

Residents as Teachers

Medical Student Education -- Goals, Objectives and Responsibilities

Surgery Website

- The Department of Surgery maintains a comprehensive website with information on both resident and medical student education
- The website is located at: <http://www.med.und.edu/surgery/>
- Take time to review the website
- Be familiar with goals and objectives for medical students

First and Second Year Students

- Problem Based Basic Science Curriculum in Grand Forks -- little contact with Surgery Residents
- Surgery Interest Group -- For any 1st or 2nd year medical student with a potential interest in a surgical career.
- Meets periodically evenings with Surgery Faculty to discuss how to pursue a surgical career.

Third Year Surgery Clerkship

- Traditional Clerkship held in 3 urban locations (Grand Forks, Fargo, Bismarck)
- Two alternative longitudinal 3rd year options (ROME, MILE)
- Surgery Residents will have the greatest contact with students taking the traditional Clerkship

ROME

- Held in multiple rural locations throughout North Dakota
- Some students will do all surgical experience at their ROME site while others will take a month of surgery on an urban campus
- Students follow a cohort of patients and do not have assigned rotations

MILE

- Minot integrated longitudinal experience
- Full year experience in Minot with design similar to ROME
- All 3rd year surgical experience obtained in Minot

Traditional Surgery Clerkship- 3rd Year

- Bismarck, Grand Forks, Fargo
- One of 6 required clerkships in 3rd year
- 8 weeks in length-6 weeks of general surgery, one week elective + additional exposure to urology and ENT
- Most resident contact with students will occur on these clerkships

Required Conferences for Students

- Weekly Student Seminars: Mondays 4–5 p.m.
- Weekly Morbidity & Mortality Conference: Fridays 7–8 a.m.
- Surgery Grand Rounds: First and third Friday of each month 8-9 a.m.
- Students must be excused to attend these conferences
- ROME and MILE students have different requirements

Grading for 3rd year students (Honors/Pass/Fail)

- MILE/ROME/Traditional Clerkship all have identical grading requirements
- Faculty/Chief Resident evaluations (60%), NBME shelf exam (15%), Oral Exam (10%)
- NBME shelf exam has a minimum passing score of 15th percentile
- Most common reason for a student to fail clerkship is scoring < 15th percentile on shelf exam

Grading-Honors

- To be an outstanding student, must go beyond the standard textbook to the specialty books and current literature.
- Determined by the Department Chair. Typically a preceptor rating of 90 or greater, a NBME score of 90% or greater and an oral exam score of 8 or greater is required to be considered for Honors.

Goals

- The **practice** of applying basic science disciplines to clinical situations.
- To **recognize diseases** or conditions that are treated surgically. This includes understanding the normal physiology, pathophysiology and changes incurred by surgical treatment. The student will be expected to understand the natural history of surgical diseases and the normal physiology in individuals not affected.
- To **develop problem-solving skills** based on a complete history, performance of a complete physical examination and collective interpretation of additional data such as laboratory and X-ray results.
- To **recognize** common surgical **emergencies** and the appropriate responses to these emergencies.
- To **develop** basic manual skills required in effective patient care.
- To **develop self-assessment skills** that will provide the student with appropriate input or awareness as to his or her performance on the clerkship objectives.

- To **develop and maintain personal characteristics**, attitudes and ideals appropriate for the physician and surgeon. This should include an awareness of personal strengths, weaknesses, appearance, reliability, integrity, honesty, and the ability to interrelate with other individuals.
- To **develop** skills enabling an effective interaction with patients, colleagues, nurses, and other health care professionals. This includes the development of communication skills that are necessary for the exchange of information concerning patients and the ability to cooperate with other disciplines in patient care.

Objectives

- Objectives for specific surgical subjects have been prepared by the Curriculum Committee of the Association for Surgical Education (ASE) and are published in the website: "[Manual of Surgical Objectives: A Symptom and Problem-Based Approach](#)," 4th Edition. These are essentially lists of expected knowledge, skills and accomplishments to be studied for each specific subject. The Department utilizes these objectives for the Third-Year Surgery Clerkship, and students should review the objectives during the clerkship.
- Residents should periodically review this website

Student Case Logs

- Smart phones or PCs will be used to record patients' diseases; operations witnessed and assisted; procedures, skills observed, assisted and performed. *These should be entered no less often than weekly; failure to enter cases may result in a failing grade for the rotation.* These patient encounters will not be part of the grade; they will, however, be used as a critique of the individual's rotation. Failure to complete the patient encounters or to submit them as requested will result in an incomplete mark in surgery.

Required Texts for Students

- "Essentials of General Surgery" by Peter F. Lawrence or "National Medical Series (NMS) for Independent Study" Surgery, by Jarrell and Carabasi, III (required)
- "Cope's Early Diagnosis of the Acute Abdomen" by William Silen (required)
- "The Manual of Surgical Objectives: A Symptom and Problem-Based Approach, 4th Edition, by the Association for Surgical Education 2001. Link provided by the Association for Surgical Education - [The Manual of Surgical Objectives](#)
- "TEAM" (Trauma Evaluation and Management) Student Booklet from the American College of Surgeons - www.facs.org (This will be provided on first day of rotation).

Call Schedule Policy for Students

- Students are expected to take call during the rotation. Call will not exceed every fourth night or fourth weekend, on average. Call may be either in-house or from

home via beeper, depending on the location. Each student should discuss facility-specific call policies upon arrival at each facility. On non-call nights, students may leave at 6:00 p.m. (but may stay later if the student desires to do so). The Department abides by the ACGME 80-hour work week policy.

Fourth Year Acting Internship

- Required 4 week surgery experience for 4th year medical students/two weeks general surgery and two weeks orthopedics
- Offered in Bismarck, Fargo, Grand Forks and Minot
- Students are given greater responsibility/independence than 3rd year students

Objectives

- General Surgery
 - To expose the student to a learning environment that will prepare the student for residency training.
 - To gain a perspective of general surgery at it relates to other disciplines, particularly primary care.
 - Gain experience in the recognition of surgical diseases and their management.
 - Expose the student to technical aspects of surgery and improve their basic surgical skills.
 - Expose students to the management aspects of a surgical practice.
- Orthopedics
 - Provide an experience in orthopedic surgery that will help the student understand the relationships of orthopedics with other areas of medical practice.
 - Familiarize the student with the recognition, diagnosis and management of common orthopedic and musculoskeletal problems.
 - Participate in the care of orthopedic problems in the outpatient, inpatient and emergency room.
 - Enhance the technical skills of students, particularly as it applies to the management of orthopedic trauma.

Fourth Year Electives

- Offered in multiple disciplines throughout the state.
- Can be viewed in the Medical School Course Catalog
- Goals and Objectives for electives can be obtained from the department offices

Tips for Residents

- Medical Students pay a lot of tuition for their education-see that they get good value
- Residents may have an impact on students equal to or in some cases greater than faculty
- Know and obey the rules regarding conferences and call for students
- Medical Students should be treated as adult learners
- A problem based approach is preferred over formal didactics (lectures)
- Use current patients to guide instruction
- Use open ended questions rather than asking for facts (pimping)
- Students need to read to pass the NBME shelf exam-make sure they have time to study
- In a few years medical students will be your colleagues, peers and the source of referrals
- Treating students well now may pay big dividends in the future
- Teaching students is a privilege and not a chore
- Seeing students develop and excel is a substantial reward

June 2013