**Overall Educational Goal of Elective:**
To expose the rotating medical student to the practice of clinical, surgical and autopsy pathology in a tertiary care setting. Emphasis is placed on giving the rotating student a working concept of the role of pathology in the overall health care system and in individual patient care.

**Objectives:**
- At the end of the rotation, the medical student will understand how the pathology laboratory functions by actively participating in daily workflow in the major areas of clinical pathology practice (surgical pathology, cytopathology, hematopathology, and autopsy).
- Extent of exposure will depend on length of rotation. Two week rotations will follow a compressed version of the full four week rotation.
  - Four week curriculum:
    - Weeks 1 & 2 – Surgical Pathology: morning surgical pathology case sign out, afternoon gross room and frozen section observation, independent case preview and microscopic diagnosis with resident assistance. Autopsy Pathology: participate in all autopsies from clinical chart review, gross examination, and formulation of preliminary diagnosis. Follow up with microscopic review and final report draft for students on 4 week rotation.
    - Weeks 3 & 4 – Cytopathology, Hematopathology and Clinical Laboratory: Work with residents in cytopathology, hematopathology, and clinical lab to include morning case review, peripheral blood smear review, accompanying cytotechnologists on fine needle aspirations, heme-onc fellows on bone marrow aspirates. Rotate through chemistry, microbiology and molecular labs
    - Attend tumor boards (heme-onc, breast, thoracic, GU, GYN, GI, molecular), daily consensus conferences (surgical pathology, autopsy, cytopathology, hematopathology), and resident conferences (resident run subspecialty conferences, didactic sessions).
- At the end of the rotation, the medical student will have a comprehensive understanding of the various specialized areas of the pathology department.
- At the end of the rotation, students (including 2 week rotations) are **required** to select an interesting case from her/his experience and give a 30 minute case presentation (complete with clinical summary, gross pathology, microscopic pathology, final diagnosis, discussion) to the residents and faculty. Students on 4-week rotations have the option to participate in either an educational case write-up or case report for publication in lieu of the 30 minute case presentation. A submission-ready manuscript is required by end of the rotation.
I. Patient care
   - Understand the role of the pathology laboratory in providing safe, effective patient care.
   - Understand the benefits and limitations of cytopathology versus surgical pathology.
   - Understand the role of autopsy as it relates to patient safety and improved patient care.

II. Medical knowledge
   - Formulate a working differential diagnosis for uncomplicated gross surgical pathology specimen.
   - Formulate a working differential diagnosis for uncomplicated microscopic surgical pathology specimens.
   - Formulate basic anatomic diagnosis from autopsy.
   - Perform a differential count on peripheral blood smear.
   - Recognize basic features of malignancy on cytopathology smear preparations.

III. Practice-based learning and improvement
   - Preview select uncomplicated surgical pathology, cytology and hematopathology cases prior to review with attending – assess accuracy of the diagnoses throughout rotation.

IV. Interpersonal and communication skills
   - Effective communication with residents, technical staff and faculty.
   - Effective communication of diagnostic findings to clinicians with appropriate clinico-pathologic correlation.

IV. Professionalism
   - Attend daily sign outs and be prepared with preview of select cases.
   - Assist with autopsies and preview chart.
   - Attend conferences as outlined above.

V. Systems-based Practice
   - Perform literature review for autopsies and surgical cases. Use University library resources.
   - Respect universal precautions.

**Brief Description of Activities**
Time will be partitioned as outlined above.

**Method of Student Evaluation**
Based upon satisfactory performance during the elective as monitored by individual interaction with faculty and residents. Other factors include punctuality, quality of required case presentation and/or educational case write-up.

**Are there any prerequisites for this elective?** No rotational prerequisites are required; HOWEVER, WRITTEN PRE-APPROVAL FROM THE ELECTIVE DIRECTOR IS REQUIRED. EMAIL DR. MINEROWICZ AT MINEROCH@RWJMS.RUTGERS.EDU PRIOR TO SCHEDULING YOUR ELECTIVE.

**Is this elective available to third year medical students as well?** Yes