



**UPMC**  
University of Pittsburgh  
Medical Center

# **Course Catalog**

2010-2011

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# Introduction

This booklet will provide for you with descriptions and prerequisites for the required and elective rotations offered in the Department of Internal Medicine. Rotations are scheduled according to blocks, with each full block lasting four to five weeks and each half-block lasting two to three weeks.

The required rotations will be assigned by the scheduling chief medical residents. The elective rotations are available on a first-come first-serve basis and will be assigned by the chief medical resident according to your request and availability. In general, the elective rotations are Monday through Friday without weekends or overnight call.

There are four major categories of elective rotations.

- Inpatient consult months provide the opportunity to see a variety of patients with diverse medical problems in the inpatient setting under the supervision of fellows and attendings. These rotations are excellent opportunities to work closely with attendings in order to obtain letters of recommendation if the subject matter happens to be your career of choice.
- Exposure electives are half-block rotations offered only to interns. These rotations are designed to provide the intern with a diverse exposure to multiple facets of the specialty in the inpatient, outpatient, and study environments. It is an ideal rotation for those that are considering the specialty as a career choice and would like to see what it might be like to walk in the shoes of the specialist. Furthermore, this rotation may be beneficial for those interested in seeing observing certain studies done first-hand (eg. colonoscopy, exercise stress tests, pulmonary function studies, etc.). Because the rotation involves various experiences under the direction of a number of attendings, this rotation is not typically meant to be one in which a letter of recommendation can be written.
- Outpatient medicine electives. These rotations are designed to provide interns and residents with exposure to outpatient medicine among the multiple medical subspecialties as well as ambulatory general medicine. Outpatient electives are ideal for interns and residents interested in primary care and medical subspecialties.
- Non-medicine (offservice) electives. These rotations are offered mostly to second and third year residents in addition to preliminary and transitional year interns. They include rotations like radiology, pathology, orthopedics, etc.

In addition to the rotations described in this catalog, there are multiple Non-Internal Medicine rotations offered to interns and residents during the course of their training. These are not explained in this booklet. Further inquiries can be made to the Chief Medical Residents about these opportunities.

If you have any questions, please direct them to the Chief Medical Residents who are responsible for scheduling.

# Cardiology

## Required:

### **Cardiac Intensive Care Unit**

Interns and residents care for patients with a variety of cardiac critical illnesses, including acute coronary syndromes, cardiogenic shock, heart failure, dysrhythmias, and valvular and pericardial diseases. Housestaff will learn principles of acute cardiac critical care management including intraaortic balloon pump management, pharmacologic therapies, and ventilator management. Three intern-resident pairs are supervised by a cardiology attending-fellow team. Teaching rounds are complemented by a didactic lecture series taught by the cardiology faculty. Overnight call is every 3<sup>rd</sup> night.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

### **Inpatient Cardiology – Cardiac Pavilion**

Interns and residents care for patients with a variety of cardiovascular disorders, including heart failure, dysrhythmias, and valvular and pericardial diseases. Housestaff will learn evidence-based practice and management of general cardiology problems. Four intern-resident pairs are supervised by a cardiology attending and fellow. Teaching rounds are complemented by a didactic lecture series taught by the cardiology faculty. Overnight call is every 4<sup>th</sup> night.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

## Electives:

### **Cardiology Exposure**

The goal of this 2-week rotation is to assist interns with sub-specialty career choices by providing an overview of Cardiology. The trainee observes in the cardiac catheterization, echocardiography, and nuclear medicine laboratories and works with fellows and attending physicians in the general cardiology, pulmonary hypertension, heart failure, heart transplant, and electrophysiology clinics.

**Open to:** PGY-1

**Prerequisites:** None

### **Cardiology Consults**

Residents are assigned to the general cardiology consultation service and work with a fellow and an attending physician. Consultative experiences typically cover pre-operative clearance, post-operative arrhythmias, cardiomyopathies, chest pain evaluation, valvular heart disease, and heart failure management on non-cardiac services. Lectures and conferences complement the patient care experience.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

## **Outpatient Cardiology**

During this 4-week outpatient rotation, residents work with fellows and attending physicians in the general cardiology, pulmonary hypertension, heart failure, heart transplant, and electrophysiology clinics. The goals of this ambulatory experience are to broaden the experience of residents to community-based cardiology practices, and may include opportunities to experience outpatient testing such as echocardiogram and nuclear test interpretations with the cardiologist. These experiences will be based out of the UPMC Cardiovascular Institute practices at Passavant and St. Margaret Hospitals.

**Open to:** PGY 2, 3

**Prerequisites:** None

## **Inpatient Advanced Heart Failure, Transplant, and Pulmonary Hypertension**

The Advanced HF/Transplant and PH rotation will expose residents to a subspecialty practice of cardiology focusing on patients with end-stage cardiomyopathies, valvular heart disease, pre-transplant evaluations, post-transplant management, and pulmonary hypertensive diseases. This is an inpatient rotation with attended by the CHF faculty along with a CHF fellow and/or general cardiology fellow. Residents will be exposed to complex hemodynamic physiology and electrophysiology problems and prior cardiology experiences is highly recommended. Residents are responsible for evaluating new admissions and consults with the assistance of the fellow as well as participating in daily patient care rounds with the heart failure team. Opportunity is available to participate in the cath lab performing hemodynamic evaluations and observing endomyocardial biopsy procedures. Residents will be supervised by the heart failure attending and fellow.

**Open to:** PGY-2, 3, but recommended for PGY-3 level

**Prerequisites:** Required prior experience with inpatient cardiology in the CICU, Cardiac Pavilion, or general cardiology consults.

# **Emergency Medicine**

## **Required:**

### **Emergency Department UPMC Presbyterian**

This is a required four week rotation in the UPMC Presbyterian Emergency Department, designated a Level I Regional Resource Trauma Center. Under the close supervision of EM attending faculty, residents assess and manage patients with a wide variety of acute and urgent medical presentations. Residents develop the clinical skills of rapid assessment for the most life threatening conditions, interpretation of diagnostic testing and become competent in the disposition of patients whether for inpatient admission or appropriate follow up in the community. This rotation also provides a good opportunity to do procedures such as arthrocentesis, I & Ds, and lumbar punctures.

**Open to:** PGY 1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 5-6

# Endocrinology and Metabolism

## Electives:

### **Endocrinology Exposure**

The goal of this 2-week rotation is to assist interns with sub-specialty career choices by providing an initial overview of the specialty of Endocrinology and Metabolism. Trainees spend two weeks in the general endocrine clinic and will be expected to attend weekly conferences. Exposure to a wide range of outpatient cases is provided at the Center for Diabetes and Endocrinology (Falk Bldg). Examples of cases include complex diabetes mellitus, insulin-pump therapy, post-transplant diabetes, primary and secondary osteoporosis, thyroid disorders, thyroid cancer, adrenal disorders, pituitary disorders, hypogonadism and disorders of sex steroids, among others.

**Open to:** PGY-1

**Prerequisites:** None

Maximum number of monthly rotators (exposure and outpatient combined): 1

Rotation Length: *2 weeks only*

### **Outpatient Endocrinology**

This rotation provides a diversified experience in outpatient endocrinology. There is greater emphasis on diagnosis and management of diabetes mellitus and its complications. Residents are exposed to Type-1 diabetes, insulin pumps and sophisticated insulin regimens. There is also broader exposure to thyroid, adrenal, pituitary disorders, and osteoporosis. In addition, the resident is expected to attend all weekly conferences in the Division, which include: Endocrine Patient-Care Conference, Endocrinology University-Wide Lecture; Fellow's Board Review Club, Thyroid Conference, Bone Club, and Pituitary-Adrenal Conference.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators (exposure and outpatient combined): 1

Rotation Length: *2 weeks only*

### **Endocrinology and Metabolism Inpatient Consults**

This is a 4-week rotation. It is offered to residents interested in acquiring sophisticated, hands-on expertise in the management of diabetes in the inpatient setting. There are also consults on disorders of the pituitary gland, adrenal gland, thyroid and calcium disorders. Cases are typical of those seen by an endocrinologist in a tertiary referral center. Didactic instruction is provided daily by experienced attending physicians. The resident is expected to attend several weekly conferences in the Division, which include: Endocrine Patient-Care Conference, Endocrinology University-Wide Lecture; Fellow's Board Review Club, Thyroid Conference, Bone Club, and Pituitary-Adrenal Conference.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 2

Rotation Length: 2 or 4 weeks

# Gastroenterology and Hepatology

## Electives:

### **Gastroenterology Consults**

Residents are assigned to the hepatology, pancreatobiliary, or luminal GI consult services and work with a fellow and an attending physician. Lectures and conferences complement the patient care experience. Good rotation for fellowship letters of recommendation.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 3

Rotation Length: *2 or 4 weeks*

### **Gastroenterology Exposure**

The goal of this 2-week rotation is to assist interns with sub-specialty career choices by providing an overview of Gastroenterology. The trainee spends several days observing GI endoscopic procedures, works with both a hepatologist and a luminal gastroenterologist in the outpatient clinic, and attends all GI fellow conferences.

**Open to:** PGY-1

**Prerequisites:** None

Maximum number of monthly rotators (exposure and outpatient combined): 2

Rotation Length: *2 weeks only*

### **Outpatient Gastroenterology**

This 4-week outpatient rotation exposes the trainee to patients with a wide variety of gastrointestinal, hepatic, and pancreatic diseases.

**Open to:** PGY- 2, 3

**Prerequisites:** None

Maximum number of monthly rotators (exposure and outpatient combined): 2

Rotation Length: *2 or 4 weeks*

### **Inflammatory Bowel Disease**

This 4 week rotation exposes the trainee to inpatient and outpatient management of IBD with attending physician. Residents will attend journal club, grand rounds, and outpatient clinics as well as their continuity clinic sessions.

**Open to:** PGY-2, 3

**Prerequisites:** None

Maximum number of monthly rotators: *insert number*

Rotation Length: *2 weeks only, 4 weeks only, 2 or 4 weeks*

# General Internal Medicine

## **Required:**

### **Inpatient Medicine (PGY-1)**

This required 4 week rotation is taken at the VA, Presbyterian/Montefiore campuses and is available at UPMC Shadyside. This rotation focuses on the core clinical skills of inpatient care including taking a history and physical exam, developing a plan of care based on an appropriate differential, using evidence in the choice of studies and therapies, communicating with patients and families and working effectively with members of the team and ancillary services. Learning occurs in the context of bedside teaching rounds, team teaching sessions and personal teaching from the faculty attending and senior residents. In addition interns are expected to demonstrate self-directed learning through the use of text books, review articles and filtered evidence-based resources.

**Open to:** All PGY I

**Prerequisites:** None

### **Inpatient Medicine (PGY-2, 3)**

This required 4 week rotation is taken at the VA, Presbyterian/Montefiore campuses and is available at UPMC Shadyside. This rotation focuses on the role as team leader and teacher as well as requires greater responsibility in decision making in the care of patients. Learning occurs in the context of bedside teaching rounds, team teaching sessions and personal teaching from the faculty attending with a greater emphasis on self-directed learning through the use of the primary literature.

**Open to:** All PGY II and III

**Prerequisites:** Successful performance as a PGY I

### **A Service/ Hospitalist Inpatient Medicine**

Residents typically in their third year work on a team with an attending hospitalist and a physician extender. Residents follow approximately 6-7 patients. They are responsible for developing the plan of care and conducting all conversations with consultants, primary care physicians, family and patients. They function in the role of a practicing hospitalist physician under the close supervision of an experienced faculty member.

Goals of the rotation are:

- 1) Learn time management and efficiency skills
- 2) Introduction to medical billing
- 3) Work with physician extenders and other support personnel, including nursing, social work, and case management.
- 4) Perform required procedures such as venopuncture and placement of intravenous canulas
- 5) Management of challenging patients and difficult situations under the guidance and formative feedback of the hospital medicine attending

**Open to:** PGY 3

**Prerequisites:** completion of sufficient floor month to be able to independently apply prior knowledge acquire



### **Inpatient Medicine Consults/ Medicine Preoperative Evaluation Clinic (VA)**

The goal of this rotation is to train residents to do a comprehensive ambulatory evaluation of patients who are scheduled to undergo low/intermediate/high risk surgeries and develop competence to address acute and lesser acute postoperative issues. On the inpatient side, residents follow their patient consults on a daily clinical basis, monitoring clinical progress and providing advice to the surgical services. In addition to performing cardiopulmonary risk assessment residents give appropriate recommendations to surgical services, manage chronic illnesses like diabetes, hypertension and sleep apnea in the peri-operative setting, review medications and provide appropriate suggestions regarding antiplatelet agents like ASA/Plavix and Coumadin as well as evidence-based recommendations regarding DVT prophylaxis.

**Open to:** PGY 2,3

**Prerequisites:** None

### **Ambulatory Medicine Block (PGY-1)**

This required four week rotation provides interns with a sample of experiences in ambulatory medicine. Learning modalities include didactics, web based modules, hands on physical exam coaching, and clinical experiences related to women's health, urgent care, homeless health, procedure clinic, and intensive training in doctor-patient communication.

**Open to:** PGY-1

**Prerequisites:** None

Maximum number of monthly rotators: 4

Rotation Length: 4 weeks only

### **Ambulatory Medicine Block (PGY-2, 3)**

Three 4 week ambulatory blocks are required of all second and third year residents. One month is scheduled in the second year and two months in the third year. During this rotation residents spend one four week block working with a community primary care practitioners and a second four week block with subspecialty faculty in their ambulatory clinics. The third block is the resident's choice for either subspecialty or general internal medicine. Residents also receive advanced training in doctor-patient communication and motivational interviewing.

**Open to:** PGY-2, 3

**Prerequisites:** Ambulatory Medicine Block (PGY-1)

Maximum number of monthly rotators: no maximum

Rotation Length: 4 weeks only

### **VA ECC (Emergency Care Center) (PGY 1, 2 or 3)**

This is a two to four week rotation that is based at the VA and provides residents with an ambulatory urgent care experience. Residents staff an ambulatory walk-in clinic 8AM to 6PM or 10AM to 8PM weekdays under the supervision of faculty attending where they evaluate and treat a wide variety of urgent care medical problems. This experience helps develop competence in clinical assessment, problem solving and use of outpatient resources in the care of veterans. This rotation may be paired with MUH Night Float or other required rotation depending on the track.

**Open to:** PGY 1,2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 5

## **VA/MUH Night Float**

This is a two week rotation combined with either the ECC or Medicine Consults. Interns gain skills of assessment of patients they are cross-covering while advancing their care overnight. Upper-level residents supervise the interns while doing admissions to the housestaff medicine teams. The safe hand-off of patients is a vital part of the Night Float residents' role and housestaff develop skills necessary to be competent in handing off patients.

**Open to:** PGY 1,2, 3

**Prerequisites:** None

## **Electives:**

### **Ambulatory Consultative Medicine Elective (MUH)**

This four week rotation provides experiences in ambulatory consultative medicine. Residents learn guideline directed evaluation of the preoperative patient with a focus on cardiac and pulmonary preoperative risk assessment and risk reduction strategies.

**Open to:** PGY 2, 3

**Pre-requisites:** None

Maximum number of monthly rotators: 1

Rotation Length: *2 or 4 weeks*

### **Ambulatory Dermatology**

The four week rotation is available for residents anticipating a career in general internal medicine. Residents participate in a busy faculty practice seeing dermatologic patients with practicing dermatologist. Readings and CD videotapes of skin findings are recommended. Weekly didactics are included.

**Open to:** PGY 2, 3 residents in the GIM track

**Pre-requisites:** None

Maximum number of monthly rotators: 1 (no rotators during month of July)

Rotation Length: *2 or 4 weeks*

### **Advanced Psychiatry for the General Internist**

Interns or residents rotate through multiple outpatient psychiatric clinics and work with the inpatient consult liaison service. Trainees work 1:1 with faculty focusing on the mood and anxiety disorders, eating disorders, geriatric psychiatry, obsessive-compulsive disorder and urgent psychiatric care. There is a prominent didactic component with the psychiatry residents. 1-2 residents can be on the rotation at a time.

**Open to:** PGY 1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: *1-2*

Rotation Length: *2 or 4 weeks*

### **Musculoskeletal Month**

This four week rotation is intended for residents who anticipate a career in general internal medicine. Residents work with a variety of issues in musculoskeletal medicine such as sports medicine, physical medicine and rehabilitation, orthopedics, and rheumatology. Resident has

hands on training in joint aspiration and injection and intensive training in physical examination techniques. Didactics include case based evidence based medicine for the care of the large joints. Residents may also opt to rotate in sports medicine physical therapy and musculoskeletal radiology.

**Open to:** PGY 2, 3 in the General Internal Medicine Track

**Pre-requisites:** None

Maximum number of monthly rotators: 1

Rotation Length: *2 or 4 weeks*

### **Medicine Consults – MUH**

The medicine consult rotation provides residents with the opportunity to develop the skills and knowledge base necessary to effectively perform internal medicine consults on nonmedical inpatients. Specific areas of focus include perioperative medical risk assessment and management, current evidence-based guidelines, and co-management of surgical patients in the era of the hospitalist. Teaching methods include one-on-one mentoring with the consult faculty attending during daily rounds as well as review of current textbooks and both recent and landmark articles in consultative medicine.

**Open to:** PGY 2, 3

**Pre-requisites:** None

Maximum number of monthly rotators: 1

Rotation Length: *2 or 4 weeks*

### **Private Practice HMO Elective**

This is four week elective experience in Boulder, Colorado as part of the Kaiser Permanente Health Maintenance Organization. Residents are provided with housing and transportation and experience general internal medicine as part of a large Health Maintenance Organization.

**Open to:** PGY 2, 3 There are a limited number of residents accepted per year thus approval needed from the program director.

**Pre-requisites:** None Rotation Length: *4 weeks only*

### **Rural Medicine Elective**

This four week rotation is available for residents who are interested in primary care of the rural patient. Residents work with community physicians as part of the Pennsylvania South West Area Health Education Center.

**Open to:** PGY 2, 3

**Pre-requisites:** None

Maximum number of monthly rotators: 1

Rotation Length: *4 weeks only*

### **Women's Health Elective**

The Women's Health Elective is a core part of the Women's Health Track Residency. Both gender-specific primary care and subspecialty experiences are offered. Residents participate in the gender-specific primary care clinics working with the Section of Women's Health Faculty seeing first hand how a "one-stop shopping model" for managing both traditional medical and gynecologic concerns is incorporated into an outpatient practice. Topics managed in the primary care setting include: contraception, menopause, PCOS, sexual trauma, sexual dysfunction,

abnormal uterine bleeding, breast and cervical cancer screening, and osteoporosis. In addition, opportunities to participate in gender focused subspecialty clinics are available and include such rotations as: High Risk Breast Clinic, Women's Heart Clinic, Endocrinology, Gynecology, Reproductive Endocrinology and Uro-gynecology. Residents work to individualize their schedules to meet their own specific learning need.

**Open to:** Women's Health Track residents and with special permission from the track director

**Pre-requisites:** Approval by Women's Health Track Director

Rotation Length: *4 weeks only*

### **Non Internal Medicine Sub-Specialty Rotations (NIMS)**

This four week rotation is offered to residents who wish to explore adjunctive training in areas related to internal medicine. Experiences are available in radiology, ophthalmology, anesthesia, cardiac testing, orthopedics, pain medicine, physical medicine and rehabilitation, integrative medicine, procedures clinic and adolescent medicine. The rotation can be designed according to the trainee's specific interests.

**Open to:** PGY 2, 3

**Pre-requisites:** None

Maximum number of monthly rotators: 2

Rotation Length: *4 weeks only*

### **Special Electives**

Special electives are unique rotations designed by the resident to develop skills and a knowledge base or gain exposure to an identified area of interest. Examples include but are not limited to international health experiences, administrative medicine, patient safety and quality as well as research. These rotations must be arranged at least 6 months in advance (particularly the international experiences) to ensure that everything is in place for a successful rotation. Meet with your advisor to determine the appropriate faculty contacts to develop the rotation. *Note that the ABIM allows only a total of 3 non-clinical months during 36 months of training. You must be sure that this number is not exceeded when signing up for this elective if the experience is not clinically based.*

**Open to:** PGY-2 and 3

**Prerequisites:** None

## **Non-Clinical Electives:**

### **Institute for Clinical Research Education**

The University of Pittsburgh offers training in clinical research, through the Institute for Clinical Research Education. Residents participating in the Clinical Scientist Training Program (CSTP) and the International Scholars Program (ISP) enroll in a series of courses in July and August of their R2 year, including topics such as clinical research methods, computer methods in clinical research, biostatistics, and measurement in clinical research. Residents are expected to attend their continuity clinic sessions. *Note that the ABIM allows only a total of 3 non-clinical months during 36 months of training. You must be sure that this number is not exceeded when signing up for this elective.*

**Open to:** ISP or CSTP PGY 2 residents (exceptions made with special approval from course directors and program director)

**Prerequisites:** Satisfactory completion of PGY 1 year

### **Medical Educator**

This four week rotation combines advanced education in physical diagnosis with training in education techniques. This rotation includes daily didactic sessions as well as educational experiences with medical students who are learning physical diagnosis. Residents are expected to research and present an evidence based lecture on specific physical exam findings. Residents will attend their continuity clinic sessions. *Note that the ABIM allows only a total of 3 non-clinical months during 36 months of training. You must be sure that this number is not exceeded when signing up for this elective.*

**Open to:** PGY 2, 3

**Pre-requisites:** None

Rotation Length: *4 weeks only*

# **Geriatrics**

## **Required:**

### **Inpatient Geriatrics**

Trainees are exposed to the acute care of the elderly during this 2 (PGY2/3) or 4 week (PGY1) rotation. The team is structured with one resident supervising two interns with attending supervision. The rotation emphasizes the differing disease presentations observed and treatment strategies used in Geriatric patients compared to other patient populations. Important goals of the rotation include improving communication skills with patients and their caregivers and becoming more thoughtful about discharge options for patients. Good for fellowship letter of recommendation.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

## **Benedum Geriatrics Center**

Trainees are exposed to the care of elders in the outpatient, home care, and nursing home setting during this 4-week rotation. The rotation emphasizes the history and exam skills needed to perform a geriatric assessment as well as using the assessment to develop a problem list and treatment plan. Important goals of the rotation include improving communication skills with patients and their caregivers, learning management approaches for common outpatient complaints, and learning to use the Geriatrics literature. Good for fellowship letter of recommendation.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 3

Rotation Length: *2 or 4 weeks*

## **Electives:**

### **Geriatrics Exposure**

The goal of this 2-week rotation is to assist interns with sub-specialty career choices by providing an overview of geriatric medicine. Trainees will spend time in the Geriatrics clinic and also have the opportunity to do home care visits and interact with patients in long-term care facilities.

**Open to:** PGY-1

**Prerequisites:** None

Maximum number of monthly rotators: 1

Rotation Length: *2 weeks only*

### **General Geriatrics**

This is a four-week elective is designed to build upon the knowledge, skills, and attitudes developed during the inpatient and outpatient rotations of the core curriculum. Residents will have the opportunity to tailor rotations to explore a particular venue of care, gain additional practice at Geriatric assessment, or learn about areas of Geriatrics or closely-related aspects of care, like Podiatry, Rehab, or wound care, not seen in prior rotations. This rotation can be particularly valuable for residents undecided about career choice, considering Geriatric fellowship, or planning primary care or specialty careers involving older patients. Good for fellowship letter of recommendation.

**Open to:** PGY-1, 2, 3

**Prerequisites:** Completion of Inpatient or Outpatient Required Rotation(s)

Maximum number of monthly rotators: 1

Rotation Length: *4 weeks only*

### **Advanced Geriatrics: Syndromes**

This is a four-week elective designed to build upon the knowledge and skills developed during the inpatient and outpatient rotations of the core curriculum with a specialized focus on Geriatric syndromes. Residents will rotate through the Uro-gynecology clinic at Magee and Incontinence clinic at MUH, observe cystometric evaluation and biofeedback, rotate through the Falls clinic at MUH and the Vestibular balance lab, and learn about gait and balance evaluation from physical therapy. This rotation is particularly valuable for residents planning a primary care career. Good for fellowship letter of recommendation.

**Open to:** PGY- 1, 2, 3

**Prerequisites:** Completion of Inpatient or Outpatient Required Rotation(s)

Maximum number of monthly rotators: 2

Rotation Length: *4 weeks only*

### **Advanced Geriatrics: Long-term Care**

This is a four-week elective designed to build upon the knowledge, skills, and attitudes developed during the outpatient rotations of the core curriculum. Rotations are designed to expose residents in depth to assisted living, long-term nursing home care, nursing home rehab, and dementia care. This rotation can be particularly valuable for residents undecided about career choice or planning a primary care careers. Good for fellowship letter of recommendation.

**Open to:** PGY- 2, 3

**Prerequisites:** Completion of Outpatient Required Rotation

Maximum number of monthly rotators: 1

Rotation Length: *4 weeks only*

### **Advanced Geriatrics: Neurology and Psychiatry**

This is a four-week elective designed to emphasize the evaluation and treatment of common Neurologic and Psychiatric problems seen in older patients. This rotation can be particularly valuable for residents who want additional practice in performing the Neurologic and Psychiatric history and exam. Time will be spent in Neurology clinics focused on stroke, movement disorders, cognitive disorders, and peripheral neuropathy; and also rotate in the outpatient Geriatric Psychiatry clinic at the Benedum clinic. This rotation will be of value to residents considering primary care, specialty careers involving older patients, or hospitalist careers.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 1

Rotation Length: *4 weeks only*

# Global Health

## **Indian Health Service**

Chinle Comprehensive Health Care Facility provides an outpatient elective experience on the Navajo reservation in Arizona to first year global health residents in March or April (2<sup>nd</sup> and 3<sup>rd</sup> year categorical residents may sign up if there are unfilled positions). Chinle is a 60 bed inpatient hospital and outpatient clinic providing medical care for approximately 35,000 Navajo. A typical day consists of inpatient rounds followed by ambulatory clinics with no night or weekend duties. Residents work under the supervision of IHS physicians. There are also opportunities to work with other disciplines depending on individual interest and availability. These include the fracture clinic, chest clinic, adolescent medicine/teen clinic, radiology, physical and occupational therapy, nutrition, exercise stress testing, native healing, pharmacy, and public health nursing (community and home based patient interactions).

**Open to:** Global Health Track interns. Categorical PGY II or III only with special permission from program directors (Global Health and Categorical)

**Prerequisites:** Approval of track directors

## **Global Health Seminar**

This is a month-long intensive experience designed to prepare residents for clinical and scholarly work in an international setting. Through didactics, team based learning, case studies and independent research; residents will learn relevant clinical skills, global public policy, leadership development, management skills, health care delivery challenges and ethical issues of working in resource limited settings. A multidisciplinary faculty panel from the School of Medicine, Graduate School of Public Health, Law, and Graduate School of Public and International Affairs provide the multidisciplinary context vital for the study of global health. The course includes a workshop on portable ultrasound for abdomen, pelvis, and chest and a review of procedural skills necessary for medical specialist in developing countries. Residents will complete a number of mini-projects including producing a critically appraised topic useful for clinicians in less developed countries, a policy brief, an ethics case study and an oral presentation about the socio-economic and political situations of a country or region of interest. This is considered a non-clinical month but residents are expected to attend their continuity clinics and additional time at the Birmingham Free Clinic. *Note that the ABIM allows only a total of 3 non-clinical months during 36 months of training. You must be sure that this number is not exceeded when signing up for this elective.*

**Open to:** All PGY levels

**Prerequisites:** none



# Hematology-Oncology

## **Required:**

### **Inpatient Hematology-Oncology (PCI)**

Interns and resident teams care for patients with a variety of solid tumors as well as those with both benign and malignant hematologic disorders.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Rotation Length: *4 weeks only*

## **Electives:**

### **Hematology-Oncology Exposure**

The goal of this 2-week rotation is to assist interns with sub-specialty career choices by providing an overview of this sub-specialty. The trainee works with fellows and attending physicians in the breast cancer, thoracic oncology, GU oncology, GI oncology, and benign and malignant hematology clinics.

**Open to:** PGY-1

**Prerequisites:** None

**Rotation Length:** *2 weeks*

Maximum number of monthly rotators: 2 every 2 weeks

### **Hematology-Oncology Outpatient Clinic**

The goal of this 4 week rotation is for PGY-2 and PGY-3 house officers to gain experience in the outpatient management of a variety of cancers and hematologic disorders. The trainee works with fellows and attending physicians in the breast cancer, thoracic oncology, GU oncology, GI oncology, and benign and malignant hematology clinics. Specific learning objectives include

1. Exposure to a range of cancers and hematologic disorders in the ambulatory setting
2. Exposure to chemotherapy and biologic therapeutic regimens used in the outpatient setting
3. Application of Evidence-based Medicine in Oncology-specific tools such as NCCN/ASCO consensus guidelines and ASCO abstracts/virtual meeting
4. Multidisciplinary cancer care in the ambulatory setting (Medical/Radiation/Surgical oncology and Palliative Care).
5. Clinical trials in Oncology.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

**Rotation Length:** *2 or 4 weeks*

Maximum number of monthly rotators: 4

## **Hematology Consults**

On this inpatient rotation interns and residents work with the attending physician and Heme/Onc fellow in the consultative management of inpatient hematologic issues, including coagulation, blood banking and interpretation of peripheral blood smears . Lectures and conferences complement the patient care experience. Good rotation for fellowship letters of recommendation.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

**Rotation Length:** *2 or 4 weeks*

Maximum number of monthly rotators: 3

## **Inpatient Leukemia/BMT**

This is an inpatient rotation in which residents will work on the Acute Leukemia Service and the Stem cell transplant service. It is suggested that residents spend half their time on each team, but this can be discussed by the resident and the attendings on service. Goals of the rotation are:

1. Understand the clinical presentation and initial evaluation and treatment of acute leukemia
  2. Develop basic skills in evaluating bone marrow and aspirates and biopsies in acute leukemia
  3. Understand indications for allogeneic and autologous stem cell transplantation and basic transplant procedures
  4. Develop basic skills in the recognition, diagnosis, grading and treatment of Graft-versus-host disease and other transplant-related complications
- Understand the application of evidence-based medicine in the care of patients with acute leukemia and stem cell transplantation.

**Open to:** PGY-2, 3

**Prerequisite:** Inpatient Hematology-Oncology

**Rotation Length:** *4 weeks only*

Maximum number of monthly rotators: 1

## **Oncology Consults**

Interns and residents may work on the oncology consult service. Lectures and conferences complement the patient care experience. Good rotation for fellowship letters of recommendation.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

**Rotation Length:** *2 or 4 weeks*

Maximum number of monthly rotators: 1

# Infectious Diseases

## Electives:

### **Infectious Diseases Exposure**

The goal of this 2-week rotation is to assist interns with sub-specialty career choices by providing an overview of Infectious Diseases. Trainees spend time in general ID, transplant ID, HIV and STI clinics, attend infection control meetings and also see a wide variety of inpatient medical, surgical, and transplant ID consults.

**Open to:** PGY-1

**Prerequisites:** None

Maximum number of monthly rotators (exposure and outpatient combined): 1

*Rotation Length: 2 weeks only*

### **Infectious Diseases Consults**

This inpatient consult rotation exposes the resident to a wide range of infectious diseases by rounding with our VA or PUH ID consultation service. Daily lectures and conferences complement the patient care experience. Depending upon availability the resident may elect to round on the surgical service and attend some PACT (HIV clinic) sessions. Good rotation for fellowship letters of recommendation.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 4

### **PACT Clinic**

The clinic is located in Falk 7<sup>th</sup> Floor and provides a combination of specialty HIV care combined with primary care for a very mixed population. Residents deal with problems related to homelessness, gender issues, STI's, secondary transmission, medication adherence, illegal drug use, and psychiatric illness. Additional focus is placed on HIV treatment, opportunistic infections, hepatitis treatment, chronic pain and drug interactions. Lectures and conferences complement the patient care experience. Good experience for preparation for ID fellowship.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 2

*Rotation Length: 2 or 4 weeks*

### **Transplant Infectious Diseases**

This is an inpatient consult rotation with a small team consisting of an attending and one fellow only. The resident receives an intensive experience in the diagnosis and management of opportunistic infections, post surgical infections and infection prophylaxis. Residents also attend division lectures and conferences. Good for prospective fellows in Nephrology, Heme/Onc, Pulmonary and GI.

**Open to:** PGY-2, 3

**Prerequisites:** One previous ID rotation (>2 weeks)

Maximum number of monthly rotators: 2  
Rotation Length: *2 or 4 weeks*

### **Surgical ID Consults**

The resident rounds with an ID attending (one on one-occasionally with an ID Fellow) on the ID Surgical Consult Service. This consult service specializes in the management of orthopedic, cardiothoracic, ENT and neurosurgical infections. This is a 2 or 4 week rotation. Contact Dr. Peter Veldkamp for availability.

**Open to:** PGY 2 or 3

**Prerequisites:** Only after finishing a general ID consult rotation (>2 weeks)

Maximum number of monthly rotators: 1

Rotation Length: *2 or 4 weeks*

# **Nephrology**

## **Electives:**

### **Nephrology Exposure**

The goal of this 2-week rotation is to assist interns with sub-specialty career choices by providing an overview of nephrology. Trainees rotate through general nephrology, SLE, and peritoneal dialysis clinics. They also spend several half-days in the hemodialysis unit.

**Open to:** PGY-1

**Prerequisites:** None

Maximum number of monthly rotators (exposure and outpatient combined): 2

Rotation Length: *2 weeks only*

### **Outpatient Nephrology**

This 4-week rotation provides a broad exposure to outpatient nephrology. Trainees rotate through general nephrology, SLE, and peritoneal dialysis clinics and attend all division conferences.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators (exposure and outpatient combined): 2

Rotation Length: *2 or 4 weeks*

### **Nephrology Consults**

Trainees are exposed to patients with a wide variety of renal diseases, including acute kidney injury, chronic kidney disease, and end-stage renal disease on the inpatient services. The diagnosis and management of electrolyte disorders is also emphasized. Division conferences and lectures complement the patient care experience. This service is staffed by a nephrology fellow and an attending physician. Best nephrology rotation for fellowship letters of recommendation.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 4

## **Renal Transplantation**

This rotation provides both an outpatient and an inpatient experience in the evaluation and management of patients with kidney transplantation. The clinical experience and didactics of the rotation are designed to expose learners to the practice of clinical transplantation, teach multidisciplinary team based patient management, and provide the basis for an understanding of transplant immunology and nephrology. It also provides an opportunity for residents considering fellowship training in nephrology to further explore the subspecialty.

**Open to:** PGY-2, 3

**Prerequisites:** Inpatient Nephrology

Maximum number of monthly rotators: 1

Rotation Length: *2 or 4 weeks*

# **Neurology**

## **Required:**

### **Inpatient Neurology Service**

This two week rotation on the Neurology Stroke Service will provide Internal Medicine PGY II and III residents with an exposure to a diverse variety of neurology patients with whom they will learn the most evidenced approach to diagnosis and management. Residents will assume care of patients admitted to this service under the guidance of a senior neurology resident and faculty attending. Trainees will be directly involved in both diagnostic and therapeutic decision making. Training emphasis will be placed on neuroanatomical correlations.

**Open to:** PGY – 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: *insert number*

Rotation Length: *2 weeks only*

## **Elective:**

### **Ambulatory Neurology**

This two week rotation is intended for residents who anticipate a career in general internal medicine or sports medicine. Residents begin with a didactic session on functional neuroanatomy including lectures, readings and a physical exam practicum. Residents then are exposed to clinic experiences in the evaluation and treatment of headache, vertigo, movement and gait disorders, as well as a general neurology clinic. Residents also work in the ambulatory stroke clinic and participate in the on-call rotation for the inpatient stroke service. A syllabus of relevant readings on core topics is provided.

**Open to:** PGY 2, 3 (Limited to 5 residents per year)

**Pre-requisites:** None

# Palliative Care

## Required:

### **Inpatient Palliative Care**

The purpose of this 2-week rotation coupled with the inpatient geriatrics rotation is to allow residents to have an opportunity to spend time with an inpatient Palliative Care consult service to work on communication skills, work with an interdisciplinary team, and learn about post-hospital care options for patients with life-limiting illness. Residents can also choose to see patients for whom symptom issues predominate.

**Open to:** PGY-2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 1\*

Rotation Length: *2 weeks\**

\*Rotation is required for some residents, so there is continually a resident for ½ block rotations

## Electives:

### **Palliative Care Exposure**

During this 2-week exposure elective, interns will divide their time between inpatient palliative care consults, inpatient hospice, home hospice, palliative care clinic, and division conferences.

**Open to:** PGY-1

**Prerequisites:** None

Maximum number of monthly rotators: 1

Rotation Length: *2 weeks only*

### **Palliative Care**

The purpose of this 4-week rotation is to increase the resident's awareness, knowledge, and clinical skills when dealing with terminally ill patients and their families. Time can be divided between multiple sites in an effort to expose learners to various aspects of Palliative Care and meet their learning goals. The PUH/MUH Palliative Care consult service has many consults focusing on communication skills and determining goals of care. The consult service at UPMC Shadyside, has more of a focus on symptom management and the consult service at Magee Womens Hospital has a mix of symptom and communication consults. Residents can also spend time with hospice, which can include seeing patients in their homes with members of the hospice interdisciplinary team or rounding at inpatient hospice units.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 1

Rotation Length: *4 weeks only*

# Pulmonary and Critical Care Medicine

## **Required:**

### **Medical Intensive Care Unit (MUH)**

Interns and residents care for patients with a wide variety of medical critical illnesses including ARDS, shock, sepsis, respiratory failure, GI bleeding, renal failure, hepatic failure, DKA, seizures, and drug overdose. Trainees perform a number of diagnostic and therapeutic procedures, including airway management, thoracentesis, and central venous, arterial, and right heart catheterization. Four intern-resident pairs (including a night float team) care for 24 patients and are supervised by two attending-fellow teams.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

### **VA Intensive Care Unit (VA)**

Interns and residents care for veterans in this dual medical and cardiac intensive care unit with a wide variety of critical illnesses including ARDS, sepsis, respiratory failure, GI bleeding, renal failure, hepatic failure, DKA, seizures, drug overdose, cardiogenic shock, heart failure, arrhythmias, and complicated acute myocardial infarction. Trainees perform a number of diagnostic and therapeutic procedures, including airway management, thoracentesis, and central venous, arterial, and right heart catheterization. In addition, housestaff evaluate and lead resuscitation efforts for patients that are decompensating on other services in the hospital. Four intern-resident pairs take care of patients under the supervision of a pulmonary attending, pulmonary fellow, and cardiologist.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

## **Electives:**

### **Allergy and Immunology**

Residents will rotate in the outpatient Adult Allergy, Asthma & Immunology Clinic located in the Comprehensive Lung Center. The residents will learn how to evaluate, diagnose and treat the following conditions: Asthma, Chronic Cough, Allergic and Nonallergic Rhinitis, Chronic sinusitis, Nasal Polyposis, Adult Immunodeficiency ( non-HIV- for example hypogammaglobulinemia, common variable immunodeficiency, ...), Food Allergy, Stinging Insect Allergy, Urticaria, Angioedema, Drug Allergy, Allergic Skin Conditions ( contact dermatitis, atopic dermatitis), Paradoxical Vocal Cord Dysfunction, Anaphylaxis. Residents will learn how to interpret PFTs (spirometry with lung volumes and DLCO), exhaled nitric oxide test, methacholine challenge test, serologic and cutaneous allergy testing. The residents are also welcome to attend the weekly Allergy-Immunology Case Conference.

**Open to:** PGY- 1, 2, 3

**Prerequisites:** None but require special permission from Dr. Petrov

Maximum number of monthly rotators: 1

Rotation Length: *2 or 4 weeks*

## **Critical Care Consult Service Rotation**

The main goal of this rotation is to familiarize residents with the care of unstable patients outside of the ICU environment. The course will be a mixture of consults for the critical care team as well as participation in the rapid response team. Another goal is to improve the quality of care we deliver for critically ill patients. Residents will be expected to briefly follow up on patients that had conditions called (whom they evaluated) to determine if the level of care was appropriate and to follow up on patient care decisions.

Consult service staffed by critical care medicine faculty and internal medicine house staff Monday through Friday. Residents are expected to participate from 9AM to 5 PM. Residents are expected to attend morning report from 8 AM to 9 AM. Residents are expected to attend noon conference from 12-1 PM. Residents also expected to attend continuity clinic at regularly scheduled time.

**Open to:** PGY 3

**Prerequisites:** Satisfactory completion of MICU and inpatient medicine at the resident level  
Maximum number of monthly rotators: 1

Rotation Length: *2 or 4 weeks*

## **Pulmonary Medicine Exposure**

The goal of this 2-week rotation is to assist interns with sub-specialty career choices by providing an overview of pulmonary medicine. Trainees rotate through general pulmonary, COPD, CF, interstitial lung disease, asthma, and sleep medicine clinics, observe in the bronchoscopy suite, and receive instruction in PFT interpretation.

**Open to:** PGY-1

**Prerequisites:** None

Maximum number of monthly rotators (exposure and outpatient combined): 1

Rotation Length: *2 weeks only*

## **Outpatient Pulmonary Medicine**

This 4-week rotation provides a broad exposure to outpatient pulmonary medicine. Trainees rotate through general pulmonary, COPD, CF, interstitial lung disease, asthma, and sleep medicine clinics.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators (exposure and outpatient combined): 1

Rotation Length: *2 or 4 weeks*



## **Pulmonary Medicine Consults**

Trainees are exposed to patients with a wide variety of pulmonary disorders, including COPD, asthma, interstitial lung disease, pneumonia, bronchogenic carcinoma, and pulmonary vascular disease on the inpatient services. The interpretation of chest radiographs, CT scans, and PFTs is emphasized. Trainees perform thoracenteses, observe bronchoscopic procedures, and attend all division conferences. This service is staffed by a pulmonary/CCM fellow and an attending physician. Best rotation for fellowship letters.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly rotators: 3

Rotation Length: *2 or 4 weeks*

# **Research**

## **Electives:**

### **Institute for Clinical Research Education**

The University of Pittsburgh offers training in clinical research, through the Institute for Clinical Research Education. Residents participating in the Clinical Scientist Training Program (CSTP) and the International Scholars Program (ISP) enroll in a series of courses in July and August of their R2 year, including topics such as clinical research methods, computer methods in clinical research, biostatistics, and measurement in clinical research. Residents are expected to attend their continuity clinic sessions. *Note that the ABIM allows only a total of 3 non-clinical months during 36 months of training. You must be sure that this number is not exceeded when signing up for this elective.*

**Open to:** ISP or CSTP PGY 2 residents (exceptions made with special approval from course directors and program director)

**Prerequisites:** Successful clinical performance during PGY 1 year

### **Research Block**

Experiences are available for both basic science and clinical research in all subspecialty fields. Generally a month is sufficient to get a project started or to finish one that is well along but generally a project cannot be started and finished in one month alone. Arrangements for a research block must be made 3 months in advance to ensure a meaningful experience. Residents should contact the appropriate Subspecialty Education Coordinator or Research Point Person to identify a research advisor and begin to plan the month. A form outlining the plan for the month and signed by the research advisor must be submitted to the Chief Medical Residents for approval by the Program Director. Residents are expected to attend their continuity clinic sessions. *Note that the ABIM allows only a total of 3 non-clinical months during 36 months of training. You must be sure that this number is not exceeded when signing up for this elective.*

**Open to:** PGY-1, 2, or 3

**Prerequisites:** Completion of pre-research form.

# Rheumatology

## **Electives:**

### **Rheumatology Exposure**

The goal of this 2-week rotation is to assist interns with sub-specialty career choices by providing an overview of rheumatology. Trainees rotate through general rheumatology, SLE, scleroderma, vasculitis and myositis clinics. Currently, there is no inpatient rheumatology experience during this rotation.

**Open to:** PGY-1

**Prerequisites:** None

Maximum number of monthly openings (for 1 and 2 combined): 2

Rotation Length: *2 weeks*

### **Outpatient Rheumatology**

This 4-week rotation provides a broad exposure to outpatient rheumatology. Trainees rotate through general rheumatology, SLE, scleroderma, vasculitis and myositis clinics, and attend all division conferences. Currently, there is no inpatient rheumatology experience during this rotation.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly openings: (for 1 and 2 combined): 2

Rotation Length: *2 or 4 weeks*

### **Rheumatology Consults**

During this 2-4 week rotation, trainees learn to assess and manage patients with a wide variety of musculoskeletal and autoimmune disorders on the inpatient service. Emphasis is placed on the appropriate utilization of diagnostic laboratory and imaging studies as well as management of inpatient rheumatologic disorders. This service is staffed by a rheumatology fellow and an attending physician. For trainees interested in pursuing a rheumatology fellowship (see below), this rotation is essential and should be completed prior to pursuing the application process for subspecialty training. Letters of recommendation should be sought by the trainee with the faculty member(s) with whom they rotate but trainees must meet with the Program Director in rheumatology. Currently, there is no outpatient rheumatology experience in this rotation.

**Open to:** PGY-1, 2, 3

**Prerequisites:** None

Maximum number of monthly openings: 3

Rotation Length: *2 or 4 weeks*

# Off-service (non-medicine) Electives

There are a large number of electives available within our institution, and including them all in the course catalog would result in too large a reference document. If you are interested in completing a non-medicine elective (for example, anesthesia), please include your request in your scheduling request document under the “Other rotations” section. If you have any questions about rotations that are available, talk to the chief residents. Spots are limited each month in the various rotations.