

**REGIONS HOSPITAL
SENIOR ELECTIVE DESCRIPTIONS
2010-2011**

EMERGENCY MEDICINE

EMMD 7512: Bedside Ultrasound for the Clinician.....	Page 2
EMMD 7571: Clinical Toxicology and Emergency Medicine.....	Page 3
EMMD 7600: Advanced Emergency Medicine – Career Track.....	Page 4-5

INTERNAL MEDICINE

MED: Gastroenterology.....	Page 6
MED: Infectious Diseases – Clinical Aspects.....	Page 7
MED: Nephrology – Clinical and Outpatient.....	Page 8

NEUROLOGY

NEURO: Neurology – Clinical.....	Page 9
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PSYCHIATRY

PSYCH: Psychiatry – Adult.....	Page 10-11
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SURGERY

SURG: Orthopedic Surgery.....	Page 12
SURG: Plastic and Reconstructive Surgery.....	Page 13
SURG: Surgical Intensive Care Unit.....	Page 14
SURG: Trauma Surgery.....	Page 15

EMMD 7512: Bedside Ultrasound for the Clinician

Course Availability:	Arranged – Students must contact Lori Barrett to choose dates
Length:	4 Weeks
Site:	Regions Hospital Emergency Medicine Department
Slots Available:	2
Prerequisites:	Surgery, Medicine
Course Director:	Cullen Hegarty, M.D.
Contact:	Lori Barrett, 651-254-3666 Lori.J.Barrett@HealthPartners.com

Rotation Description:

This 4-week elective will introduce students to bedside ultrasound. Bedside ultrasound is best learned at the bedside. Students will learn basics of ultrasound and will perform clinical ultrasounds in the Emergency Departments of Regions Hospital. While individual lectures, individual reading and online instruction will play a role in the learning, the majority of the rotation will be spent in the emergency department at Regions Hospital. Bedside teaching will be facilitated by the course director, Dr. Zwank as well as ultrasound fellows, ultrasound technicians and emergency medicine residents.

- The student will be required to be present in the emergency department from 8am to 5pm Monday through Friday. There will be no duties on Saturday or Sunday. Arrangements may be made with Dr. Zwank to spend time working with them during evening or overnight shifts. This would replace any daytime duties for those days.
- The student will perform a minimum of 75 ultrasound scans. The specific goals include 25 FAST ultrasound exams, 25 cardiac ultrasound exams and 25 other ultrasound exams which can include but are not limited to aorta, OB, vascular, ocular or procedure guidance. If the student is present for an entire exam performed by another individual or assists in the performance of an exam, they may take credit for that exam. All studies will be carefully recorded and logged.
- A written pre-test will be given as well as a written and hands-on post-test.

Sonoguide.com

Emergency Ultrasound by Ma, Mateer & Blavis (McGraw Hill 2nd Edition 2008)

Youtube.com (keyword: HQMEDED)

Goals and Objectives:

- Understand the basic physics and principles of application
- Begin developing an ability to acquire standard images and to recognize pathology related to the following core applications:
 - FAST (Focused Assessment with Sonography in Trauma) as it relates to trauma and undifferentiated hypotension
 - Cardiac as it relates to tamponade and gross cardiac function
 - Aorta/AAA as it relates to undifferentiated hypotension
 - Identification of early intrauterine pregnancy via transabdominal sonography
 - Cannulation of blood vessels under ultrasound guidance
- Become familiar with other common applications such as biliary, urinary tract, deep venous thrombosis of the extremity, soft-tissue/musculoskeletal, thoracic, ocular and procedural guidance
- Develop an understanding of the limitations of bedside ultrasound

Evaluation:

- Review of ultrasound studies performed by student
- Pre-test
- Post-test (hands-on and written)

EMMD 7571: Clinical Toxicology and Emergency Medicine

Course Availability:	Arranged - Students must contact Lori Barrett to choose dates
Length:	4 Weeks
Site:	Regions Hospital Emergency Medicine Department
Slots Available:	2
Prerequisites:	Preferably the student will have completed Med
Course Director:	Carson Harris, M.D.
Contact:	Lori Barrett, 651-254-3666 Lori.J.Barrett@HealthPartners.com

Rotation Description:

This course offers the student the opportunity to be involved in the initial stages of providing critical care to the patient with serious, sometimes life-threatening medical problems. The student will develop understanding of the application of certain procedural principles of critical care and the fundamentals of Clinical Toxicology. These include drug overdoses, acute alcohol intoxication and withdrawal syndromes, antidotes, toxic inhalations, some environmental toxins, indications for hemoperfusion/dialysis, street drug problems and principles of pediatric poisonings.

Goals and Objectives:

This course will offer the student a chance to participate in the emergency management of toxic ingestions and exposures. The student will develop an orderly and systematic approach in the emergency department management of overdosed and poisoned patients.

At course completion, the student will:

- know the indications for admission of ED managed patients to inpatient services.
- be familiar with techniques used in the emergent management of severely poisoned patients.
- have a better understanding of the toxicokinetics of common drugs encountered in overdoses.
- be familiar with poison information database system commonly used by US Poison Centers.

Evaluation:

The student will be evaluated based on his performance in the ED and formal and informal presentations of cases managed while on service. A written examination is given at the end of the rotation.

EMMD 7600: Advanced Emergency Medicine - Career Track

Course Availability:	Arranged - Students must contact Lori Barrett to choose dates
Length:	4 Weeks
Site:	Regions Hospital Emergency Medicine Department
Slots Available:	5
Prerequisites:	Core Emergency Medicine Course
Course Director:	Cullen Hegarty, MD
Contact:	Lori Barrett, 651-254-3666 Lori.J.Barrett@HealthPartners.com

Rotation Description:

This course is designed for medical students interested in pursuing a career in Emergency Medicine. Students will rotate at Regions Hospital which is a Level I Trauma Centers and supports an independent Emergency Medicine residency program. During the rotation, students will work intensively with a staff member from the site. These staff members will serve as a mentor and meet with the student at least twice during the rotation. The faculty mentor will facilitate the students rotation, advise the student in pursuing a residency, and illustrate other aspects of Emergency Medicine as a career, including administration, research, and sub-specialties in EM (Toxicology, Emergency Medical Services, Ultrasound, etc.). An attempt will be made to assign the student to at least 5 shifts with his/her mentor. This will allow the faculty to develop a relationship with the student, aiding in accurately representing the student in a letter of recommendation for the residency application procedure. The Emergency Medicine Career Track Student will be scheduled for approximately 12–16 clinical shifts in the Emergency Department. They will also have increased extra-clinical responsibilities, including assisting in procedure workshops, attending the full range of EM conferences, and presenting several topics during the rotation.

Goals and Objectives:

The Emergency Medicine Career Track student will:

- hone his/her History and Physical Examination skills.
- develop his/her fund of knowledge of the Core Content of Emergency Medicine.
- learn how to care for multiple patients simultaneously.
- understand the thought processes to uncover occult, life-threatening diseases.
- improve efficiency in the Emergency Department.
- develop a better understanding of how the Emergency Department functions with the hospital as a whole, and within the community.
- recognize limitations within the Emergency Department.
- learn how to better disposition patients both to outpatient and inpatient settings.
- improve on communication skills at all levels.
- become familiar with many other facets of Emergency Medicine, including ED use of Ultrasound, EMS, Toxicology, and/or administration.
- develop a better understanding of Emergency Medicine as a Career.
- become a better candidate for the Emergency Medicine Residency Application.

EMMD 7600 – continued

Evaluation:

- Daily evaluation of the student's clinical progress after each shift
 - professionalism
 - interpersonal skills
 - organization
 - ability to obtain an appropriate history and physical exam
 - formulation of an accurate diagnosis, plan, and disposition
- Understanding of procedures that they will assist in teaching and performing
- Quality and understanding of the topics they present
- Attendance of conferences, shifts, and outside assignments (e.g. Run Reports, etc)
- Final Examination

A Typical Week of a Career Track Emergency Medicine Student:

- 3 - 4 clinical shifts (day, evening, night, and weekend shifts)
- Attend and participate in EMS run review with medics
- Ride along with the EMS
- Rotate in:
 - Ultrasound instruction
 - Toxicology (Regions)
 - or EMS
- Meet with mentor:
 - Go over evaluations
 - Assess any problems
 - Review application materials
- Attend Emergency Medicine weekly didactic conferences - half-day Wednesday AM
- Present short chosen topic in Emergency Medicine every other week
- Attend and assist in teaching workshops/procedure labs
- Assigned follow up of several patients he/she saw during their clinical shifts

MED: Gastroenterology

Course Availability:	Arranged - Students must contact Jo-Ellyn Pilarski to choose dates
Length:	4 Weeks
Site:	Regions Hospital, Internal Medicine - Gastroenterology Department
Slots Available:	1
Prerequisites:	None
Course Director:	Irshad Jafri, MD
Contact:	JoEllyn Pilarski (651) 254-3725, joellyn.l.pilarski@healthpartners.com

Rotation Description:

Students, as members of the G.I. consult team, will do work-ups and attend teaching rounds on patients with gastrointestinal disease, attend gastrointestinal conferences (clinic, x-ray, pathology), gain outpatient clinical experience, and become familiar with special diagnostic techniques, such as endoscopy, liver biopsy, and small intestinal biopsy. Night call is not required.

Goals and Objectives:

This elective provides a broad, basic understanding of G.I. diseases. At the end of this course, the students will be able to:

- take a history and physical exam and relate them to the G.I. tract;
- compile a differential diagnosis of patients with G.I. diseases;
- order appropriate lab and special tests to facilitate diagnosis and treatment;
- develop an appropriate treatment program for patients with G.I. diseases; and
- develop a basic understanding of gastrointestinal and hepatic diseases through teaching sessions.

Evaluation:

Evaluation is based on performance with primary emphasis on work-ups, evaluation of diseases, and presentation to teaching rounds.

MED: Infectious Diseases - Clinical Aspects

Course Availability:	Arranged - Students must contact Jo-Ellyn Pilarski to choose dates
Length:	4 Weeks
Site:	Regions Hospital, Internal Medicine – Infectious Diseases Department
Slots Available:	1
Prerequisites:	Medicine
Course Director:	Noe Mateo, MD
Contact:	JoEllyn Pilarski (651) 254-3725, joellyn.l.pilarski@healthpartners.com

Rotation Description:

Students will function as integral members of the clinical infectious diseases team during this elective. They will evaluate patients, participate in all discussions, and explore the literature on problems relating to patients they have seen. Additional reading, conferences, and clinical lab rounds will also be an integral part of the course, as will a weekly series of didactic lectures covering some major clinical problems.

Goals and Objectives:

This course familiarizes students with major problems in infectious diseases and develops a framework for systematic diagnosis and management of most major infectious disease problems, including bacteremia, endocarditis, meningitis, pneumonia, urinary tract infections, and infections of the compromised host.

Upon completion of this course, the student should be able to:

- differentiate infectious diseases from other similar diseases;
- use a variety of diagnostic resources;
- explain basic principles of therapy in regard to selection and monitoring of antibiotics;
- discuss the value and best use of the clinical microbiology laboratory; and
- describe the pathogenesis of infectious disease and its relationship with clinical manifestations.

MED: Nephrology - Outpatient and Clinical

Course Availability: Arranged - Students must contact Jo-Ellyn Pilarski to choose dates
Length: 4 Weeks
Site: Regions Hospital, Internal Medicine – Infectious Diseases Department
Slots Available: 1
Prerequisites: Medicine
Course Director: Paul Abraham, MD
Contact: JoEllyn Pilarski (651) 254-3725, joellyn.l.pilarski@healthpartners.com

Rotation Description:

This course focuses on renal problems common to a community clinic and hospital practice. Renal clinics are held four days a week. Inpatient consultation is done daily. Didactic lectures are given. This experience is appropriate for students interested in primary care.

Goals and Objectives:

The student will work closely with renal staff and medical residents to:

- diagnose and manage common renal outpatient problems; and
- diagnose and manage acute and chronic renal problems common to a community hospital.

Evaluation:

By course director and associates in consultation with residents. No formal test.

NEURO: Neurology - Clinical

Course Availability:	Arranged - Students must contact Jo-Ellyn Pilarski to choose dates
Length:	4 Weeks
Site:	Regions Hospital, Neurology Department
Slots Available:	1
Prerequisites:	None
Course Director:	
Contact:	JoEllyn Pilarski (651) 254-3725, joellyn.l.pilarski@healthpartners.com

Goals and Objectives:

The goals of the neurology externship are to increase clinical skills in diagnosing and treating neurologic illnesses, to stimulate interest in clinical neurosciences, and to increase awareness of the role of the neurologist. It is hoped that upon completion of the course the student will be familiar with common neurological disorders and will have a sense for when neurologic consultation is appropriate.

- The student will become increasingly proficient at acquiring history and performing examinations on neurological patients and will be able to localize and describe the clinical profiles of common neurological disorders.
- The student will be able to describe and discuss the value, limitations, indications, and contraindications of common diagnostic procedures including LP, EEG, EMG, and neuroimaging techniques.
- The student will be able to correlate data obtained from the history, general physical examination, neurological examination, laboratory, and specialized diagnostic procedures to develop a clinical diagnosis, differential diagnosis, and management plan. The formulation will be presented orally and in written form.
- The student will be able to identify and characterize, assess, and (especially for chronic problems) plan integrated long-term management for the following common neurologic presentations: spine or limb pain, stroke syndromes, seizures, Parkinsonism and movement disorders, weakness, headaches, abnormalities of mental behavior, and dizziness.
- The student will be able to identify, assess, and formulate management plans for neurological emergencies such as coma, status epilepticus, meningitis, neuromuscular respiratory failure, spinal cord compression, and increased intracranial pressure.
- The student will learn to recognize situations appropriate for neurologic consultation, to determine the urgency of the consultation, and to define the role of the consultant.

PSYCH: Psychiatry - Adult

Course Availability:	Arranged - Students must contact Miranda Hatfield to choose dates
Length:	6 Weeks
Site:	Regions Hospital, Behavioral Health Department
Slots Available:	1
Prerequisites:	None
Course Director:	Dr. Scott Oakman
Contact:	Miranda Hatfield Miranda.I.hatfield@healthpartners.com 651-254-3846

Rotation Description:

This course is a requirement for all third year medical students. Its goal is to prepare medical students to recognize, diagnose, and care for patients with psychiatric disorders encountered in most medical practices. At the beginning of the course students will be given an outline of specific course objectives plus other orientation materials. Students will be assigned to work with interdisciplinary teams which will aid the student in meeting course objectives. Students will be assigned patients and will follow both in-hospital and outpatients. They will attend teaching rounds and a variety of teaching conferences. They will be given a series of lectures/discussions at their individual teaching sites. Each student will be required to write a brief paper concerning a patient-related problem.

Overall Goal:

To prepare the medical student to recognize, diagnose, and care for patients with psychiatric disorders encountered in most medical practices.

Specific Objectives:

1. Using appropriate interview techniques, the student will be able to elicit a complete psychiatric history from psychiatric and medical patients and will be able to amplify or confirm the patient's history by information from relatives and/or social agencies.
2. The student will be able to perform a physical examination emphasizing aspects pertinent to the psychiatric evaluation and a mental status examination sufficiently comprehensive to detect, at a minimum, disorders of orientation, thinking, mood, and cognition.
3. The student will learn the applications and limitations in psychiatric practice of major diagnostic tests and procedures including laboratory tests, neuroimaging tests, psychometrics, and electroencephalography.
4. The student will be able to recognize psychiatric emergencies (e.g., suicidal, violent, or delirious patients; withdrawal symptoms) and be familiar with their management. In particular, the student will develop a repertoire of questions and interpretive skills sufficient to permit estimation of the likelihood of suicide and methods of safeguarding against it.
5. The student will learn the principles of giving and receiving consultation from other physicians and to cooperate with social service agencies.
6. The student will learn the basic processes of judicial commitment in Minnesota and other basic forensic issues.
7. The student will learn to effectively utilize the processes of patient education, reassurance, and support. The student will learn indications for, and gain some familiarity with, other psychological interventions.
8. The student will be able to describe the clinical presentations, course, and prognosis of the following disorders with special emphasis on findings discriminating among them:
 - o Affective disorders
 - o Anxiety disorders.
 - o Organic mental disorders, especially delirium and dementia.
 - o Personality disorders, especially antisocial personality
 - o Somatoform disorders
 - o Schizophrenic disorders.
 - o Substance use disorders

PSYCH – continued

9. The student will become familiar with somatic treatments:
 - Common pharmacologic treatments, including indications, contraindications, and side-effects of antianxiety agents, antidepressants, antipsychotics, and sedative-hypnotics.
 - Electroconvulsive treatment indications and effects.
10. The student will become familiar with common psychiatric disorders in the aged.
11. The student will become familiar with common psychiatric disorders first diagnosed in infancy, childhood, or adolescence

Evaluation:

Evaluation of student performance will be based on overall clinical performance

SURG: Orthopedic Surgery

Course Availability:	Arranged - Students must contact Kathy Cherry to choose dates
Length:	2-4 Weeks
Site:	Regions Hospital, Orthopedic Surgery Department
Slots Available:	1-2
Prerequisites:	None
Course Director:	Dr. Scott Marston
Contact:	Kathy Cherry Kathy.j.cherry@Healthpartners.com 651-254-1513

Rotation Description:

The orthopedic surgery selective consists of 2-4 week rotations concentrating on the areas of general orthopedics, sports medicine, and pediatrics. Each selective will be geared toward the students desired orthopedic interest and will hopefully allow for greater variability in a student's overall experience.

Requirements:

Each student will be expected to learn the objectives as outlined in the course description. Depending on the student's selected rotation, he or she may be required to perform additional activities such as training room coverage or event coverage. The student will be expected to attend the conferences that are currently active in the residency curriculum. He or she may be requested to present cases at these conferences. The overall experience will be a mixture of diverse clinical exposure in addition to operating room activity. The extent of the student's involvement in the operating room will be at the discretion of the orthopedic attending.

Goals and Objectives:

The purpose of this course is to provide an opportunity for students to evaluate and treat common orthopedic problems encountered in ambulatory patients.

Upon completion of this course, the student should be able to do the following:

- Perform an adequate orthopedic history and physical examination of the musculoskeletal system, including assessment of joint motion and grading of muscle strength of the major muscle groups of the extremities.
- Use of proper terminology to describe signs, symptoms, and treatment of common injuries and disorders of the musculoskeletal system.
- Develop a differential diagnosis of common orthopedic conditions and outline a treatment plan to establish the proper diagnosis, description of physical findings, and inclusion of pertinent laboratory, x-ray, and special studies.
- Learn to apply suitable splints and casts for common extremity injuries.

SURG: Plastic and Reconstructive Surgery

Course Availability: Arranged - **Students must contact Jo-Ellyn Pilarski to choose dates**
Length: 2, 3 or 4 Weeks
Site: Regions Hospital, Plastic Surgery Department
Slots Available: 1-2
Prerequisites: None
Course Director: Dr. Warren Schubert
Contact: Jo-Ellyn Pilarski, joellyn.l.pilarski@healthpartners.com 651-254-3725

Rotation Description:

The student will be exposed to the full spectrum of Plastic and Reconstructive problems while on the rotation. Areas covered may include basic hand surgery, breast reconstruction, aesthetic surgery, facial reconstruction, microsurgery, wound management and surgical research.

Students are required to be involved in the pre-operative evaluation and post-operative management of patients on the plastic surgery services and in clinic, and are expected to assist in the operating room. You are expected to attend some of the division's regularly scheduled conferences and to participate in patient care.

Evaluation:

There is no written examination at the completion of this rotation. However students are evaluated by at least one staff member regarding their clinical preparedness, effort and quality of participation on the service.

SURGERY: Surgical Intensive Care

Course Availability:	Arranged – Students must contact Jo-Ellyn Pilarski to choose dates
Length:	4 Weeks
Site:	Regions Hospital Surgery Department
Slots Available:	1
Prerequisites:	General Surgery
Course Director:	Bruce Bennett, M.D.
Contact:	JoEllyn Pilarski (651) 254-3725, joellyn.l.pilarski@healthpartners.com

Rotation Description:

This attending and resident-based teaching service provides students with direct bedside experience and opportunities to apply the principles of physiology, biochemistry, and metabolism to critically ill and injured patients. The multi-disciplinary course provides didactic classroom instruction coupled with daily care of patients who present a broad spectrum of surgical pathology.

Goals and Objectives:

The Surgical Intensive Care rotation is designed to be an in depth patient care experience of the management of the critically ill and injured.

The student will gain knowledge and practical experience with:

- fluid and electrolyte balance
- acid-base balance
- airway support and maintenance
- applied pulmonary and cardiovascular physiology
- applied human biochemistry, metabolism of the surgical stress response, and sepsis
- applied pharmacology
- appropriate utilization, care, and complications of monitoring systems
- artificial organ support in organ failure

SURGERY: Trauma Surgery

Course Availability:	Arranged – Students must contact Jo-Ellyn Pilarski to choose dates
Length:	4 Weeks
Site:	Regions Hospital Surgery Department
Slots Available:	1
Prerequisites:	None
Course Director:	Michael McGonigal, M.D.
Contact:	JoEllyn Pilarski (651) 254-3725, joellyn.l.pilarski@healthpartners.com

Rotation Description:

This service is a very active service within the hospital system. We are the Trauma Acute Care Surgery (TACS) team. Our Trauma service is a level 1 Adult and Pediatric Trauma Service. We also manage the care for patients who come to our emergency department with acute care surgical needs. The team is a closely knit service that is run by the staff surgeon, chief resident (from the University of Minnesota Surgical Training Program), a physician assistant, 2nd year surgical resident (1 covers the night shift: 1800 to 0700, and another who covers the day shift). We will commonly have at least 2 interns, and also 1-2 PA students with the addition of 1-2 medical students. The staff surgeon usually rotates on a weekly basis. We have six staff trauma surgeons that you will commonly meet during your rotation with us. This is an exciting and very busy service. You will be exposed to a complicated patient population, and you will learn medical information that is not taught on any other service. This is a good rotation to allow you the opportunity to have exposure to the OR, surgical ICU, Emergency Department, floor patients and clinic patients. Dr. McGonigal is nationally recognized for his work in trauma. Our Level 1 Pediatric Trauma service is the first and only in the upper Midwest.

Goals and Objectives:

You will have opportunities to observe and assist surgeries. Because the TACS service depends on surgical residents, it is expected that the chief surgical resident, and potentially the 2nd yr resident scrub the cases. This is an excellent rotation to glean skills as a surgical hospitalist, understand management of trauma Acute Care Surgery patients, become comfortable with doing surgical consultations and work closely with a multidisciplinary team.