

Internal Medicine

INMD 920. Introduction to Functional Medicine. 2-4 Credits.

Functional medicine is an evidenced based system approach to chronic disease seeking to treat processes by identifying the underlying cause. Functional medicine uses a timeline to identify antecedents, triggers, and mediators of disease and tries to address the process at the root cause. This course seeks to introduce the learner to foundational principles of functional medicine and demonstrate how to apply these to an individual patient based on the goals and health status of the patient.

INMD 975. Internal Medicine Clerkship. 0-8 Credits.

During the clinical clerkship the student develops understanding of health maintenance and the spectrum of disease processes specific to adults. Students will have the opportunity to gain an understanding of Internal Medicine through patient interviews, physical examination, review of imaging and laboratory studies, development of assessments and plans, and a variety of other educational experiences. The clerkship will expose students to the management of general medicine and subspecialty medicine patients in both inpatient and outpatient settings including the Robert J Dole Veterans Affairs Hospital. Prerequisite: Medical Basic Sciences.

INMD 976. Emergency Medicine. 4 Credits.

This rotation will introduce the student to the clinical practice of Emergency Medicine. The student will observe and participate as a member of the Emergency Department team, in handling a variety of patient problems and complaints, under the direct supervision of the full time Emergency physician. The student will develop patient evaluation skills, examining unscreened patients under faculty supervision. The information gained from performance of this history and physical exam will aid in the selective use of ancillary services to achieve the most efficient and effective emergency assessment in management of patients seen in the Emergency Department setting. The student will develop and improve skills in suturing, interpretation of radiographs and electrocardiograms, establishing IV lines, and other diagnostic studies and procedures commonly performed in the Emergency Department setting. The student will have clinical exposure to resuscitation techniques and problems. The student will develop an understanding of how Emergency Medicine Services relates to other departments and services. The student will assume appropriate responsibility for management of patient problems under the direct supervision of the Emergency Medicine faculty. The student's evaluation will consist of performance observed by assigned preceptor and director of Emergency Medicine Education. Prerequisite: Medical Basic Sciences and any two of the following four: SGRY 975, INMD 975, PDRC 975, or OBN 975.

INMD 979. Endocrinology. 2-4 Credits.

Student will learn to appreciate the normal physiology and pathophysiology of selected diseases of the endocrine glands. In this brief encounter he or she will study in particular thyroid abnormalities as a model of the altered homeostasis occurring in endocrinopathies. Patients with diabetes mellitus will be encountered and the reference to metabolic perturbation of the acute and chronic complications of the same. Less common problems will be assigned when patients are available. The student will be expected to attend and participate in two seminars weekly along with the resident on the endocrinology rotation. There are two to four new work-ups weekly among hospital patients and selected outpatients with individual patient follow-ups as required. Performance will be evaluated by the faculty on written departmental forms. Critical review of clinical ward and outpatient activities will equal 100 percent of the grade. Prerequisite: INMD 975.

INMD 981. Rheumatology. 2-4 Credits.

Medical students completing a four-week elective in Rheumatology should be able to: 1) Perform a complete history and physical, with emphasis on the those items (e.g., skin, joints) related to rheumatic disorders; 2) Aspirate the knee; 3) Identify urate and calcium pyrophosphate dihydrate crystals in synovial fluid; 4) List: a) historical and physical findings; b) X-ray findings; c) modes of therapy for rheumatoid arthritis, degenerative joint disease, gout, lupus and ankylosing spondylitis. Outpatient and inpatient clinical performance - 100% of grade. Students will be evaluated on the basis of meeting objectives 1-4 listed above. Prerequisite: INMD 975.

INMD 982. Hematology/Oncology. 2-4 Credits.

The student will learn the "team approach" to patient care, involving the patient and family and other caregivers. Students will learn to examine and interpret a peripheral smear. Students will also learn: the fundamentals of bone marrow examination, the approach to evaluation of anemia, the approach to patients with suspected malignancy and the rationale behind chemotherapy, the evaluation of coagulopathies, thrombotic states, bleeding disorders, nutritional deficiencies, and blood therapy. Students will learn the natural history of common malignancies, to perform therapeutic phlebotomy, bone marrow aspiration, and how to interpret biopsy, bleeding time, and bone marrow pathology. Student will perform patient work-ups, attend conferences, and rounds, including interaction with the team (nurses, chaplains, social workers, occupational therapists, volunteers). Prerequisite: INMD 975.

INMD 984. Nephrology. 2-4 Credits.

Students will be assigned patients at a sub-intern level from the inpatient renal consultation services and the inpatient and outpatient hemodialysis services. Renal physiology and pathophysiology will be emphasized plus complicated fluid and electrolyte problems. Prerequisite: INMD 975.

INMD 985. Infectious Disease. 4 Credits.

The student will: 1) Learn about management of postoperative infection, CNS infection, pulmonary infection, sepsis, fungal infection, etc. 2) Learn data analysis techniques of infectious diseases specialist and how (generally) microbiology laboratories work. 3) Learn principles of antibiotic, antifungal, and antiviral therapy. Students are to attend infectious diseases conferences. Students will see patients primarily admitted to the Infectious Disease Office and work with selected educational consultants. They will attend noon medicine conferences and grand rounds at the assigned hospital. They will be supervised by one physician. Students will have contact with 3 to 5 new patients a week plus follow-up 3 to 4 patients. Clinical ward performance = 100% of grade. Student performance will be evaluated by faculty on written departmental forms to assess: history-taking ability, expertise in performing physical exams, formulation of clinical judgment, diagnostic approach, rapport with nursing staff and fellow physicians. Prerequisite: INMD 975.

INMD 986. Physical Medicine and Rehabilitation. 2-4 Credits.

The student should develop a working knowledge of the physiatric evaluation, including manual muscle testing, examination of joints, neurologic evaluation, evaluation of functional level. The student should achieve a basic familiarity with neuromuscular diseases, CVA, joint problems, amputee management, head injury, and spinal cord injuries, as well as the rehabilitation goals and therapies as applied to the above. The student will be involved in the initial evaluation and diagnostic workup of selected patients, including EMG's, X-rays, scans, lab tests, as well as the physical examination with emphasis on the physiatric evaluation. There will be student involvement in the management of patient progress. The student will participate in inpatient rounds, consultations, and outpatient evaluations. He/she is expected to be a participating member of the rehabilitation team and to work closely with the nurses, therapists, and

physicians. The students will be evaluated on the basis of their clinical skills, knowledge of the interest in the field, rapport with patients, and participation as a member of the rehabilitation team. Clinical ward performance = 100% of grade. Prerequisite: INMD 975.

INMD 987. Neurology. 2-4 Credits.

The clerk will serve at a subintern level under supervision of a resident and attending staff. Clinical examination of patients and management of neurologic disorders will be emphasized. Prerequisite: INMD 975.

INMD 988. Gastroenterology. 2-4 Credits.

Services are available for concentrated experience in gastrointestinal disease problems with student participation in diagnostic work-up, including various endoscopic procedures and management of clinical problems. Prerequisite: INMD 975.

INMD 989. Dermatology. 2-4 Credits.

This service is centered in the private offices of dermatology groups where the student will observe and participate in treating a wide variety of dermatologic problems. The emphasis is on common problems, those relating to systemic disease, and principles of dermatologic therapy. Prerequisite: INMD 975.

INMD 991. Cardiology. 2-4 Credits.

Student will learn 1) Evaluation and therapy of clinical cardiology patients, 2) Proficiency in physical diagnostic techniques, 3) Introduction to non-invasive cardiology, including EKG, stress testing both exercise treadmill and nuclear procedures, M-Mode, and two dimensional echocardiography, 4) Direct hands-on invasive procedures on patients that the attending works up, as well as other selected patients, 5) Intensive care experience, including management and proficiency in dealing with acutely ill cardiac patients, and ascertaining the ability to use hemodynamic monitoring and intensive care treatment such as drugs, intra-aortic balloon, etc. Experience with both in-patients and out-patients will be offered. Primary emphasis will be placed on learning basic cardiology and sharpening skills. Student will work with 3 to 5 patients per week. Clinical ward performance = 100% of grade. Student performance will be evaluated by faculty on written departmental forms to assess: history-taking ability, expertise in performing physical exam, formulation of clinical judgment, diagnostic approach, rapport with nursing staff and fellow physicians. Prerequisite: INMD 975.

INMD 994. Ambulatory Care in Internal Medicine. 2-4 Credits.

The student may elect an office practice experience in ambulatory medicine with available faculty as arranged by Academic and Student Affairs and the department of Internal Medicine. The specific goals and objectives and the scope and type of clinical experience are constructed under the supervision of the Clerkship Director in Internal Medicine. The office experience may be in general medicine or specialty practice. Prerequisite: INMD 975.

INMD 995. Special Topics in Internal Medicine. 2-4 Credits.

This elective is designed to provide clinical and/or research experience in general medicine or topics of special interest. The student will design, in consultation with the clerkship director and department faculty, specific objectives, reading assignments, and the mechanism for course evaluation. Prerequisite: INMD 975 and departmental consent.

INMD 998. Subinternship in Internal Medicine. 4 Credits.

This course is designed to give the student practical experience in the hospital care of general medicine patients and patient care at the intern or R1 level. Students will perform and dictate the initial history and physical, write orders, perform indicated procedures under the supervision of a senior resident and faculty attending, and dictate discharge summaries on patients. Students will take hospital call with the senior resident, attend

scheduled rounds and conferences, and function as a member of the patient care team. Prerequisite: Medical Basic Sciences and INMD 975.