INTERNAL MEDICINE (IM)

IM 0106 - Health Resource Center  
Credit(s): 3-6 Credits  
This elective is designed to provide students with insight into the work required to run a community clinic. The Health Resource Center (HRC) is a student-run, free, health clinic supported by the Saint Louis University School of Medicine. The mission of the HRC is three-fold: 1) To inspire medical students to advocate for social justice and erase health care disparities in underserved areas of North St. Louis and Hamilton Heights communities 2) To empower patients to improve their quality of life through healthcare and education 3) To foster learning opportunities for students to hone their medical skills. Students will become familiar with the HRC mission by volunteering at the clinic and completing a project that will benefit the HRC and the patient population. This elective will be non-lottery, application-based course offered by the 2017-2018 Lead Coordinators.

IM 0110 - Introduction to Sleep Medicine  
Credit(s): 3-6 Credits

IM 0115 - Asthma & Allergy Clinical Services  
Credit(s): 2-12 Credits (Repeatable for credit)  
The asthma & allergy clinical service elective will run in conjunction with the asthma & allergy clinic at the Health Resource Center. Selected students will take ownership in the success of this clinic by completing a semester-long project intended to build and strengthen the clinic. Students will volunteer at bi-weekly asthma/allergy clinics during elective time. Additionally, students will participate in community outreach initiatives to increase asthma/allergy awareness and will receive leadership training on clinic management.

IM 0301 - Internal Medicine Clerkship  
Credit(s): 6-12 Credits (Repeatable for credit)

IM 0302 - Internal Medicine Career Exploration  
Credit(s): 1-2 Credits (Repeatable for credit)  
This course may be used to register for Internal Medicine career exploration. The location of the experience may be at a SLU SOM affiliate or at another health care institution.

IM 0303 - Internal Medicine self-designed Career Exploration  
Credit(s): 1-2 Credits (Repeatable for credit)

IM 0305 - Internal Medicine Career Exploration - Allergy, Asthma & Immunology Institute of St. Louis, Inc.  
Credit(s): 1-4 Credits

IM 0306 - Esse St. Louis Gastroenterology  
Credit(s): 1-4 Credits

IM 0307 - Internal Medicine - Geriatric Medicine at SLU Hospital and Clinics  
Credit(s): 1-4 Credits

IM 0308 - Internal Medicine - Pulmonary @ SLU Hospital  
Credit(s): 1-4 Credits

IM 0309 - Palliative Care @ SLU Hospital  
Credit(s): 1-4 Credits

IM 0310 - St. Anthony's at Arnold Family Healthcare  
Credit(s): 1-4 Credits

IM 0311 - Internal Medicine Career Exploration - Cardiology@SLUH  
Credit(s): 1-4 Credits

IM 0406 - Medical Intensive Care Unit  
Credit(s): 2-12 Credits  
The objective of the course is to provide clinical experience in the care of the critically ill. Active participation in patient management is emphasized. Cardiac emergencies constitute approximately half of the patient population in the Medical Intensive Care Unit; the other half is made up of critically ill patients in various medical subspecialties. The Intensive Care Unit has full hemodynamic and rhythm monitoring capability.

IM 0407 - Allergy and Immunology  
Credit(s): 2-12 Credits  
The elective gives the student broad exposure to allergic and immunologic diseases such as asthma, rhinitis, sinusitis, anaphylaxis, food and drug reactions, allergic skin conditions and non-HIV immune deficiencies. These disorders include some of the most common problems encountered in primary internal medicine, pediatrics and family medicine. The standard rotation includes weekly attendance at allergy & immunology clinics held at both Drummond Hall (primarily adult patients) and at Cardinal Glennon. In discussion with the Elective Director and/or Chief Allergy and Immunology Fellow (contact through Kiana Wilder or Emily Bishop), clinic assignments may be modified to include greater or lesser exposure to pediatric clinics.

IM 0409 - Cardiovascular Disease  
Credit(s): 2-12 Credits  
This cardiovascular medicine elective is designed to provide the student with an interesting and broad-based educational experience in general cardiovascular medicine via time spent with the inpatient consultation service as well as by observing patients cared for in the cardiac catheterization, nuclear cardiology, electrocardiographic, echocardiographic and electrophysiology laboratories at St. Louis University Hospital. Typical day is 8:00 AM to 5:00 PM. No call involved.

IM 0410 - Cardiology 3  
Credit(s): 2-12 Credits

IM 0413 - Clinical Endocrinology  
Credit(s): 2-12 Credits

IM 0417 - Clinical Endocrinology  
Credit(s): 2-12 Credits

The student participates fully in the consultative service at Saint Louis University Hospital, in the preparation and presentation of clinical teaching conferences, and in the practice of endocrinology in an outpatient setting. Approximately half of the time is spent seeing outpatients under close supervision by full-time faculty at the Saint Louis University Hospital. Participants will learn normal and abnormal endocrine physiology and biochemistry, the diagnostic approach to endocrine problems, and the management of endocrine diseases.
**IM 0414 - Hematology and Medical Oncology**  
**Credit(s): 2-12 Credits**  
The student will participate in both inpatient and outpatient consultations under the direction of the attending staff and fellows. The average number of inpatients followed at any one time is 7. The student will receive instruction in examining and interpreting bone marrow aspirates and biopsies along with peripheral blood smears.

**IM 0415 - Clinical Infectious Disease**  
**Credit(s): 2-12 Credits**  
The Clinical Infectious Diseases elective offers an exciting opportunity for the student to participate in consultations on a variety of infectious disease problems including general medical or surgical patients, immune compromised hosts, trauma victims, and patients with hospital acquired infections. New consultations and follow-up visits of the patients assigned to the student are performed each morning. Afternoon rounds are made with the attending physician to whom patients are presented, problems are discussed on a didactic basis, and patients are seen at the bedside. Regular teaching sessions with the faculty of the division of Infectious Diseases are scheduled separately; these review a series of common infectious diseases topics and Microbiology Lab Rounds are incorporated throughout the rotation. Weekly conferences include Journal Club, Clinical Infectious Diseases Conference, Research Infectious Diseases Conference, and Internal Medicine Grand Rounds. The emphasis during the clinical elective is on the pathophysiology of infectious diseases and the host response to an infectious agent. Mechanisms of action of antibiotics are discussed in detail. The emphasis of the elective is on infectious diseases as a part of Internal Medicine and Surgery. Reference material is provided and the student is expected to acquire general information in infectious diseases and a detailed knowledge of their patient’s clinical information and problems.

**IM 0417 - Nephrology**  
**Credit(s): 2-12 Credits**  
Activities: The educational programs of the Division of Nephrology offer the student abundant opportunities to enrich their exposure to clinical nephrology and transplantation. Weekly didactic conferences are designed to cover a broad spectrum of clinical, basic physiologic, and pathophysiologic information relevant to the practice of nephrology and transplantation. Didactic conferences include renal physiology, pathophysiology and clinical nephrology seminars. In addition, the weekly journal club provides an opportunity to review state of the art information from leading medical journals. Medical student teaching conferences are a key component of the training program and are specifically designed to provide an in-depth review of clinical nephrology at the student level. Course materials include a comprehensive syllabus, access to an updated computer database in clinical nephrology, and numerous reference textbooks within the library of the Division of Nephrology. The purpose of this elective is to provide the student with a basic understanding of the following areas: Urine examination and its use in differential diagnosis. Clinical acid-base disturbances. Disorders of fluid and electrolyte distribution. Acute and chronic renal insufficiency. Glomerular, vascular, and tubulointerstitial diseases. Hypertension. Renal stone disease. Renal transplantation.

**IM 0419 - Pulmonary Disease**  
**Credit(s): 2-12 Credits**  
The student will be an active participant of the Pulmonary Medicine consult team under the close direction of a subspecialty resident (fellow) in pulmonary/critical care medicine and consult attending physician. Students will have primary responsibility in the initial consultative work-up of assigned patients with pulmonary problems as well as continuing management, under the guidance of senior team members. The student will have the opportunity to interpret pulmonary function and cardiopulmonary stress test results, and to learn the principles of pulmonary rehabilitation in addition to administration of supplemental oxygen by various techniques. The student will also be involved in bronchoscopic and thoracentesis procedures as well as the management of chest tubes. The student takes part in review of all chest-imaging procedures performed on rounds. Weekly seminars or journal club provides didactic information sessions with pulmonary division members. The elective is supervised throughout by pulmonary/critical care medicine attending physicians and fellows rotating through Saint Louis University Hospital. The following are the goals for the Pulmonary/Critical Care Medicine elective: To present a broad exposure to a spectrum of acute and chronic pulmonary diseases caused by genetic, infectious, immunologic/inflammatory, vascular, neoplastic, and systemic disorders. To provide a focused opportunity to strengthen the student’s approach to the diagnosis, differential diagnosis, and cause-specific management of pulmonary diseases occurring alone, or in combination with other systemic disease processes. To enable the student to learn a structured approach to the fundamentals of interpreting pulmonary function tests including cardiopulmonary stress studies, and review of radiologic, computerized tomographic, and scintigraphic imaging studies of the chest. To integrate the student’s knowledge of cardiopulmonary physiology and pathology in relation to diverse clinical presentations of chest diseases. To teach essentials of pulmonary pharmacology as well as invasive and noninvasive ventilatory support for acute respiratory failure.

**IM 0420 - Clinical Rheumatology**  
**Credit(s): 2-12 Credits**  
The goals of this elective are to learn the clinical aspects of rheumatology and immunology through seeing consults and attending adult children’s and arthritis clinics.

**IM 0421 - Introduction to Outpatient Clinical Hepatology**  
**Credit(s): 2-12 Credits**  
This course will introduce the student to clinical hepatology in an outpatient setting. The student will have an opportunity to observe patients with a wide variety of common esoteric diseases of the liver. The student will participate in patient evaluation, formulation of the differential diagnosis, laboratory evaluation and care of outpatients. The clinical experience will consist primarily of ‘one on one’ discussions of patients seen in the outpatient setting. The student will work with GI faculty as well as GI subspecialty residents seeing patients with a variety of liver diseases.

**IM 0425 - Consultative Internal Medicine**  
**Credit(s): 2-12 Credits**  
This elective will give the student exposure to assessment of the surgical risk and perioperative care of medical problems. Students will work closely with a resident in Internal Medicine and a General Internal Medicine faculty member. The elective is based at Saint Louis University Hospital and the Doctors Office Building.
IM 0427 - Interpretation of the Electrocardiogram
Credit(s): 2-12 Credits
The student will learn the basics of electrocardiographic interpretation through review of lecture notes, studying of an EKG text, and reading of up to 250 electrocardiograms. Students will be taught a systematic approach to the electrocardiogram. Learning modules will focus on diagnosis of chamber enlargement, conduction disease, rhythm disturbances and ischemia/infarction. A pre-test and post-test will allow the student to evaluate their progress. Information concerning the course will be emailed to the registered students.

IM 0428 - Ambulatory Medicine
Credit(s): 2-12 Credits
This clerkship involves extensive first contact with patients who are both well and ill, in a strictly ambulatory environment. Students will work under direct faculty supervision. Faculty will provide teaching on a one-on-one basis appropriate to the individual student's needs.

IM 0431 - Cardiac Auscultation-An Advanced Course
Credit(s): 2-12 Credits
Students will extend their knowledge and skills in cardiac auscultation through the use of a variety of teaching aids including readings, audio recordings, and bedside diagnosis. Computer simulations, recorded heart sounds and murmurs, and auscultation of a variety of abnormalities in real patients comprise the core course work.

IM 0433 - Inpatient Gastroenterology and Hepatology
Credit(s): 1-12 Credits
Students will spend 3 weeks as a subintern on the General GI or Liver service at Saint Louis University Hospital, working with a senior resident, two interns and a gastroenterology subspecialty resident (fellow) under the supervision of faculty from the Division of Gastroenterology and Hepatology.

IM 0435 - Non-Invasive Cardiology
Credit(s): 2-12 Credits
This course will be designed to familiarize the student with all modalities of outpatient cardiac testing and outpatient cardiac care. They will learn the indications and performance of cardiac stress testing and echocardiography. The student will gain experience interpreting resting and stress electrocardiograms. The student will learn the indications for diagnostic cardiac catheterization and percutaneous interventions in the cath lab. The student will spend one week in the cardiac stress testing lab, one week in the echocardiography lab, and one week in the cardiac catheterization lab. The student will be exposed to various outpatient cardiology clinics including general cardiology, heart failure, arrhythmia, and peripheral vascular disease clinics. Dr. Forsberg should be contacted on the first day of the rotation for didactic materials and schedule.

IM 0439 - Hospice and Palliative Medicine
Credit(s): 2-12 Credits
The Palliative Care Elective provides students with hands-on experience caring for patients with advanced and terminal illness.

IM 0441 - Preparing Clinical Cases for Presentation and Publication
Credit(s): 2-12 Credits
Participants will develop an oral presentation of the clinical case (with PowerPoint or other presentation software), create a poster of their clinical vignette with appropriate discussion section, write an abstract and clinical vignette of their case, submit the abstract for possible presentation to at least one regional or national meeting, and submit the vignette to at least on journal for consideration for publication.

IM 0442 - Clinical Gastroenterology & Hepatology- St. Anthony's Hospital
Credit(s): 2-12 Credits
Students will work with a busy private gastroenterology and hepatology practice to obtain a better understanding of the pathophysiology, diagnosis and treatment of various gastrointestinal disorders in both the inpatient and outpatient setting.

IM 0446 - Nephrology and Hypertension - St. Anthony's Hospital
Credit(s): 2-12 Credits (Repeatable for credit)
Develop an understanding of acute and chronic renal failure and the treatment of hypertension.

IM 0450 - Intro to Patient Safety and Quality Improvement
Credit(s): 2-12 Credits (Repeatable for credit)
Students will have a chance to learn valuable lessons in patient safety and quality improvement through online courses via the Institute for Healthcare Improvement (IHI). Students will complete online lessons and then formulate and present a Quality Improvement project at a date near Match Day.

IM 0451 - Required Ambulatory Medicine
Credit(s): 3-12 Credits (Repeatable for credit)
In this course, students will have a clinical experience that is representative of outpatient Internal Medicine. Students will be provided with the knowledge, skills, and attitudes required to manage common and high-yield outpatient Internal Medicine problems, and students will prepare to function as interns within the ambulatory setting.

IM 0452 - Advanced Art and Practice of Internal Medicine
Credit(s): 1-12 Credits
IM 0453 - Geriatric Consultation Service
Credit(s): 2-8 Credits (Repeatable for credit)
The students will make geriatric consult rounds with the geriatric nurse practitioner and attending physician Monday through Friday. Supervision will be upper level residents, geriatric nurse practitioner and faculty members of the Division of Geriatric Medicine.

IM 0499 - Internal Medicine Student Chief
Credit(s): 1-12 Credits
Students selected to take this elective will serve as ‘Student Chiefs’ at the beginning of the required clerkships. Week 1: The first week of the elective overlaps with the required, one-week orientation for students beginning their clerkships. During this week you would receive instruction in how to teach and provide feedback in the clinical setting. You will also be expected to help with general third year orientation week. Weeks 2-3: The following two weeks, you will help the new third-year students make the transition from classroom to clinic. The clerkship director and the education coordinator for the clerkship will provide you with guidance in this area. For example, you may be asked to observe and provide feedback when students perform histories and physical exams, to provide guidance on written and oral case presentations, and other clerkship tasks. In general, your job is to help facilitate each student’s successful entry into the clerkship.
**IM 0501 - Subinternship: General Internal Medicine at Saint Louis University Hospital**

**Credit(s): 1-4 Credits (Repeatable for credit)**

Each student will admit approximately twenty patients-two patients on each long-call shift (every fifth night) and one patient on each short-call day (two days out of five) and follow each patient until they are transferred to another service or discharged from the hospital. Students will write all admission and subsequent orders, write a daily progress note, perform all needed procedures, and participate in discharge planning activities for their patients. Students will attend all work and teaching rounds, as well as all teaching conferences while on service. In all of the above areas the students will be under the supervision of an upper-level resident and attending physician.

**IM 0502 - Subinternship: General Internal Medicine at John Cochran VA Medical Center**

**Credit(s): 1-4 Credits (Repeatable for credit)**

The purpose of the Medicine Sub-internship at the VA Medical Center is to develop proficiency in the care of hospitalized patients on an internal medicine ward. Sub-interns will have similar responsibilities as interns, with appropriate supervision by the faculty and senior resident physicians. They have the same on-call/admitting schedules as the interns and participate in the same teaching conferences, but they do not take overnight call. Sub-interns should admit at least two patients per call day, and they should be the first to evaluate the patients admitted to the medical service, except in emergencies. A diagnostic and therapeutic approach to evaluating each patient is planned in consultation with the resident. Sub-interns assume primary responsibility for the daily care of their patients, including evaluating each patient daily, presenting on morning rounds entering orders (discussed with and co-signed by the resident), interpreting results of diagnostic studies, calling consultants, collaborating with nurses and social work, organizing post-discharge care, and communicating with patients and their families. Sub-interns also attend weekly small group learning sessions during which they discuss, diagnose, and treat patients using example cases. By the end of the rotation, sub-interns will be able to independently: * Synthesize and succinctly present a patient’s history, exam, diagnostic data, assessment, and plan of care. * Support differential diagnoses and proposed care plans with clinical reasoning and evidence. * Demonstrate how to correctly order diagnostic tests and medications that further patient care. * Analyze complex patient cases during interactive small group learning sessions. * Integrate feedback from patients, residents, and attending physicians, and formulate a plan for ongoing improvement as a clinician. Student time distribution: Inpatient 80%; Conferences/Lectures 20%; Subspecialty Care 100% Patients seen weekly: 6-8 Major teaching responsibility: Attending physician, chief resident, and resident On call/weekend responsibility: On call every fourth day.

**IM 0504 - Subinternship: General Internal Medicine at St. Mary’s Health Center**

**Credit(s): 1-4 Credits (Repeatable for credit)**

Each student will admit approximately twenty patients-two patients on each long-call night (every fifth night) and one patient on each short-call day (two days out of five) and follow each patient until they are transferred to another service or discharged from the hospital. Students will write all admission and subsequent orders, write a daily progress note, perform all needed procedures, and participate in discharge planning activities for their patients. Students will attend all work and teaching rounds, as well as all teaching conferences while on service. In all of the above areas the students will be under the supervision of an upper-level resident and attending physician. Supervision: Upper level residents and faculty members of the Department of Internal Medicine of the St. Mary’s Health Center residency training program will supervise the subinterns.

**IM 0505 - Subinternship: Gastroenterology - Hepatology at Saint Louis University Hospital**

**Credit(s): 1-4 Credits (Repeatable for credit)**

Students will function as sub-Interns assigned to one of the four medicine teams on the in-patient general medicine service at St. Luke’s Hospital. An assigned faculty member from the Residency in Medicine and the senior resident on that service will supervise the student.

**IM 0506 - Subinternship: Geriatric Medicine at Saint Louis University Hospital**

**Credit(s): 1-4 Credits (Repeatable for credit)**

Each student will admit approximately twenty patients-two patients on each long-call night (every fifth night) and one patient on each short-call day (two days out of five) and follow each patient until they are transferred to another service or discharged from the hospital. Students will write all admission and subsequent orders, write a daily progress note, perform all needed procedures, and participate in discharge planning activities for their patients. Students will attend all work and teaching rounds, as well as all teaching conferences while on service. In all of the above areas the students will be under the supervision of an upper-level resident and attending physician. Supervision: Upper level residents and faculty members of the Division of Geriatric Medicine of the Department of Internal Medicine of the Saint Louis University School of Medicine will supervise the subinterns.

**IM 0507 - Subinternship: Gastroenterology - Hepatology at Saint Louis University Hospital**

**Credit(s): 3 Credits (Repeatable for credit)**

Students will evaluate and treat new patients admitted to the inpatient gastroenterology and hepatology service under the supervision of the faculty and fellows of the division of gastroenterology and internal medicine resident physicians. Students will write all admission and subsequent orders, write a daily progress note, perform all needed procedures, and participate in discharge planning activities for their patients. Students will attend all work and teaching rounds, as well as all teaching conferences while on service. There is no overnight call, but subinterns may be required to stay late to evaluate new patients.
IM 0508 - Subinternship: Clinical Cardiology at Saint Louis University Hospital
Credit(s): 3 Credits (Repeatable for credit)
Students will evaluate and treat new patients admitted to the inpatient cardiology service and Coronary Care Unit under the supervision of the faculty and fellows of the division of cardiology and internal medicine resident physicians. Students will write all admission and subsequent orders, write a daily progress note, perform all needed procedures, and participate in discharge planning activities for their patients. Students will attend all work and teaching rounds, as well as all teaching conferences while on service. There is no overnight call, but subinterns may be required to stay late to evaluate new patients.

IM 0509 - Subinternship: Nephrology at Saint Louis University Hospital
Credit(s): 3 Credits (Repeatable for credit)
Students will evaluate and treat new patients admitted to the inpatient nephrology service under the supervision of the faculty and fellows of the division of nephrology and internal medicine resident physicians. Students will write all admission and subsequent orders, write a daily progress note, perform all needed procedures, and participate in discharge planning activities for their patients. Students will attend all work and teaching rounds, as well as all teaching conferences while on service. There is no overnight call, but subinterns may be required to stay late to evaluate new patients.

IM 0510 - Subinternship: Critical Care Medicine at Saint Louis University Hospital
Credit(s): 3 Credits (Repeatable for credit)
The student will be an active member of the MICU Service health care team consisting of 2-3 upper level residents (R2-R4) and R1s, guided by a subspecialty resident (fellow) in pulmonary/critical care medicine, or critical care medicine and the attending MICU physician. Students will be assigned patients for whom they will assume primary responsibility during admission and subsequent management, with focused learning opportunities afforded by close contact with senior team members. Emphasis will be placed on teaching logical and priority-based decision-making when confronted with acutely-evolving disorders, the concept of titrated care at the bedside of ICU patients, pharmacology in the critically ill, and principles of medical ethics relevant to current ICU practices. Opportunities will be provided for learning the indications, contraindications, and alternatives to invasive procedures and for improving technical skills. Students will attend periodic lectures didactic MICU lectures in which the management of diverse organ-based ICU problems is discussed. The student is expected to do at least 2 weekend day shifts with the team and will get one full weekend off. Students will receive in-depth exposure to the diagnosis and management of complex, life-threatening problems in all major organ systems that occur in critical medical illnesses.

IM 0512 - Subinternship: Critical Care Medicine at Mercy Medical Center
Credit(s): 3 Credits (Repeatable for credit)
The medical student will be assigned to a team consisting of an Intensivist, Critical Care Fellow and a resident. This team will cover 12-15 patients in the Medical-Surgical ICUs. The student will be assigned primary responsibility for 1-3 patients under the supervision of the Critical Care Fellow. Teaching rounds occur each morning and the team attends Critical Care noon conference each day. Afternoons are spent on patient care and procedures. Call is every 4th night and the student will stay until 8PM on call nights with the team. Students will receive in-depth exposure to the diagnosis and management of complex, life-threatening problems in all major organ systems that occur in critical medical illnesses.

IM 0513 - Subinternship: Hematology Oncology at Saint Louis University Hospital
Credit(s): 3 Credits (Repeatable for credit)
This course requires that the student meet with a Heme/Onc attending to plan a personalized sub-internship. A typical schedule: Students carry approximately five patients-one patient on each long-call night (every fifth night) and one patient on each short-call day (two days out of five) and follow each patient until they are transferred to another service or discharged from the hospital. Students will write all admission and subsequent orders, write a daily progress note, perform all needed procedures, and participate in discharge planning activities for their patients. Students will attend all work and teaching rounds, as well as all teaching conferences while on service. In all of the above areas the students will be under the supervision of a fellow and attending physician. Supervision: fellows and faculty members of the Division of Hematology-Oncology of the Department of Internal Medicine of the Saint Louis University School of Medicine will supervise the subinterns.

IM 0901 - Internal Medicine Direct Patient Care
Credit(s): 1-12 Credits (Repeatable for credit)
This course may be used to register for an Internal Medicine elective. The elective experience must fulfill the requirements for a direct-patient care elective. The location of the experience may be at a SLU SOM affiliate or at another health care institution.

IM 0902 - Internal Medicine Non-Direct Patient Care
Credit(s): 1-12 Credits (Repeatable for credit)

IM 0903 - Internal Medicine Research
Credit(s): 1-12 Credits (Repeatable for credit)
This course may be used to register for an Internal Medicine elective. The elective experience must fulfill the requirements for a research elective. The location of the experience may be at a SLU SOM affiliate or at another health care institution.

IM 0904 - Internal Medicine Senior Inquiry
Credit(s): 1-12 Credits (Repeatable for credit)