ANES:8401  CLINICAL ANESTHESIA SENIOR ROTATION

OBJECTIVES: The student will: Build on the knowledge and experience gained from the two week Anesthesiology elective rotation (ANES:8301). Students will gain more advanced airway management skills. Students will encounter patients with complex medical and surgical conditions. The course will be tailored to meet the need and interest of the student; students will have an opportunity to spend extended time on subspecialty areas (OB, neuro, cardiac, pediatric, regional, ASC, and Pain Clinic). Completion of an academic project (case report and discussion) is a requirement.

This will be achieved through: 1) preoperative, intraoperative, and postoperative care for patients undergoing surgical procedures. 2) direct supervision by a staff anesthesiologist. 3) attendance at conferences and teaching activities of the section, and completion of an academic project.

FACULTY: Staff
MAX ENROLLMENT: 2 – 5
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Lorri Barnes
REPORT TO: Arranged
PREREQUISITE: ANES:8301
OBJECTIVES: The student will: 1) receive in-depth exposure to continuous invasive and non-invasive monitoring techniques including ECG, pulse oximetry, arterial blood pressure, central venous pressure, pulmonary artery pressure monitoring. 2) gain experience in use of vasoactive drugs. 3) gain experience in managing acid-base and fluid balance alterations associated with critical illness. 4) be introduced to ventilatory management of critically ill patients. 5) have exposure to critically ill patients. 6) have exposure to trauma, transplant, and post-surgical patients in addition it offers a unique opportunity to work in the largest ICU in the state of Iowa and largest Neurosurgical ICU in the state. 7) learn about neurologic monitoring, management of intracranial pressure, management of closed head injuries and exposure to management of other neurologic and neurosurgical emergencies; 8) be exposed to the role of multi-disciplinary management teams with clinical nutrition service, physical therapy, and social work.

This will be achieved through: 1) involvement in the care of critically ill patients in the Surgical and Neuroscience Intensive Care Unit (SNICU) under the supervision of residents, fellows and staff. 2) participation during teaching rounds. 3) attendance at conference seminars and teaching activities provided by the SNICU.

FACULTY: Dr. Sundar Krishnan and Staff
MAX ENROLLMENT 5
OFFERED: All periods
LENGTH OF ELECTIVE 4 weeks
ADMINISTRATIVE CONTACT: Melinda Allbaugh
REPORT TO: SNICU Reception Desk and ask to be directed to the SNICU Conference Room, 7:00 am
CTS:8401  SUB-INTERNSHIP CARDIOTHORACIC SURGERY

OBJECTIVES: The student will participate in the diagnosis, preoperative, operative, and postoperative care of thoracic and cardiac patients. He/she will attend all scheduled conferences of the Department. The student will assume responsibility and act as an intern. These students may concentrate their interest in either cardiac surgery or thoracic surgery. The student will be responsible for diagnosis and management of patients on an inpatient service under close supervision by an upper level resident and a faculty member.

FACULTY: Dr. Joseph Turek and Staff
MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Kim Horras
REPORT TO: Cardiothoracic Fellow, 7:00 am, 1st day.
DEPARTMENT OF DERMATOLOGY

COURSE DIRECTOR: Dr. Vincent Liu

CONTACT PERSON: Cheryl Moores
40027 PFP
356-1694

DERM:8401 DERMATOLOGY ELECTIVE

OBJECTIVES: The student will 1) acquire a deeper familiarity with basic skin anatomy, physiology and pathology; 2) understand the importance of morphology and description of diagnosing cutaneous disease; 3) learn how to perform and document a complete skin examination; 4) learn to generate appropriate differential diagnoses for skin conditions; 5) learn the most common and clinically most significant dermatologic conditions; 6) become familiar with fundamental dermatologic diagnostic techniques; 7) become familiar with minor skin surgical procedures; and 8) formulate appropriate plans for management of patients with dermatologic disease.

This will be achieved through experience 1) in the UIHC Dermatology Clinic; 2) at the Iowa City VA Medical Center; 3) with specially-scheduled surgery patients; 4) on the UIHC Dermatopathology Service; and 5) with inpatient consultations.

FACULTY: Dr. Liu and Staff
MAX ENROLLMENT: 2
OFFERED: All periods
LENGTH OF ELECTIVE 4 weeks
ADMINISTRATIVE CONTACT: Cheryl Moores
REPORT TO: Dermatology Clinic
COURSE DIRECTOR: Dr. Olivia Bailey
olivia-bailey@uiowa.edu

CONTACT PERSON: Kelby Kiefer
kelby-kiefer@uiowa.edu
1008 RCP
384-6468

EM:8401 INTRO TO ADVANCED LIFE SUPPORT SKILLS

OBJECTIVES: Students will undergo an intensive program providing “basic training” in life support skills. This 4 week elective coincides with the emergency medicine intern orientation and is designed for the medical student with a strong interest in specializing in emergency medicine. The month is divided among lectures, demonstrations, skills labs, procedural workshops, small groups, high fidelity simulation, manikin training, cultural and diversity training, wilderness medicine, journal club, and patient care. Students will develop an advanced understanding of prehospital triage, transport, and initial stabilization of critically ill patients. Critical care procedures will be taught through procedural skills labs. Students will complete up to 7 clinical shifts in the department at UIHC.

In the process of the course, students can become certified in Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS). These courses are optional. The fees are as follows:

- ACLS self-directed learning module $120
- PALS self-directed learning module $120

Students will receive training in the recognition and management of common clinical problems as well as critical care training in trauma, respiratory emergencies, cardiovascular emergencies, neurologic emergencies, endocrine emergencies, and septic shock. In addition, special populations will be discussed including pediatrics and geriatrics. The rotation will include a wilderness medicine race at Lake MacBride.

Nearly 100% of the faculty from the Department of Emergency Medicine will teach some aspect of this course, especially residency leadership with oversight by the course director.

COURSE DIRECTOR: Michael Takacs, MD MS
MAX ENROLLMENT: 18
OFFERED: 7/4/16 ONLY
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Kelby Kiefer
REPORT TO: 0073 RCP
PREREQUISITES: Strong interest in Emergency Medicine
SPECIAL CONDITIONS: Grading is PASS/FAIL only.
Student should not take both ALS and Transition to Residency
A 4 week clerkship with emergency medicine residents and faculty in which the principles of acute care medicine and the approach to life threatening disease are emphasized. The student will perform under the close supervision of the staff and resident physicians in the Emergency Department.

Students will be scheduled for up to 160 hours of clinical time. A combination of day, evening, and night shifts including weekdays and weekends is required to maximize exposure to a wide range of patient presentations.

The Carver College of Medicine policy on attendance and time off requests will be followed. Please keep this in mind when registering during interview season.

Students must attend orientation at 8:00 am on the first day of the clerkship followed by a simulation day. Students are required to attend 16 hours of simulation lab and case conferences (typically held on Mondays). Students are additionally required to complete a systems-based practice project and ethics paper. Student evaluation will be based on a combination of ED clinical performance and a multiple-choice final exam.

**FACULTY:** Dr. Olivia Bailey

**MAX ENROLLMENT:** 4-8

**OFFERED:** All periods except block 1 (when ALS is offered)

**LENGTH OF ELECTIVE:** 4 weeks

**ADMINISTRATIVE CONTACT:** Kelby Kiefer

**REPORT TO:** Emergency Department, 8:00 am, 1st day.

**PREREQUISITES:** Completion of Core Clerkships

**SPECIAL CONDITIONS:** All time off requests must be submitted 2 weeks prior to the start of the rotation. Attendance is mandatory at UIHC 1st day of rotation for orientation and simulation day.
DEPARTMENT OF FAMILY MEDICINE

COURSE DIRECTOR:  Dr. Jill Endres

CONTACT PERSON:  Chris Lake
                  01293-G PFP
                  384-7517

FAM:8402  UNIVERSITY OF IOWA FAMILY MEDICINE CLERKSHIP

DESCRIPTION:  This course will emphasize the outpatient aspects of key components of family medicine, including:
  ▪ Continuity of care
  ▪ Comprehensive care
  ▪ Caring for entire families and caring for patients throughout the lifespan
  ▪ Integration of health care in the local community
  ▪ Patient education
  ▪ Care for acute and chronic diseases

OBJECTIVES:
  ▪ Gain skill in assessment, diagnosis, treatment, and management of patients with common illnesses seen in the ambulatory setting while assigned to the Family Care Center.
  ▪ Work collaboratively with the other members of the health care team.
  ▪ Attend Family Medicine conferences.

Students taking this rotation must be seriously considering entering the specialty of Family Medicine.

FACULTY:  Jill Endres, M.D., Course Director

MAX ENROLLMENT:  1

OFFERED:  All periods

LENGTH OF ELECTIVE:  2 or 4 weeks

ADMINISTRATIVE CONTACT:  Chris Lake
OBJECTIVES: Students will help monitor and evaluate the health and functional status of patients 65 or older in the Geriatric Assessment Clinic and in some community settings. Students will increase their knowledge of how to handle medical and psychosocial problems of the elderly. Participation in conferences including Geriatrics Staffing and Geriatrics Journal Club will be part of the teaching experience.

Time and resources are available for students to read about their patients’ problems. Special original clinical investigation projects can be developed by students.

FACULTY: Drs. Gerald Jogerst, Richard Dohy, and Jason Wilbur
MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Gretchen Schmuch
REPORT TO: Gerald Jogerst, M.D.
DESCRIPTION: This course will emphasize the integration of mental and physical health care across the outpatient family medicine and outpatient psychiatry arenas, including:

- Mental health care in the primary care setting
- Primary care for people with severe mental illness
- Continuity of care
- Comprehensive and holistic care
- Caring for entire families and caring for patients throughout the lifespan
- Integration of health care in the local community
- Preventive medicine
- Care for acute and chronic diseases
- Patient education

STUDENTS WILL:

- Gain skill in assessment, diagnosis, treatment, and management of patients with common illnesses seen in the ambulatory setting while assigned to the Counseling and Health Promotions (CHPS) Clinic, the Family Medicine Clinic, the rural office in Riverside, the Free Medical Clinic, the CoMeBeh clinic in adult psychiatry, the palliative medicine service, and the IMPACT program
- Work collaboratively with other members of the health care team
- Attend conferences in Family Medicine & Psychiatry

FACULTY: Alison Lynch, MD, Elective Director
Jill Endres, MD, Fam Med Clerkship Director, Jess Fiedorowicz, MD, Psychiatry Clerkship Director

MAX ENROLLMENT: 1
OFFERED: All Periods
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Chris Lake
REPORT TO: Dr. Alison Lynch

SPECIAL CONDITIONS:
PREREQUISITES: FAM:8301 and PSYC:8301
DEPARTMENT OF INTERNAL MEDICINE

COURSE DIRECTOR: Dr. Joe Szot, Vice Chair for Education
Dr. Ellen Gordon, Director, Sub-Internship Program

CONTACT PERSON: Dana Hartman
E330 GH
356-2333

IM:8410 CLINICAL ALLERGY-IMMUNOLOGY

OBJECTIVES: This subspecialty elective emphasizes experience in the diagnosis and treatment of clinical problems in allergy and immunology, including experience in skin testing, administering immunotherapy, and performing and interpreting pulmonary function tests. The student will assist in the diagnosis and management of asthma, allergic rhinitis, drug allergy, food allergy, urticaria and angioedema, hereditary angioedema and immunodeficiency disease states. Outpatients will be evaluated by the student under supervision of the staff. Students will participate in allergy-immunology conferences weekly including Immunology Grand Rounds (Wed, 1:00 pm, C423-1 GH), the Fellows’ Conference (Wed, 2:00 pm), and the Immunology Group Seminars (Wed, 4:00 pm, 283 EMRB).

FACULTY: Dr. Vogelgesang and Staff
MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Aaron Knaack, C42 GH
REPORT TO: Jan Buchmayer, RN

IM:8412 CLINICAL CARDIOLOGY

OBJECTIVES: Internal scheduling for this course will be the responsibility of the department.

Emphasis will be to acquire both breadth and depth in the diagnosis and therapeutic problems encountered in clinical cardiology.

The student will participate in the evaluation and decisions regarding patients seen at the Cardiovascular Clinic and/or Cardiovascular in-patient consult service (at the UIHC or VAH for consults). He/she will become familiar with techniques and regimens of management of ischemic heart disease, pre- and post-operative conditions, and the chronic cardiac states seen frequently in clinical cardiology, such as congestive heart failure and valvular heart disease, and management of common rhythm abnormalities. During each week of the rotation there will be an emphasis on one of these topic areas through computer assisted instruction, assigned readings, and meeting with one of our cardiology fellows.

The elective consists of either four weeks on the Clinical Service or two weeks on the Clinic Service plus two weeks on General Cardiology In-patient Consult Service. In general, no more than one student can be assigned to the Cardiology Clinic at one time. If students have preferences as to their assignment during this rotation they should contact Ms. Linda Bang, 6-2028, E-315 GH, as soon as they have been notified of their acceptance into this elective.

COURSE DIRECTOR: Dr. Donald Brown
FACULTY: Staff of Cardiovascular Division
MAX ENROLLMENT: 2 (except by special arrangement)
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Linda Bang, E-315 GH, 356-2028
REPORT TO: Arranged
OBJECTIVES: Students electing this course will spend about half of their time in outpatient clinics and the other half on the endocrine consult team. During the outpatient clinic part of the rotation, students will attend endocrine and diabetes clinics every day, working alongside different faculty members. These clinics take place at Iowa River Landing, the University of Iowa, and the VA Hospital. While on consults, students will work with the Endocrine Consult team that consists of a staff physician, an endocrinology fellow and sometimes an internal medicine resident, and will see inpatient endocrine and diabetes consultation patients. When the consult service is not busy, students will also have the opportunity to spend all or part of their morning seeing patients in clinic with a staff physician. For each of these activities students will be expected to perform complete patient evaluations and to develop diagnostic programs and therapeutic plans. Students will also participate in the clinical conferences of the Division.

Conferences to be attended by the student:
* The Diabetes and Obesity Talks: Mondays 1:00 – 2:00 pm, 1289 Kelch
* Fellows Curriculum Lecture Series: Mondays 2:00 – 3:00 pm
* Endocrinology Clinical Conference: Mondays 4:00 – 5:00 pm.
* Internal Medicine Grand Rounds: Thursdays Noon, Med Alumn Aud
* Endocrine Grand Rounds: Fridays 7:30 – 8:15 am.

FACULTY: Dr. Amal Shibli-Rahhal and Staff
MAX ENROLLMENT: 2
OFFERED: All periods
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Linda Hayes, phone 3-7842
REPORT TO: Assigned Faculty - 8:00 am, 1st day, or as directed.
OBJECTIVES: Gastroenterologists/Hepatologists are Internists that specialize in care of patients with diseases that impair the function of the esophagus, stomach, small bowel, colon, rectum, liver, biliary system, and/or exocrine pancreas. The goal of this rotation is to familiarize you with the differential diagnosis, evaluation and management of common gastrointestinal and liver disorders.

By the end of the rotation, we expect that:

1) You will have refined your ability to obtain pertinent history and exam findings in patients with GI/Liver disease.
2) You will be able to identify and understand the management approach to significant (urgent) GI/Liver disease problems in the inpatient and outpatient setting.
3) You will be able to understand when and what procedures (endoscopy, liver biopsy, motility studies) are needed to provide diagnostic or therapeutic results.
4) You will be able to interpret what the GI/Liver specialist is trying to communicate about the results of these procedures.
5) You will be able to interpret some of the important findings of various procedures including biopsies/aspirations taken during procedures.

This will be achieved through:

1) Active participation in the Inpatient GI and Inpatient Liver consult services.
2) Evaluation of select patients in the GI/Liver outpatient clinics with the consult fellow and attending.
3) Observation of invasive procedures performed in the Digestive Diseases Diagnostic and Therapeutic Unit, MICU, and SNICU by GI/Liver clinical faculty.
4) Attendance at weekly teaching conferences and pathology seminar.

FACULTY: Gastroenterology-Hepatology Staff
MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Dr. Miriam Naveed, 4553 JCP or Hilary Humphrey 4608 JCP, 356-2132
REPORT TO: Digestive Diseases Clinic
IM:8418  HEMATOLOGY ONCOLOGY

OBJECTIVES: This elective is designed to increase diagnostic skills in hematology and oncology

The student will learn: 1) the methods and value of clinical staging of common cancers including solid tumors and lymphomas; 2) the principles and practice of rational chemotherapy; 3) the therapy and outpatient management of patients with solid tumors and lymphomas; 4) the principles of palliative care; 5) about hemostatic and thrombotic disorders; 6) the study of blood smears and bone marrow preparations; and 7) the principles and practice of rational therapy for benign and malignant hematological disorders.

This will be achieved through: 1) participation in oncology and hematology inpatient and outpatient consultation and outpatient clinic activities; 2) attendance at division conferences and 3) independent study.

FACULTY: Staff
MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Erin Thompson, C-32 GH, 356-2148

IM:8422  CLINICAL INFECTIOUS DISEASE

OBJECTIVES: The student will: 1) Increase their understanding of the pathogenesis of infectious diseases and of the host's reaction to such disease processes; 2) Increase proficiency in the diagnosis and management of patients with infectious diseases, including the proper use of antibiotics; 3) Learn to apply clinical microbiology to the diagnosis of infectious diseases.

This will be achieved through: 1) Evaluation and follow-up of patients seen by the Infectious Diseases consult service; 2) Participation in daily clinical work rounds; 3) Clinical teaching during daily work rounds; 4) Participation in weekly Infectious Diseases grand rounds; 5) Participation in clinical microbiology rounds.

FACULTY: Infectious Disease Staff
MAX ENROLLMENT: 2
OFFERED: All periods
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Daniel Diekema or Stephanie Cecil
REPORT TO: SW5-12 GH Conference Room; 9:30 am
**OBJECTIVES:** The student will: 1. Refine history taking and physical exam skills, with emphasis on symptoms and signs common to diseases of the cardiopulmonary system. 2. Learn diagnostic and therapeutic strategies for adult patients with pulmonary disease. 3. Interpret pulmonary function tests and thoracic radiographic studies. 4. Gain exposure to the role of a consulting physician.

**This will be achieved through:** 1. Participation in the Adult Pulmonary Consult service at University Hospitals. 2. Interpretation of pulmonary function tests with the consult fellow and attending. 3. Review of thoracic imaging studies with the consult fellow and attending. 4. Observation of invasive diagnostic and therapeutic procedures. 5. Attendance at teaching conferences for the Pulmonary Disease and Critical Care Division, held two-to-three times weekly. 6. Present at the clinical case conference on Friday noon (optional).

**FACULTY:** Pulmonary faculty on rotational basis.

**MAX ENROLLMENT:** 2

**OFFERED:** All periods

**LENGTH OF ELECTIVE:** 2 or 4 weeks

**ADMINISTRATIVE CONTACT:** Lakshmi Durairaj, M.D., Dana Hartman, or Jamie Schwartz, 6-4419

**REPORT TO:** Consult Staff, 8:00 am
IM:8428  ADULT NEPHROLOGY

OBJECTIVES:
1. To understand the use and basic interpretation of specialized tests of renal function
2. To evaluate and manage patients with acute kidney injury
3. To assess and manage patients with complex fluid, electrolyte and acid base problems
4. To manage patients with CKD or ESRD
5. To understand the indications and modalities for renal replacement therapy
6. To understand the evaluation and management of patients with HTN

Students on the Nephrology Consult Service are integral members of our patient care team and are afforded the opportunity to assume significant responsibilities and play a vital role in the clinical and educational activities of the Division of Nephrology. During the adult nephrology rotation the student will become acquainted with a wide variety of challenges and experiences encountered in the practice of clinical nephrology. Students will participate in rounds on the in-patients at UIHC (no on-call responsibilities) and will be assigned to one ½ day ambulatory renal clinic per week at either UIHC or the VAMC. In addition students will attend teaching conferences of the Nephrology Division and participate in daily review of renal test questions.

FACULTY: Dr. Antes and Renal Division Staff
MAX ENROLLMENT: 1-2
OFFERED: All periods
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Lisa Novak, E300 GH, 356-3446
REPORT TO: Office of Lisa Antes, E329 GH

IM:8434  CLINICAL RHEUMATOLOGY

OBJECTIVES: The student will: 1) increase his/her understanding of rheumatic diseases; 2) increase his/her skill in medical diagnosis of these diseases; 3) will learn the principles of management of patients with these diseases; 4) participate in clinical conferences.

This will be achieved through: 1) participation in daily clinical activities; 2) frequent patient-oriented discussion of problems as they arise on the clinical service; 3) independent study.

FACULTY: Dr. Stafford and all Division faculty members
MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Dr. Dee Dee Stafford
REPORT TO: UIHC Rheumatology Clinic, 31205 PFP, (except Thursdays; VA 1st floor).
GOALS: Students will become familiar with the basic concepts of the delivery of hospice and palliative care in both the inpatient and outpatient setting. In addition, students will be introduced to the multidisciplinary care for patients with serious illnesses and their families and will work closely with team members of other disciplines.

OBJECTIVES At the conclusion of the rotation, students will be able to:
1. understand the principles of hospice and palliative medicine in the inpatient and home settings including eligibility for hospice care.
2. describe situations in which palliative medicine consultation is appropriate.
3. define effective strategies and techniques for communicating with patients and families especially when communicating bad news.
4. appropriately prescribe opioid and non-opioid drugs for the treatment of pain and to accurately calculate equivalent doses of different opioids.
5. describe assessment and management strategies for non-pain symptoms in patients at the end of life, particularly nausea, dyspnea, anorexia, delirium and terminal restlessness.
6. educate and prepare family and staff for death.
7. work with patients regarding goals of care.
8. explore the emotional and psychosocial aspects of the illness experience and physician grief.

Goals and objectives will be achieved by:
1. assisting with the supervised care for patients on the UIHC Palliative Care Consult Service.
2. participating in educational conferences/meetings including the UIHC Palliative Care Conference and daily report at UIHC.
3. reading about patients encountered while on the rotation.

COURSE DIRECTOR: Timothy A. Thomsen, MD (Program Medical Director); Ann Broderick, MD; William David Clark, MD

MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks

ADMINISTRATIVE CONTACT: Angela K. Gingerich, phone 467-5426
angela-gingerich@uiowa.edu

REPORT TO: Angela K. Gingerich
Maximum of 19 students per block including the required clerkship and senior electives.

NEUR:8401  ADVANCED INPATIENT NEUROLOGY

Objectives: Intensive period of experience dealing with diagnosis of patients hospitalized because of neurologic disease. The student will be responsible for the initial assessment outline management plans and will be responsible for daily care, under the supervision of faculty and senior residents. Daily clinical conferences and teaching rounds are included.

Faculty: Drs. Adams & Pieper
Max Enrollment: 1 student on each service
Offered: All periods
Length of Elective: 2 or 4 weeks
Administrative Contact: Sara Nordman
Report To: S205-B GH, 8:00 am on the first day.

NEUR:8402  ADVANCED OUTPATIENT NEUROLOGY

Objectives: Intensive period of experience with the diagnosis and treatment of patients with neurologic disease. The student will be assigned to the Neurology Outpatient Clinic. The student will perform the initial assessment of the patient and through consultation with the faculty, outline the management. Departmental conferences are held daily.

Faculty: Drs. Adams & Pieper
Max Enrollment: 1 student on each service
Offered: All periods
Length of Elective: 2 or 4 weeks
Administrative Contact: Sara Nordman
Report To: S205-B GH, 8:00 am on the first day.
**NEUR:8404  SUB-INTERNSHIP IN NEUROLOGY**

**OBJECTIVES:** This 4-week course provides opportunities in which the student to do the following

1) Develop skills related to the management of patients hospitalized with acute neurological disease (stroke)
2) Gain experience in the diagnosis, evaluation, and treatment of patients with stroke in the emergency department setting and on inpatient units
3) Participate in the emergency and acute medical management of patients, including the treatment of comorbid diseases, prevention and treatment of acute complications, initiation the therapies to prevent recurrent stroke, and development of plans for recovery and rehabilitation, including discharge planning.

**SUPERVISION:** The student will have direct patient care under the supervision of the faculty and senior level residents or fellows.

Patient care responsibilities:

The student will have appropriate management responsibilities for all aspects of patient care.

1) The student will follow assigned patients who are admitted for critical care to the surgical and neuroscience intensive care unit
2) The student will be involved in evening call on the stroke service
3) The student is expected to develop plans for evaluation and treatment of patients.
4) The student is expected to prepare clinical notes and orders that can be forwarded to faculty and residents.
5) The student is expected to join the stroke-team huddles in which allied health professionals also are present.

Conferences: The student is expected to be a participant in our daily stroke rounds and noon conferences.

Evaluations; Student performance is assessed using the standard CCOM evaluation forms. The performance is based on the ACGME core competencies for resident education. The student is expected to provide an evaluation of his/her experience on the rotation.

**FACULTY:** Drs. Adams & Pieper

**MAX ENROLLMENT:** 1

**OFFERED:** All periods

**LENGTH OF ELECTIVE:** 4 weeks

**ADMINISTRATIVE CONTACT:** Sara Nordman

**REPORT TO:** 7:00 am on first day to 6 JC East
DEPARTMENT OF NEUROLOGICAL SURGERY

COURSE DIRECTOR: Dr. Matthew Howard

CONTACT PERSON: Carol Bontrager
1617 JCP
353-7902

NSG:8401  SUB-INTERNSHIP NEUROSURGERY

OBJECTIVES: This advanced clinical clerkship is designed for students interested in neurologic diseases. There will be emphasis on the diagnosis of neurologic disorders as well as operative therapy. The student will be expected to attend related conferences with Radiology and Neurology. The student will be responsible for diagnosis and management of patients on an inpatient service under close supervision by an upper level resident and faculty member. Evaluation will be based upon the ward performance.

FACULTY: Dr. Howard and Staff
MAX ENROLLMENT: 2
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Carol Bontrager
REPORT TO: Dr. Howard, 1823 JPP, 8:00 am
OBJECTIVES: Under supervision by an upper level resident and faculty member, the student will be responsible for managing many of the high risk patients admitted to the Obstetric Service and will order diagnostic studies and follow their course. He or she will develop expertise in various diagnostic procedures such as non-stress testing and biophysical profiles.

Under resident and staff supervision, the student will see specific patients in the High Risk clinics. At the daily conferences the student will present the patients he or she has evaluated and will participate in the discussion concerning other patients. The student will be expected to present at some of the weekly High Risk Conferences.

He or she may work-up complicated patients admitted to the labor room and assist in their evaluation. He or she may be involved in the intrapartum care and delivery of the high risk obstetric patient.

In addition to the above activities, the teaching goals will be achieved through completion of one formal referenced paper of a specific problem in Maternal-Fetal Medicine chosen by the student and one of the faculty members.

FACULTY: Drs. Stephen Hunter, Jennifer Niebyl, Mark Santillan, Heather Anaya, Janet Andrews, and Andrea Greiner

MAX ENROLLMENT: 1

OFFERED: All periods

LENGTH OF ELECTIVE: 4 weeks

ADMINISTRATIVE CONTACT: Dr. Heather Anaya

REPORT TO: 31314 PFP at 8:00 am
OBJECTIVES: Develop competency in the evaluation and management of hospitalized patients with serious and often complex gynecologic oncology problems.

GOALS & OBJECTIVES:

1. Develop a better understanding of diagnosis, evaluation, and management of patients with a variety of gynecologic malignancies.
2. Participate in direct patient care under the supervision of faculty and senior-level residents. The student’s experiences will consist predominantly (more than 80%) of inpatient responsibilities.
3. The student will develop proficiency in the management of postoperative gynecological cancer patients, with emphasis on clinical decision-making and development of management plans.
4. The subintern will assume an appropriate level of management responsibility for all aspects of patient care. Specifically, the student will participate in admissions, write postoperative admission orders, write discharge summaries, and participate in in-house call within the ACGME work hours requirement for residents.
5. The student will develop proficiency in postoperative wound care and placement of nasogastric tubes, and the student will participate in other on-floor procedures as appropriate.
6. The student will become proficient in the management of postoperative fluid, electrolyte, and acid-base disorders.
7. The student will learn to independently diagnose and evaluate postoperative pain, and develop an understanding of postoperative pain management.
8. The sub-intern will learn to semi-independently manage postoperative patients with anemia and malnutrition.
9. The student will learn to independently identify critically ill patients who require immediate attention and may have to be transferred to an intensive care setting.
10. The student will demonstrate proficiency in documenting clinical activities (admission notes, progress notes, discharge notes, and orders) in the medical record.
11. The student will learn to function appropriately in a clinical management team including nursing staff, students and residents, social service workers, ward clerks, and other support.

ENABLING OBJECTIVES:

1. The student will be supervised and interact closely on a daily basis with the senior residents and the faculty staff. Daily feedback regarding notes, decision-making, and management plans will be provided.
2. The subintern will attend the weekly Gynecologic Oncology Tumor Conference.
3. At the end of the rotation, the student will present an appropriately referenced topic in gynecologic oncology of his/her choice, illustrated by a patient seen during the rotation.

FACULTY: Drs. Steve Bender, Michael Goodheart, Jean-Marie Stephan, Jesus Gonzalez-Bosquet, and Emily Hill

MAX ENROLLMENT: 1

OFFERED: All periods

LENGTH OF ELECTIVE: 4 weeks

ADMINISTRATIVE CONTACT: Dr. Michael Goodheart

REPORT TO: In-Patient Gynecologic Conf Room

3 JPW (Elevator I), 7:30 am
OBJECTIVES: The student will: 1) increase his/her understanding and proficiency in evaluation, diagnosis, and treatment of patients with infertility, amenorrhea, recurrent pregnancy loss, and other gynecological endocrinopathies. 2) increase his/her understanding and ability to evaluate patient pre-operatively, and care for patients post-operatively in the hospital. As a member of a team caring for patients with infertility, reproductive endocrine system disorders, and benign gynecologic conditions; the student will function as a sub-intern under close supervision by upper level resident and faculty members.

This will be achieved through: 1) active participation in the Reproductive Endocrinology-Infertility Clinic two days a week; 2) participation in related major in-patient and minor out-patient surgical procedures including pre and post operative evaluation and care; 3) attendance at weekly student lectures, participation and assistance in performing hysterosalpingograms one afternoon per week, assistance in performing pelvic ultrasounds throughout the week, and study of assigned reading material. Students will be expected to select and complete one referenced presentation of a specific problem in reproductive endocrinology.

This elective is designed to accommodate students planning to take further training in Obstetrics & Gynecology.

FACULTY: Drs. Brad Van Voorhis, Craig Syrop, Ginny Ryan, Bill Davis, and Hakan Duran
MAX ENROLLMENT: 1
OFFERED: Fall Only, Closed Spring
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Hakan Duran
REPORT TO: Ob/Gyn Outpatient Clinic, 3rd Floor PFP, 8:00 am
DEPARTMENT OF OPHTHALMOLOGY

COURSE DIRECTOR: Dr. Richard Olson

CONTACT PERSON: Patricia Zahs
11196 PFP
356-4475

OPHT:8401  EXTERNAL EYE DISEASE

OBJECTIVES: Intended for students interested in learning about the most common non-refractive eye disorders.

The student is expected to: 1) learn basic techniques of eye examination; 2) learn to diagnose common diseases of the eyelids, conjunctiva, and cornea; 3) learn basic principles of therapeutics of external eye disease.

This will be achieved by: 1) reading assignments; 2) daily conferences; 3) clinical work-up of patients; 4) self-assessment programs.

The student will be tested throughout the elective and at its completion.

FACULTY: Kenneth Goins, M.D.
MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Patricia Zahs
REPORT TO: Arranged
PREREQUISITE: OPHT:8301

OPHT:8402  NEURO-OPHTHALMOLOGY

OBJECTIVES: Intended for students with an interest in Neurology, Neurosurgery, Internal Medicine, or Ophthalmology.

The student is expected to learn the diagnosis and management of neuro-ophthalmic problems (visual loss, diplopia, field loss, pupil dysfunction).

This will be achieved by working up patients in the Neuro-ophthalmology Clinic and presenting them to the faculty.

FACULTY: Randy Kardon, M.D., PhD
MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Patricia Zahs
REPORT TO: Arranged
PREREQUISITE: OPHT:8301
OBJECTIVES: This course is designed to introduce the student to ophthalmic pathology and the basic principles of ocular disease.

GOALS: Attitude:
1) To develop an appreciation for the importance of communication between the surgeon and pathologist.
2) To learn to incorporate preparation of specimens for pathologic examination into the surgical plan.
3) To appreciate the manner in which pathologic specimens should be handled for diagnostic purposes.

Knowledge:
1) To understand the basic pathologic mechanisms of disease and understand how these may manifest in the eye and ocular adnexae.
2) To understand the relationship between clinical manifestations of ocular disease and the pathologic findings (clinicopathologic correlation).

Skills:
1) To recognize basic histology of the eye and ocular adnexae.
2) To become familiar with terminology in the field of ophthalmic pathology.
3) To develop a basic differential diagnosis based on pathologic findings.

This course is designed to introduce the student to ophthalmic pathology and the basic principles of ocular disease. Working with the staff and residents in the Ophthalmic Pathology Laboratory in the Dept. of Ophthalmology, the student will participate in the gross and microscopic examination and diagnosis of surgical and autopsy specimens from the eye and ocular adnexae. Clinicopathologic correlation will be stressed with problems in an unknown case format. Students will be expected to supplement their practical experience with independent reading and examination of histopathologic teaching materials. A final examination will be given. Students would be expected to make one clinicopathologic correlation (CPC) presentation at morning conference toward the end of their elective. A clinical ophthalmology elective or similar previous clinical exposure is highly recommended prior to taking this course.

This course is designed as a 4 week elective (5 days a week/8 hours per day). Not available July, course may be abbreviated in May and October due to major ophthalmology meetings.

FACULTY: Nasreen Syed, M.D.
MAX ENROLLMENT: 1
OFFERED: All periods except Block 1
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Patricia Zahs
REPORT TO: 233 MRC, 9:00 am
SPECIAL CONDITIONS: Instructor permission required
PREREQUISITE: OPHT:8301
DEPARTMENT OF ORTHOPEDICS AND REHABILITATION

COURSE DIRECTOR: Dr. Charles Clark
CO-DIRECTOR: Dr. Jose Morcuende

CONTACT PERSON: Diane Shaffer
01078 JPP
356-2466

ORTH:8401 ADVANCED CLINICAL ORTHOPEDICS

OBJECTIVES: The student will: 1) develop in-depth skill in the physical diagnosis and approach to diseases of the musculoskeletal system; 2) he/she will increase his/her ability to establish a differential list of problems to recommend appropriate solutions to each problem and assist in the management of the problem and each solution.

This will be achieved by: 1) participation in the service of the student's choice including adult orthopadics (VA), children's orthopedics, adult reconstruction, low back, sports medicine, or tumor/foot teams; 2) duties will be analogous to those of an intern with responsibility for patient care in clinic, in the hospital, and the operating room; 3) participation in staff conferences and rounds including presentation of patients for discussion; 4) development of surgical and non-surgical skills including plaster work in the care of patients; 5) review and discussion of teaching sets of x-ray and microscopic slides in the musculoskeletal pathology lab; 6) the student will take call at least one night per week.

FACULTY: Orthopedic Staff
MAX ENROLLMENT: 5
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Diane Shaffer
REPORT TO: Dr. Clark, 01075 JPP

SPECIAL CONDITIONS: Consists of seven individual “teams”:
Silver = Tumor and Foot/Ankle
Black = Sports Medicine and Shoulder
Blue = Hip and Knee Reconstruction
Green = Pediatrics
Orange = Spine
Yellow = Hand

PLEASE CONTACT DIANE SHAFFER TO INDICATE YOUR TEAM PREFERENCE. FIRST COME, FIRST SERVED. THOSE STUDENTS WHO DO NOT INDICATE A PREFERENCE WILL BE ASSIGNED A TEAM.
ORTH:8402 MUSCULOSKELETAL TRAUMA

OBJECTIVES: The student will: 1) increase his ability to diagnose and treat by non-surgical and surgical methods, injuries of the musculoskeletal system; 2) increase his skill in the application and removal of plaster dressings; 3) increase knowledge of the complications of injuries of the musculoskeletal system.

This will be achieved by: 1) participation on the trauma team with duties analogous to those of an intern with responsibility for patient care in clinic, in the hospital and operating room; 2) attendance at all teaching conferences and seminars; 3) the student will take call at least one night per week.

FACULTY: Drs. Marsh, Karam, and Willey
MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE 4 weeks
ADMINISTRATIVE CONTACT: Diane Shaffer
REPORT TO: Dr. Clark, 01075 JPP
OTO:8401  SUB-INTERNSHIP IN OTOLARYNGOLOGY

OBJECTIVES: The student will: 1) become proficient in the physical examination of the head and neck; 2) increase his ability to diagnose, evaluate and manage common disorders of the ears, nose, and throat; 3) work in the outpatient clinic, on inpatient services, and in the operating room.

This will be achieved through: 1) examination of a large number of patients; 2) assuming interns level responsibility inpatient care; 3) independent study; 4) exposure to the operating room if desired.

FACULTY: Staff
MAX ENROLLMENT: 3
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Amanda Marble
REPORT TO: Amanda Marble, Oto Clinic, 8:00 am
PATH:8402  HEMATOPATHOLOGY CLERKSHIP

**OBJECTIVES:** The student will: Depending on the student’s interest, participate in one or more of the following: 1) to develop proficiency in the evaluation of peripheral blood and bone marrow, lymph node, and body fluid cell evaluation; 2) increase skills in recognition of benign and malignant disorders of the hematopoietic system; 3) learn the appropriate laboratory work-up of anemia, leukocytic disorders and disorders of thrombosis and coagulation; 4) increase understanding of the functioning of the hematology laboratory; and/or 5) correlate hematologic findings with molecular, immuno and cytogenetic laboratory findings.

This will be achieved through: 1) performance of written reports on peripheral blood and bone marrow cases; 2) attendance at daily review of bone marrows and abnormal peripheral blood and body fluid films; 3) observation of performance of bone marrow aspiration and biopsy procedures; 4) work up of patients with coagulopathies with emphasis on both clinical and laboratory aspects of the disorder; 5) attendance at hematopathology and coagulation conferences.

The student can tailor the clerkship with individual needs with options of rotation through the bone marrow laboratory and the core hematology laboratory.

**FACULTY:** Drs. N. Rosenthal, S. Syrbu, C. Holman and C. Zhao

**MAX ENROLLMENT:** 1

**OFFERED:** All Periods

**LENGTH OF ELECTIVE:** 4 weeks

**ADMINISTRATIVE CONTACT:** Deb Stumme

**REPORT TO:** Dr. N. Rosenthal, 6227 RCP, 6-3059

**SPECIAL CONDITIONS:** Instructor consent required.
PATH:8403  SURGICAL PATHOLOGY

OBJECTIVES:  1) To become acquainted with the contributions to and limitations of tissue examination to patient care, 2) to learn basic aspects of tissue examination and approaches to anatomic diagnosis, 3) to be exposed to a variety of diseases at the gross and microscopic level.

The student will actively participate in surgical pathology by: 1) observing the gross and assisting in the microscopic examination, clinical pathological correlation and report preparation of current surgical and medical specimens, 2) participating in daily surgical pathology conferences.

FACULTY: Dr. Anthony Snow and Staff
MAX ENROLLMENT: 2
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Lynn Westphal
REPORT TO: Surgical Pathology, 5244 RCP
SPECIAL CONDITIONS: Scheduling approval Dr. Snow

PATH:8404  BLOOD BANK CLERKSHIP

OBJECTIVES: To be exposed to common activities and functions of a comprehensive transfusion service. Upon completion of the clinical clerkship the student will:

1) Understand the preparation of and indications for the transfusion of components such as platelets, plasma, RBC’s and cryoprecipitate.
2) Participate in Morning Report and be aware of common indications for therapeutic apheresis and therapeutic phlebotomy, and the common risks and complications associated with these procedures.
3) Answer requests from the clinical services regarding the transfusion of blood components and special services (e.g., therapeutic plasma exchange).
4) Observe specific procedures such as: plasmapheresis, photopheresis, therapeutic phlebotomy, and peripheral blood progenitor cell collection.
5) Participate in an offsite blood drive with DeGowin Donor Center Staff.
6) Be familiar with Blood Bank procedures and regulations including knowing techniques of erythrocyte typing, compatibility testing, antibody detection and antibody identification. Students will participate in specific procedures including pretransfusion compatibility testing, RBC typing and antibody screen.
7) Be able to apply knowledge of Transfusion Medicine to other specialties of medicine and surgery.

Students performing a 4 week rotation will have progressively more lab electives, pager coverage and will be expected to give a 30 minute presentation on a transfusion medicine topic that is approved by DeGowin Faculty.

FACULTY: Drs. M. Knudson, A. Schlueter and J. Blau
MAX ENROLLMENT: 1
OFFERED: All periods – based on availability of an open trainee slot in the DeGowin rotation schedule
LENGTH OF ELECTIVE: 2/4 weeks
ADMINISTRATIVE CONTACT: Deb Stumme
REPORT TO: Heather Fleming, 9:00 am,
DeGowin Blood Center SW246 GH
The pediatric inpatient services are staffed with a physician care team which includes the attending faculty, pediatric residents, and senior and junior medical students. The teams include the senior students as an integral part of each team. All Pediatric inpatient rotations will include one week of nights.

**PEDS:8406 PEDIATRIC ALLERGY & PULMONOLOGY**

**OBJECTIVES:** The student will within the limits of time available:

1. Learn to obtain a historical data base to make the diagnosis of and characterize the following problems:
   a) Asthma
   b) Cystic fibrosis
   c) Bronchiectasis
   d) Bronchopulmonary dysplasia
   e) Interstitial lung disease
   f) Anatomical disorders of the respiratory tract
   g) Rhinitis
   h) Atopic dermatitis
   i) Urticaria
   j) Angioedema
   k) Anaphylaxis
   l) Stinging insect reactions

2. Learn to perform and interpret pulmonary function testing in children and to combine this information with history, physical, chest x-ray, and blood gases in defining physiological abnormalities of the lower airway.

3. Be able to appropriately choose, perform and interpret skin tests for inhalant allergens, and demonstrate an understanding of the indications and limitations of these tests.

4. Learn appropriate environmental, immunological, and pharmacologic management of the diseases listed under #1.

5. Review the basic science areas of immunology, physiology, and pharmacology related to the diagnosis and treatment of the diseases listed under #1.

**These goals will be achieved through** exposure to ambulatory patients in the clinics and the performance of consultations on in-patient and out-patients. Students will assist in performing and interpreting pulmonary function testing on their own and other patients. Educational reading material and library references will be available.

**FACULTY:** Pulmonology and Allergy/Immunology Staff

**MAX ENROLLMENT:** 1

**OFFERED:** All periods

**LENGTH OF ELECTIVE:** 2 or 4 weeks

**ADMINISTRATIVE CONTACT:** Cathy Chavez

**REPORT TO:** 2443 JCP, 8:00 am

**EVALUATIONS:** Each student will develop goals for their rotation (1 goal/week). Students completing a 4-week rotation will review their goals and progress at the midpoint of the rotation. ALL students will write a 1-page reflection of their experience. Completion of the mid rotation feedback form (for 4-week rotations) and final reflection is mandatory to receive credit. Cathy will initiate one evaluation which will be completed by the faculty as a group. Students may initiate on-line evaluations to the residents and fellow with whom they work.
OBJECTIVES: This elective would be suitable for students with an interest in pediatrics, family practice and cardiology. The student will learn the skills required to assess the cardiovascular status of a child in an outpatient situation.

The rotation focuses on enhancing physical exam skills and physiology knowledgebase from a cardiovascular perspective. Students will learn to clinically integrate cardiovascular physiology with physical findings and laboratory tests. An emphasis will be placed on learning to differentiate innocent versus organic heart murmurs. By the end of the rotation, students should be able to explain the mechanism for the production of heart sounds and murmurs, distinguish normal from abnormal cardiovascular signs and symptoms and explain normal cardiac physiology as it applies to interpreting physical exam or laboratory tests. Students will have the opportunity to participate in all cardiology clinical activities including inpatient rounds, outpatient clinics, cardiac radiography, teaching conferences; including cardiac catheterization conferences, surgical conferences, journal club and seminars in pediatric cardiology are held weekly. The elective is well-structured, yet can be tailored to meet individual interests.

FACULTY: Drs. Aldoss, Atkins, Divekar, Edens, Law, Ochoa, Reinking, Scholz

MAX ENROLLMENT: 1

OFFERED: All periods

LENGTH OF ELECTIVE: 2 or 4 weeks

ADMINISTRATIVE CONTACT: Cathy Chavez

REPORT TO: 2543 JCP, 8:00 am

EVALUATIONS: Each student will develop goals for their rotation (1 goal/week). Students completing a 4-week rotation will review their goals and progress at the midpoint of the rotation. ALL students will write a 1-page reflection of their experience. Completion of the mid rotation feedback form (for 4-week rotations) and final reflection is mandatory to receive credit. Cathy will initiate one evaluation which will be completed by the faculty as a group. Students may initiate on-line evaluations to the residents and fellow with whom they work.
OBJECTIVES: The student will increase his proficiency in the diagnosis, management and treatment of various diseases of the gastrointestinal tract, liver and pancreas and their nutritional consequences during infancy and childhood. A greater depth of knowledge concerning normal and abnormal nutrition will also result.

The objectives will be achieved through: 1) Participation in clinical activities such as daily ward rounds, consultations on pediatric patients with GI problems, outpatient clinics, and diagnostic procedures such as endoscopies; 2) Attending teaching and patient management conferences.

FACULTY: Drs. D. Al-Zubeidi, Warren Bishop, Dawn Ebach, Eyad Hanna, Catherine Newland, Riad Rahhal, and Aliye Ucmek

MAX ENROLLMENT: 2

OFFERED: All periods

LENGTH OF ELECTIVE: 2 or 4 weeks

ADMINISTRATIVE CONTACT: Cathy Chavez

REPORT TO: Pediatric GI teaching room 2436 JCP, 8:00 am

SPECIAL CONDITIONS: Contact Dr. Al-Zubeidi by phone (356-2950 or 356-1376) 1-2 days before starting rotation.

EVALUATIONS: Each student will develop goals for their rotation (1 goal/week). Students completing a 4-week rotation will review their goals and progress at the midpoint of the rotation. ALL students will write a 1-page reflection of their experience. Completion of the mid rotation feedback form (for 4-week rotations) and final reflection is mandatory to receive credit. Cathy will initiate one evaluation which will be completed by the faculty as a group. Students may initiate on-line evaluations to the residents and fellow with whom they work.
OBJECTIVES: The student will learn current diagnostic and therapeutic approaches to children with disorders of red blood cells, white blood cells, platelets, and coagulation. Students will observe the multidisciplinary approach used for the treatment of children with oncologic diagnosis. Students will gain experience in current measures for evaluation and treating children with oncologic diseases. Students will be able to recognize common hematologic abnormalities by examination of peripheral blood smear and bone marrow specimens.

The above goals will be achieved by attending pediatric hematology/oncology outpatient clinics. Students will participate in the initial diagnostic evaluation of patients referred to the Pediatric Hematology-Oncology Service, interpret the microscopic examination of blood smears and bone marrow specimens, and complete a selective reading list.

FACULTY: Drs. Abusin, Gordon, Kailasnath, Modi, O’Dorisio, Sato, Sharathkumar, Staber, Terry, and Vyas

MAX ENROLLMENT: 1

OFFERED: All periods

LENGTH OF ELECTIVE: 2 or 4 weeks

ADMINISTRATIVE CONTACT: Cathy Chavez

REPORT TO: 2534 JCP, 8:30 am

EVALUATIONS: Each student will develop goals for their rotation (1 goal/week). Students completing a 4-week rotation will review their goals and progress at the midpoint of the rotation. ALL students will write a 1-page reflection of their experience. Completion of the mid rotation feedback form (for 4-week rotations) and final reflection is mandatory to receive credit. Cathy will initiate one evaluation which will be completed by the faculty as a group. Students may initiate on-line evaluations to the residents and fellow with whom they work.
OBJECTIVES: The student will: Increase proficiency in doing a neurologic examination on infants, children and young adults. Students will develop competence at obtaining a neurologic history, including developmental history and genetic history. The student will learn an approach to diagnosing and managing common and rare neurologic problems in childhood, including seizures, developmental delay, neurocutaneous disorders and muscular dystrophy. Through exposure to patients in follow-up visits, the student will learn the natural history of common neurologic disorders. Students will learn to use written and computer based resources and interpret the results of laboratory testing (CT, MRI, EEG) in the diagnostic evaluations.

These goals will be achieved through: Clinical activities will be focused on the outpatient clinic, with limited involvement in the inpatient service and consult service. The student will see patients independently and staff them with an attending. Students will participate in clinical conferences, and will be expected to read selected readings in pediatric neurology. Students will be expected to participate in the weekly child neurology clinical conference.

FACULTY: Drs. Bassuk, Bonthius, Ciliberto, Joshi, Mathews, Matsumoto, Perlman, and Zhorne

MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Cathy Chavez
REPORT TO: 2475 JCP, 8:00 am (call 6-1851 to let secretaries know you have arrived)

EVALUATIONS: Each student will develop goals for their rotation (1 goal/week). Students completing a 4-week rotation will review their goals and progress at the midpoint of the rotation. ALL students will write a 1-page reflection of their experience. Completion of the mid rotation feedback form (for 4-week rotations) and final reflection is mandatory to receive credit. Cathy will initiate one evaluation which will be completed by the faculty as a group. Students may initiate on-line evaluations to the residents and fellow with whom they work.
OBJECTIVES:
1. Understand the normal developmental sequence of childhood, and the impact of environmental influences.
2. Be aware of the antecedents of selected developmental disabilities including ADHD, autism, intellectual and physical disabilities.
3. Identify methods to detect cognitive and motor delays in infancy.
4. Identify methods to detect physical and cognitive delays in the preschool child.
5. Understand the long-term consequences of developmental disabilities.
6. Work with an interdisciplinary team and understand its advantages in addressing developmental disabilities.

FACULTY: Dianne McBrien, M.D. and staff
MAX ENROLLMENT: 1
OFFERED: All blocks
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Cathy Chavez
REPORT TO: LaVonne Kahler, 213 CDD, 8:00 am
EVALUATIONS: Each student will develop goals for their rotation (1 goal/week). Students completing a 4-week rotation will review their goals and progress at the midpoint of the rotation. ALL students will write a 1-page reflection of their experience. Completion of the mid rotation feedback form (for 4-week rotations) and final reflection is mandatory to receive credit. Cathy will initiate one evaluation which will be completed by the faculty as a group. Students may initiate on-line evaluations to the residents and fellow with whom they work.
OBJECTIVES:
- Become familiar with the pathophysiology, diagnosis and management of pediatric kidney disease and hypertension.
- Become familiar with the assessment of kidney function based on serum creatinine, estimated/measured GFR, urinalysis, and blood pressure.
- Recognize the abnormal clinical findings, urinalysis and laboratory markers of glomerular disease.
- Understand the impact of congenital kidney abnormalities on long-term kidney and voiding function.
- Become familiar with the stages of chronic kidney disease and the side effects associated with CKD.
- Become familiar with the assessment of fluid balance, especially as it pertains to a patient with kidney disease or acute kidney injury.
- Appreciate the impact that end-stage renal disease, dialysis, and kidney transplant have on the lives of our patient and their families.
- Appreciate the impact of acute kidney injury on the clinical course and outcomes of critically ill patients.

At the end of a four week rotation, the student will be able to:
- Perform a physical exam with attention to physical findings pertinent to patients with kidney disease.
- Be able to classify a pediatric blood pressure reading as normal, pre-hypertension, stage 1 or stage 2 hypertension using the 4th report tables.
- Be able to calculate eGFR using the updated Schwartz formula
- List the side effects of chronic kidney disease
- Develop basic differential diagnoses for common nephrology issues (e.g., gross hematuria, proteinuria, acute kidney injury, hypertension).

Key Responsibilities of the student:
- No night call or weekends are required.
- Students will rotate with both the inpatient service and outpatient clinic providers. The schedule will be tailored to individual interests as much as possible, so please let us know if there are particular areas on which you wish to focus.
- Students will write the notes for all patients they are following (including consult notes, daily progress notes and clinic notes).
- Students will attend all educational activities of the service as outlined in the weekly schedule.
- All senior students will be asked to prepare a 15-20 minute Powerpoint learning issue on the nephrology topic of their choice to be presented on the last Tuesday afternoon of their rotation.

FACULTY: Drs. Brophy, Jetton, Lee-Son, Nester, and Zepeda-Orozco; and Brynna Van Wyk (inpatient ARNP)

MAX ENROLLMENT: 1

OFFERED: All periods

LENGTH OF ELECTIVE: 4 weeks

ADMINISTRATIVE CONTACT: Cathy Chavez

REPORT TO: Deanne Edgar, 4035 BT, 8:30 am
also meet with Dr. Jetton at 3:30 pm on the first Monday of the rotation to discuss schedule and goals for the month.

EVALUATIONS: Each student will develop goals for their rotation (1 goal/week). Students completing a 4-week rotation will review their goals and progress at the midpoint of the rotation. ALL students will write a 1-page reflection of their experience. Completion of the mid rotation feedback form (for 4-week rotations) and final reflection is mandatory to receive credit. Cathy will initiate one evaluation which will be completed by the faculty as a group. Students may initiate on-line evaluations to the residents and fellow with whom they work.
PSYC:8401  ADULT INPATIENT PSYCHIATRY

OBJECTIVES: This advanced elective offers the opportunity to study clinical psychiatry in greater depth. Elective clerks carry a smaller case load than residents, but are otherwise expected to act as junior residents with staff supervision. Clerks also participate in a program of directed readings, didactic seminars, and clinical conferences. Feedback on directly observed clinical interviews will be provided. Options include general adult psychiatry, geriatrics, eating disorders, mood, or psychotic disorders/neuropsychiatry. Student learning will emphasize assessment to develop a foundation of skills in clinical interviewing, mental status examination, differential diagnosis, and formulation. Psychotherapeutic and pharmacological management approaches will be emphasized.

FACULTY: Dr. Fiedorowicz
MAX ENROLLMENT: 2
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Teresa Young
REPORT TO: SPECIAL CONDITIONS

PSYC:8402  CHILD PSYCHIATRY

OBJECTIVES: This elective offers the student the opportunity to study in depth the behavioral manifestations of psychiatric disorders in children and adolescents. The elective will include both inpatient and outpatient experiences so that students have an opportunity to observe how psychiatrists diagnose and treat acute and chronic disorders in children. Outpatient clinic experiences will include diagnostic evaluations, medication follow-ups, and full team evaluations. Students will also have the opportunity to observe neuropsychological and psychological evaluations. Students also participate in a program of clinical readings, didactic seminars, and clinical conferences. This elective is well-suited for the student who is planning a career in pediatrics. May be repeated.

FACULTY: Dr. Espe-Pfeifer
MAX ENROLLMENT: 1
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Teresa Young
REPORT TO: SPECIAL CONDITIONS
**PSYC:8403  ADULT OUTPATIENT PSYCHIATRY**

**OBJECTIVES:** This elective offers students the opportunity to study outpatient psychiatry and emergency management of psychiatric patients. Students will be expected to participate with more independence in the diagnostic assessment of new patients in the clinic, as well as to assist senior residents in the evaluation and treatment of patients with psychiatric emergencies. An emphasis will be placed on the further development of psychiatric interviewing skills and diagnostic assessment skills. Students will be exposed to both psychotherapeutic and psychopharmacologic treatment modalities. Observation of group psychotherapy and participation in senior elective clinical readings, resident didactic seminars, and resident clinical conferences are expected of the clerk during this elective. The elective will be tailored as possible to the student’s interests, including exposure to the University Adult Psychiatry Outpatient Clinic, the VA Adult Psychiatry Outpatient Clinic, geriatric evaluations, addictions treatment, and community psychiatry sites.

**FACULTY:** Dr. Eric Epping  
**MAX ENROLLMENT:** 1  
**OFFERED:** All periods  
**LENGTH OF ELECTIVE:** 2 or 4 weeks  
**ADMINISTRATIVE CONTACT:** Teresa Young  
**REPORT TO:**

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**PSYC:8404  WOMEN’S WELLNESS & COUNSELING SERVICE**

**OBJECTIVES:** Fourth year medical students can pursue a Women’s Mental Health senior elective in the Women’s Wellness and Counseling Service (WWC) at the University of Iowa Hospitals and Clinics and at the VA Women’s Clinic. During this four week rotation, students will have the opportunity for greater autonomy in evaluation and treatment of women with mental illness with a special emphasis on pregnant and postpartum women. They will be expected to participate in case conferences, attend regularly scheduled educational activities in women’s mental health, prepare a presentation for the WWC service, and develop a working knowledge of fundamental literature in this field. The majority of clinical and educational activities will be devoted to women’s mental health. Depending on in the interests of the student, other psychiatric learning activities will be arranged during this rotation.

**FACULTY:** Dr. Hristina Koleva  
**MAX ENROLLMENT:** 1  
**OFFERED:** Close Blocks 1 & 2  
**LENGTH OF ELECTIVE:** 4 weeks  
**ADMINISTRATIVE CONTACT:** Teresa Young  
**REPORT TO:** Arranged
OBJECTIVE: The Medical Psychiatry Clerkship is designed to provide hands-on experience in the evaluation and treatment of patients with combined medical and psychiatric disease. The fourth year student under the supervision of residents in both medicine and psychiatry will learn to make appropriate medical and psychiatric diagnoses while considering the relationship of these conditions. The student will act at subintern level selecting appropriate consultations, diagnostic tests, and treatments. The student will be expected to develop familiarity with the etiology and pathophysiology of the conditions being treated, review potential complications, and develop skills in direct interactions with the patients to facilitate team-teaching and patient care. The student is required to prepare and present an article at the Medicine-Psychiatry noon conference. Contact Dr. Vicki Kijewski for details about the noon conference schedule at the beginning of the elective. Participation in senior elective clinical readings, resident didactic seminars, and resident clinical conferences are expected of the clerk during this elective.

FACULTY: Dr. Vicki Kijewski
MAX ENROLLMENT: 2
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Teresa Young
REPORT TO:

OBJECTIVE: The sub-internship in adult psychiatry will provide an experience for the student that maximizes autonomy and responsibility. The inpatient rotation will focus on one sub-specialty area (psychotic disorders or mood disorders) and emphasize the substantial other medical co-morbidity. The sub-Intern will be expected to assess and address the medical and psychiatric needs of their assigned patients in a collaborative and integrative fashion. Students will be expected to assess and manage their patients independently at the level of a psychiatry intern, reporting directly to the attending. Call is required. The didactic curriculum focuses on critical appraisal of the medical literature.

FACULTY: Dr. Jess Fiedorowicz
MAX ENROLLMENT: 2
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Teresa Young
REPORT TO:
OBJECTIVES

The elective in eating disorders will provide an experience for the student that maximizes autonomy and responsibility. The inpatient or partial hospital rotation will emphasize the co-occurring psychiatric and co-morbid medical conditions associated with the eating disorders. Students will be expected to assess and manage their patients at an advanced level. Students will provide direct patient care and engage in clinical decision making for complex patients with substantial co-morbidity. The didactic curriculum focuses on critical appraisal of the relevant medical literature. Students will be introduced to cognitive behavioral psychotherapy techniques.

FACULTY: Dr. Jess Fiedorowicz
MAX ENROLLMENT: 1
OFFERED: All Periods
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Teresa Young
REPORT TO:
DEPARTMENT OF RADIOLOGY

COURSE DIRECTOR: Dr. Eve Clark
Dr. Maheen Rajput

CONTACT PERSON: Nici Bontrager
3875 JPP
467-5463

RAD 8401  ADVANCED CLINICAL RADIOLOGY

OBJECTIVES: This elective is intended for students who want to improve their radiologic abilities whether or not they plan to pursue a career in radiology. The course consists of 4 one-week blocks in the radiologic subspecialties of the student’s choice. This is a hands-on rotation in which the student will become a full member of the clinical team participating in all aspects of patient care including radiologic procedures. In addition, there is a program of lectures, case presentations, and guided self-instruction to update the student on the latest regarding integrating diagnostic and interventional imaging into patient management.

Upon successful completion of the rotation, the student will be able to: 1) develop differential diagnoses of common pathology based on radiographic imaging, and 2) understand the appropriate integration of radiologic imaging into patient management.

FACULTY: Drs. Eve Clark and Maheen Rajput
MAX ENROLLMENT: 6
OFFERED: All periods
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Nici Bontrager
REPORT TO: 3567 JCP at 9:15 am
SPECIAL CONDITIONS: Must be dropped 4 weeks prior to the beginning of the section.

RAD 8402  VASCULAR AND INTERVENTIONAL RADIOLOGY

OBJECTIVES: The purpose of this elective is to expose the student to the broad range of diagnostic and therapeutic procedures performed by Interventional Radiology. Interventional radiology is a subspecialty of Radiology, which is responsible for the performance of a wide array of percutaneous, vascular and non-vascular procedures. These include angiography, angioplasty, vascular reconstructions, vascular embolization, percutaneous nephrostomies, biliary drainage, and placement of custom devices in the vascular tree and elsewhere.

Students in this elective will join the clinical interventional service, staff, fellows and residents. You will be expected to participate in the diagnostic workup and management of interventional patients as well as in the performance of selected interventional procedures. You will be involved in the daily readouts and teaching on the interventional clinical service and participate in interventional and interdisciplinary interventional conference, and familiarize yourself with research opportunities.

FACULTY: Sandeep Laroia, M.D.
MAX ENROLLMENT: 2
OFFERED: All periods pending approval of Dr. Laroia
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Nici Bontrager
REPORT TO: Dr. Sandeep Laroia
OBJECTIVES: Students are involved directly with the patient care and management under the immediate supervision of the faculty. They rotate through all five clinical services:
1. Head and Neck Carcinoma, 2. Thoracic, 3. GI/GU/Metastases, 4. Lymphoma/CNS/Pediatric, 5. Gynecological/Breast/Sarcomas

Under the direction of the faculty, the students evaluate patients for radiotherapy and help plan the course of radiotherapy treatments. They also participate in the discussion regarding these patients in multidisciplinary tumor boards and departmental conferences. The students are exposed to a variety of neoplasms and attend the multidisciplinary conferences relating to their patients.

The goal of the course is to expose the student to the field of radiation oncology and cancer management, and give them an understanding of the interactions of radiation therapy, chemotherapy, and surgery.

FACULTY: John Buatti, M.D.
MAX ENROLLMENT: 3
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Shawn Reynolds
REPORT TO: Dr. John Buatti, 01626 PFPW, 7:30 am
DEPARTMENT OF SURGERY

COURSE DIRECTOR: Dr. Luis Garcia

CONTACT PERSON: Cate Spencer-Motyko
1527 JCP
356-4499

SURG:8401 ADVANCED GENERAL SURGERY

OBJECTIVES Students on senior electives in surgery will increase their knowledge by focusing on a specific area of surgical practice with a particular full-time faculty member, serving as a preceptor. The students will strengthen their clinical skills in perioperative patient assessment and management, in use of diagnostic studies pertinent to the surgeon’s practice, and assisting or performing procedures under direct supervision.

ACTIVITIES A broad range of clinical activities in the operating room, clinics, wards, and intensive care units is possible depending on the preceptor’s practice. This may also include night and/or weekend call activity at the discretion of the preceptor. However, more than 40 but less than 80 total hours of clinical activity should be expected.

FACULTY: Department of Surgery Faculty
MAX ENROLLMENT: 5
OFFERED: All periods
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Cate Spencer-Motyko
REPORT TO: Contact Cate Spencer-Motyko for information for the first day of clerkship

SPECIAL CONDITIONS: No more than one senior student can be on a general surgery team with junior students on their required clerkship, whether those students are doing electives or sub-internships.
**OBJECTIVES:** Sub-interns will improve students’ clinical skills by assuming an intern’s level of responsibility for the assessment and management of a limited number of patients, under the direct supervision of a senior surgery resident. The sub-interns will increase their proficiency with perioperative patient assessment and management, including selecting and interpreting appropriate laboratory and radiologic studies. Sub-interns may also participate in procedures, but at least 80% of their time should be spent managing in-patients.

Sub-interns will accomplish this by working as a member of a surgical resident team, including approximately weekly night/weekend call at the same time as a faculty member on the team so that the sub-interns may participate in the entire spectrum of patient management from the stage of initial surgical consultation. Sub-interns will be asked to submit goals and strategies for achieving their goals in advance. The chief residents will be asked to review and revise these goals as appropriate. At the end of the month, sub-interns will be asked to review how these goals have been met with the course director, residency program director, or chair of surgery.

**FACULTY:** Dr. Luis Garcia and Staff

**MAX ENROLLMENT:** 5

**OFFERED:** All periods

**LENGTH OF ELECTIVE:** 4 weeks

**ADMINISTRATIVE CONTACT:** Cate Spencer-Motyko

**REPORT TO:** Contact Cate Spencer-Motyko for information for the first day of clerkship

**SPECIAL CONDITIONS:** Only one student per team. Contact Cate Spencer-Motyko to indicate your preference one month prior to beginning of clerkship.
DEPARTMENT OF UROLOGY

COURSE DIRECTOR: Dr. Chad Tracy

CONTACT PERSON: Kris Greiner
3244 RCP
353-7871

URO:8401  ADVANCED GENERAL UROLOGY

OBJECTIVES: The student will become an integral member of the ward team, functioning at the PGY-1 level (i.e. responsible for histories and physicals on admission, daily ward rounds, attending surgery, and seeing patient in the urology clinic). The student will be given graded responsibility for as much as possible of each patient’s case. The student will prepare and present to the Urology Departmental Conference, a 15 minute didactic lecture on a selected urologic topic.

FACULTY: Dr. Tracy
MAX ENROLLMENT: 2
OFFERED: All blocks
LENGTH OF ELECTIVE: 4 weeks
ADMINISTRATIVE CONTACT: Kris Greiner
REPORT TO: Dr. Tracy
SPECIAL CONDITIONS: Students considering a Urology residency are encouraged to meet with Dr. Tracy.

URO:8402  PEDIATRIC UROLOGY

OBJECTIVES: Under the direction of the urology resident assigned to the pediatric service as well as the pediatric urology faculty, the senior student is expected to participate in the evaluation of clinical patients and participate in the care of selected surgical patients, including preoperative evaluation, intraoperative assistance and postoperative care. The student is encouraged to work under a close mentor-student relationship to develop skills in pediatric urology and to select and study a specific subspecialty topic.

FACULTY: Drs. Cooper, Arlen, and Storm
MAX ENROLLMENT: 1
OFFERED: All blocks
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Kris Greiner
REPORT TO: Dr. Tracy
SPECIAL CONDITIONS: Instructor consent required.
OBJECTIVES: The student will have a multispecialty exposure to the diagnosis and treatment of patients with current and newly diagnosed urologic malignancies. The student will spend on average of 1-2 days per week in either medical oncology or radiation oncology and the remainder of the time in either the urology oncology clinic or ORs. We will attempt to focus the rotation based on the student’s interest, OR vs. clinical time. The student will attend the urology conferences, specifically indications, radiology, and pathology conference in addition to the bi-monthly multispecialty tumor board. This course is designed for students planning to enter into primary care that have an interest in oncology or men’s health issues and for students with an interest in urology.

FACULTY: Drs. O’Donnell, Brown, Tracy Nepple, Deorah and Gupta
MAX ENROLLMENT: 1
OFFERED: Closed Block 6
LENGTH OF ELECTIVE: 2 or 4 weeks
ADMINISTRATIVE CONTACT: Kris Greiner
REPORT TO: Dr. Tracy