. This will cover studies in brain, spine, and head and neck. The Neuroradiology faculty will provide feedback during the elective to the student. The student will present two interesting cases to the Neuroradiology division, choosing relevant images and providing relevant clinical details from the medical record. At the conclusion of the elective, the student will complete a quiz covering rudimentary anatomy and pathology, and with an emphasis on appropriate choice of imaging in given clinical scenarios.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. The case reports will be graded high pass/pass/fail, and the quiz will receive a numerical grade. The case reports will be weighted 10% each, and the quiz will be weighted 20%. The conduct and clinical experience and interactions of the student in the reading room will be weighted for the remaining 60%. A student cannot pass the elective without submission of the case reports and completion of the quiz. This elective is graded pass/fail per NJMS grading policy.

Key responsibilities of the student while on elective:
1. The student is expected to read the assigned text prior to beginning the elective.
2. The student will be expected to report to the reading room in a timely manner every day and stay in the reading room with the faculty and residents until the end of the work day.
3. The student is expected to sit with the Neuroradiology attending and/or residents to learn the mechanics of radiology reading and report generation, as well as choice and refinement of imaging techniques.
4. The student is expected to refer to the medical record throughout the day to obtain clinical data and elements of history that are necessary for the interpretation of scans.
5. The student is expected to search the medical literature on a daily basis to increase his or her knowledge of Neuroradiology, and to learn more about evolving techniques in neuroradiology.
6. The student will generate 10 radiology reports for assigned cases and submit them to the Neuroradiology attending for evaluation.
7. The student will present two interesting cases to the Neuroradiology service in Powerpoint form, in compliance with HIPAA regulations
8. The student will complete a quiz at the end of the rotation to evaluate his or her progress.

First Day Reporting Instructions: The student will have read the assigned text prior to beginning the elective. He or she will present to the main Reading Room, C-318 at 8 am, and ask for the Neuroradiology-CT reading station and attending.

RAD 9515 – RADIOLOGY (NBIMC)

Site(s) of Elective: Newark Beth Israel Medical Center
Elective Director: Dr. Michael Sadler

Contact Information: rotators@rwjbh.org, 973-926-3233

When offered: July to April
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: Students rotate through general radiology, neuroradiology, mammography, diagnostic ultrasound, nuclear medicine, musculoskeletal radiology, thoracic radiology, and interventional radiology. The objective of the program is to provide the student with the skills necessary to analyze common radiographic studies. Emphasis is on chest, abdomen, bone and gastrointestinal studies as well as emergency radiological evaluation. For exposure to ER radiology students are encouraged to observe in the ER reading area with the assigned physician. Computed tomography, nuclear medicine, magnetic resonance and ultrasound evaluations are essential elements in the program. A better understanding of the imaging modalities, their limitations, advantages and costs will also emerge from the experience.

Objectives:
1. Identify the indications, contraindications, risks and costs of commonly used imaging procedures.
2. Describe patient safety issues relating to radiology.
3. Recognize basic anatomic structures as they appear on imaging studies in the normal patient and in common disease states.
4. Interpret plain radiographs as well as basic skills in CT, MRI, and ultrasound.

REPORTING INSTRUCTIONS: On the first day of the elective the student should report to the Student Coordinator, at NBIMC in the Newark Strong Lobby. E-mail: rotators@rwjbh.org; Phone: 973-926-3233.

DEPARTMENT OF RADIATION ONCOLOGY

RADO 9530 – RADIATION ONCOLOGY

Site(s) of Elective: University Hospital Cancer Center (205 S Orange Ave, Newark, NJ)
Elective Director: Name: Malcolm Mattes, M.D.
E-mail: mattesmd@cinj.rutgers.edu

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: Radiation therapy has an important role in both the curative and palliative treatment of nearly all human malignancies, and is one of the three primary cancer treatment modalities alongside surgery and systemic therapy. This elective is designed to introduce medical students to the field of oadiation oncology, and the integration of radiation therapy into multidisciplinary cancer care. Students will have the opportunity to participate in all aspects of patient care, including the initial consultation with the radiation oncologist where it is determined if radiation is indicated, radiation treatment planning, treatment delivery, management of side effects while patients are on treatment, and monitoring for recurrence in the follow-up period. Students will also attend all departmental patient care meetings and multidisciplinary tumor boards.

Learning outcomes & evaluation methods:
Outcomes: During this elective, it is expected that the student will prepare in advance to see new patients, conduct patient interviews and physical exams, and present the findings to clinical faculty on a daily basis.

Evaluation: Participation in all aspects of patient care will be expected. This elective is graded pass/fail per NJMS grading policy. The student's clinical grade will computed using the NJMS Student Evaluation Form.

Didactic lectures: Students should watch the following virtual lecture prior to the start of the rotation: https://www.astro.org/Affiliate/Medical-Students/About-the-Field-of-Radiation-Oncology. The radiation oncology department at NJMS and RWJMS is a joint department under the Cancer Institute of New Jersey. On Fridays, all residents have an academic day, where radiation oncology residents learn about physics, radiobiology, and clinical radiation oncology. NJMS students are welcome to attend these lectures if patient-care responsibilities allow.

Key responsibilities of the student while on elective:
1. See as many outpatient & inpatient consultations as possible, and present the findings to faculty
2. Attend all departmental meetings and tumor boards with faculty
3. Observe radiation treatment delivery with the radiation therapists
4. Observe a CT simulation with the radiation therapists
5. Participate in radiation treatment planning with the radiation oncologist and medical dosimetrist/physicist

First day reporting instructions: Report to the radiation oncology department on the A-level (basement room A1120, 973-972-5053) of the cancer center (205 S Orange Ave, Newark, NJ) on the first Monday of the rotation at 8:00am. Ask for Dr. Malcolm Mattes or when you arrive. Wear a white coat and ID badge. Email Dr. Mattes at least 24 hours in advance to receive orientation materials for the rotation.

DEPARTMENT OF SURGERY

SURG 9505 – GENERAL SURGERY

Site(s) of Elective: University Hospital
Elective Directors: Name: Michael E. Shapiro, M.D. Title: Professor
Email: mes362@njms.rutgers.edu Phone: 973-972-6639

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 provide the third year student additional exposure (in addition to the core clerkship) to the principles of clinical surgery, with particular emphasis on the pathophysiology ofsurgical disease and its management, both operative and non-operative. Activities include rounds with residentsand faculty, assisting in the operating room on appropriate patients, one-on-one sessions with the instructor, literature review, as well as at least one presentation on a topic of interest.

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.

Evaluation: This elective is graded pass/fail per NJMS grading policy. The student's clinical grade will 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.
2. Student is expected to attend daily and participate in daily rounds and attend surgical conferences
3. Students will have the opportunity to attend surgery outpatient clinics
4. Student will observe and participate in operative cases.

First Day Reporting Instructions: Students should report at 7:00 a.m. to MSB G-506b on the first day of the elective. Dr. Shapiro's cell: 201-913-5212. Please contact Dr. Shapiro the week before the elective starts for patient-related reading assignment.

SURG 9512 – SURGICAL ETHICS

Site(s) of Elective: University Hospital
Elective Directors: Name: Michael E. Shapiro, M.D. Title: Professor
Email: mes362@njms.rutgers.edu Phone: 973-972-6639

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 elective is designed to build upon prior knowledge of Bioethics gained in the first two years with particular emphasis on ethical questions related to the surgical care of the

patient. Students will participate in surgical rounds and the operating room on General Surgery/Surgical Oncology, and using those patient experiences, examine ethical questions such as informed consent, shared decision-making, intrinsic bias, futility, organ donation and allocation of scarce resources, management of complications and disclosure of error, etc.

Students will round with the resident team as well as the course instructor, and in the Surgical ICU as appropriate. Students will meet with the instructor to discuss ethical issues arising in the care of the patients, and prepare at least one presentation of a topic of mutual interest. Students will also attend the November UH Bioethics Committee meeting.

Learning outcomes & evaluation methods:

Outcomes: During this elective it is expected that a student will function as a member of the surgical team. Cases will be presented to the faculty on a regular basis, with discussions of ethical issues and concerns. Clinical faculty will provide mid-elective feedback to the student. The student will also be required to make one presentation to the entire team during this elective. At the conclusion of this elective, the student and faculty member will provide feedback to each other regarding the elective.

Evaluation: The student's clinical grade will be computed using the NJMS Student Evaluation Form. The presentation will be graded pass/fail. The clinical grade is weighted at 40% of the final grade, the presentation and discussions 30% each. A student cannot pass the elective without a presentation. 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 round with the resident team, attend cases in the OR, and present to clinical faculty on a daily basis.
2. The student is expected to read the pertinent surgical and ethics literature concerning the cases they see.
3. One written presentation discussing an ethical issue presented by a patient is required.

First Day Reporting Instructions: On the first day of the elective the student should report to MSB G-506b at 7:00 am. The student must wear his/her white coat and bring his/her ID. Please contact Dr. Shapiro the week before the elective to confirm the meeting location, and any appropriate reading.

SURG 9522 – ADULT CARDIOTHORACIC SURGERY

Site(s) of Elective: University Hospital
Elective Directors: Name: Huzaifa Shakir, M.D. Phone: 973-972-3555
Email: shakirhu@njms.rutgers.edu

Additional Faculty: Dr. Justin Sambol

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

When offered: September - May only, with approval from Dr. Shakir
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. Only offered to students with interest in pursuing career in CT Surgery

Course Description: The Adult Cardiothoracic Program includes cardiac, thoracic and esophageal surgery and will include working with the cardiac and thoracic attendings. The student will participate in

Cardiothoracic conferences in which cardiac catheterization data, X-rays, angiography and other pertinent clinical data are discussed. He/she will participate in decision-making in regard to the necessity for, and types of, surgery done. Pre-operatively, the patient will be evaluated and both during the time of surgery and in the postoperative course, the student may become an essential member of the team. The goals and objectives are for the medical student to become familiar with both cardiac and thoracic diseases and types of surgical therapy offered.

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.

Evaluation: This elective is graded pass/fail per NJMS grading policy. The student's clinical grade will 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 cardiothoracic surgery service. At the discretion of the chief resident and/or staff the student will be assigned several patients to follow closely throughout the rotation.
2. When appropriate there will be attendance at the surgical M&M Conference and formal staff rounds
3. Students will have the opportunity to attend outpatient clinics
4. Student will observe and participate in operative cases

First Day Reporting Instructions: Students should reach out by pager to 973-421-0690 for instructions.

SURG 9532 – TRAUMA SURGERY

Site(s) of Elective: University Hospital
Elective Directors: Name: Amy Gore, M.D. Phone: 973-972-3865
Email: goreav@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: 1
Prior approval required: NO

Course Description: In this elective, students will serve as members of the Trauma Team at the New Jersey State Trauma Center. They will participate in the initial assessment of trauma victims in the Emergency Room and in the subsequent pre-operative, operative and post-operative management. In addition, there are conferences, didactic lectures and daily rounds which allow for expansion of the interests of the student.

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.

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

Key responsibilities of the student while on elective:

1. Student will participate in the initial assessment of trauma victims
2. Student is expected to attend daily and participate in daily rounds and attend surgical conferences
3. Student will observe and participate in operative cases.

First Day Reporting Instructions: Students should report to UH E-349 on Monday at 7:00 a.m. for Morning Report/Rounds, followed by MSB B-624 for registration by Ms. Deyse Ribau (ribaudd@njms.rutgers.edu).

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.
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 at 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 9559 – BURN SERVICE (CBMC)

Site(s) of Elective: Cooperman Barnabas Medical Center
Elective Director: Name: Dr. Cherry Song
Phone: (913) 486-3834 Email cherry.song2@rwjbh.org

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 2

Prior approval required: YES

Course Description: This elective is designed to provide the third year student with exposure to the Burn Service, which includes the Burn Intensive Care unit and Burn Step-Down Unit. They will function under the close supervision of teaching residents and attending staff. The student will participate in the care of burned patients including acute resuscitation, preoperative, operative and postoperative aspects of care.

Key responsibilities of the student while on elective:

1. The students will actively participate in formal clinical teaching rounds, which include surgical residents and attending staff.
2. The student will attend regular scheduled resident conferences of the Department of Surgery.
3. The student will also participate in evaluation of the acute burn patient in the emergency department and be able to 1) present a complete history, 2) perform a physical exam, and 3) apply appropriate information obtained in reading to individual cases.
4. The student will also participate and be familiar with each operative procedures.

First day reporting instructions: Students should report to the Medical Education Office (Room 4225) at 9:30am and contact Debbie Paciga (Debbie.paciga@rwjbh.org) prior to the rotation. This will then be followed by an orientation in the Department of Surgery with the Medical Student Coordinator Jillian Scalici.

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: NO

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: Chair and Associate Dean
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, University Hospital C-401, at 6:45 a.m.

SURG 9566 – VASCULAR AND ENDOVASCULAR SURGERY

Site(s) of Elective: University Hospital, Newark, NJ
Elective Directors: Name: Joe Huang, MD
Phone: 973-972-6295
Email: joe.huang.md@njms.rutgers.edu

When offered: Year-round
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: The student will be exposed to the field of vascular and endovascular surgery by learning about the pathophysiology and management of peripheral arterial and venous diseases. Pathologies encountered will include aortic aneurysms, carotid occlusive disease, lower extremity arterial disease, venous disease, and dialysis access needs. The student will become familiar with the evaluation and diagnostic testing modalities for these conditions. Through office hours, endovascular suite procedures, and operating room procedures, the student will also learn about the medical, endovascular, and open interventions to treat these patients. In addition to rounds and clinics, students will attend weekly pre-operative conferences, monthly journal clubs, and monthly morbidity & mortality conferences.

Outcomes: During this rotation, students will conduct patient interviews, perform physical exams, and present findings to the clinical faculty on a daily basis. They will also present on a topic of their choice at the end of their elective.

Evaluation: This elective is graded PASS/FAIL per NJMS grading policy. The student's clinical grade will 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 vascular service.
2. When appropriate there will be attendance at the surgical case conferences and formal staff rounds
3. Students will have the opportunity to attend outpatient clinics
4. Student will observe and participate in endovascular and operative cases

First Day Reporting Instructions: Prior to the start of the elective, students should contact the Division of Vascular Surgery Coordinator to find out where to report.

SURG 9567 – VASCULAR SURGERY (NBIMC)

Site(s) of Elective: Newark Beth Israel Medical Center
Elective Director: Dr. Bruce Brener
Contact Information: rotators@rwjbh.org, 973-926-3233

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: YES
Prerequisites: Surgery Clerkship

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

Objectives:

1. Perform a thorough, accurate and focused history that includes the medical, behavioral, psychosocial and environmental aspect of illness, as well as physical exam.
2. Identify conditions requiring vascular surgery and/or when consultation is necessary.
3. Outline the principles of pre- and post-operative care.
4. Explain the key components of the vascular procedure as well as surgical anatomy and pathology.
5. Demonstrate review of appropriate vascular surgery literature on rounds and in a formal presentation.
6. Communicate effectively with other members of the healthcare team, including nurses, social workers, attendings and consultants.

REPORTING INSTRUCTIONS: On the first day of the elective the student should report to the Student Coordinator, at NBIMC in the Newark Strong Lobby. E-mail: rotators@rwjbh.org; Phone: 973-926-3233.

SURG 9575 – SURGICAL ONCOLOGY

Site(s) of Elective: University Hospital
Elective Directors: Name: Ravi Chokshi, M.D. Phone: 973-972-1110

Email: chokshrj@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: 1
Prior approval required: NO

Course Description: This elective is designed to introduce the third year student to the principles of surgical oncology, focused on pre-operative evaluation, selection of operations, and post-operative care. Activities include formal rounds with residents and faculty as well as a series of conferences which the student may attend.

Learning outcomes & evaluation methods: 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. This elective is graded pass/fail per NJMS grading policy. The student's clinical grade will 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.
2. Student is expected to attend daily and participate in daily rounds and attend surgical conferences
3. Students will have the opportunity to attend surgery outpatient clinics
4. Student will observe and participate in operative cases.

First Day Reporting Instructions: Please email the course director for information. Telephone: 973-972-1110.

SURG 9585 – BREAST SURGERY (Not currently offered – DO NOT REGISTER)

Site(s) of Elective: University Hospital
Elective Director: Dr. Susan Pories

When offered: Throughout the academic year with permission

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 the third year student to breast surgery. Rounds are conducted daily prior to going to the operating room or clinic. In the operating room, the student will observe surgeries including an array of breast pathology. They will participate in all peri-operative care of the patient. In the office/clinic, students will see patients, take H & P's, and present the patient to the attending who then sees the patient with the student.

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.

Evaluation: This elective is graded pass/fail per NJMS grading policy. The student's clinical grade will 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.
2. Student is expected to attend daily and participate in daily rounds and attend surgical conferences
3. Students will have the opportunity to attend surgery outpatient clinics
4. Student will observe and participate in operative cases.

First Day Reporting Instructions: Please email the course director for information.

SURG 9590 – LIVER TRANSPLANT AND HEPATOBILIARY SURGERY

Site(s) of Elective: University Hospital
Elective Directors: Name: Dr. Flavio Paterno
Dr. Arpit Amin
Phone: (973) 972-3573
(973) 972-8088
Email fp227@njms.rutgers.edu
arpit.amin@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 Liver Transplant and HPB Surgery Service, students will be able to participate in all the surgical procedures performed in the division. These include organ procurement, liver transplants, and various open and robotic hepatobiliary procedures. In addition to the operative experience, students will be exposed to pre- and post-operative management of patients with end-stage liver disease and hepatobiliary pathologies. There is also a strong emphasis on bedside and operating room teaching regarding the various aspects of transplantation science. The student will participate actively in multidisciplinary rounds and conferences.

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.

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 they are following, particularly if the patient has rare or unusual pathology or an interesting clinical course. 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 but highly encouraged given the nature of patient care on this service. Communication will be via cellular phone. The student can make at least one brief presentation, ie., case report, presentation on a topic of interest pertaining to transplantation, liver disorders, etc. This presentation may be given verbally or in PowerPoint format.
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 pathologies.
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 email course directors prior to their elective start date to help coordinate meeting location/time with transplant surgery team on their first day of rotation.

SURG 9595 – MINIMALLY INVASIVE AND WEIGHT-LOSS SURGERY

Site(s) of Elective: University Hospital
Elective Director: Name: Dr. Danbee Kim
Phone: (609) 903-5581 Email dhk84@njms.rutgers.edu

When is this elective offered? Throughout the academic year with permission
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 provide the third year student with exposure to minimally invasive surgery and weight-loss surgery/management. Students will have the opportunity to evaluate patients in the office both prior to and after surgery, participate in working with patients enrolled in our multidisciplinary weight-management program, observe minimally invasive surgery (including robotic surgery) in the operating room, and follow patients admitted to the hospital after surgery or who require consultation by MIS/bariatrics. Students will also be able to learn about how to use the robot, do simulations such as basic laparoscopy (FLS), robotic simulations, as well as the complex workup and preparation of weight-management for patients with obesity.

Learning outcomes & evaluation methods: At the end of the rotation, the student will have an in-depth understanding of obesity and its treatment methods. They will be expected to report their findings and assessments in clinic after conducting patient interviews and physical exams. Students will be evaluated also on their FLS and robotic simulation skills with similar assessment criteria used

for FLS (understanding the level of skills of a third-year medical student) and robotic simulation scoring system. The rotation overall will be graded as a pass/fail per NJMS grading policy.

Key responsibilities of the student while on elective:

1. The student will be expected to round with the resident team, attend cases in the OR, and present to clinical faculty on a daily basis.
2. The student is expected to read the pertinent surgical and ethics literature concerning the cases they see.
3. Student is expected to attend bariatric clinic and multidisciplinary weight-management conference
4. Student is expected to perform basic laparoscopic skills at the sim lab according to the FLS testing guidelines
5. Student is expected to complete robotic simulations with the Da Vinci console simulation system
6. Student should present one journal for weekly journal club on topic of MIS and/or bariatric surgery
7. Student may participate in clinical research regarding MIS/bariatric surgery, if interested.

First day reporting instructions: On the first day of the elective the student should report to MSB G-580 at 8:00 am. The student must wear his/her white coat and bring his/her ID. Please contact Dr. Kim the week before the elective to confirm the meeting location, and any appropriate reading.