INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Curriculum

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INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Cardiology Curriculum

1. EDUCATIONAL GOALS

The goal of the cardiology rotation is to teach residents to provide quality medical care to patients with hypertension, acute myocardial infarction, congestive heart failure and valvular heart disease as well as the associated complications of these disorders in the inpatient and outpatient settings.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-2 and PGY-3

Inpatient Consultation Service	
Demonstration of bedside skills necessary for the assessment and on-going care of patients with cardiac problems.	→ Patient Care → Medical Knowledge
Identification of common etiologies, presentations, complications of heart failure, chest pain and valvular disease and their management.	→ Medical Knowledge → Practice Based Learning
Identify appropriate utilization of the cardiology subspecialty consultation in a cost-effective and evidence based manner.	→ Medical Knowledge System Based Learning
Understanding and interpretation of the tests and radiological imaging utilized in the evaluation, management and monitoring of patients with cardiac diseases such EKG, exercise stress testing and radionuclide imaging.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Actively participate in making informed recommendations about preventive, diagnostic, and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning
Communicate effectively with patients and their families in all situations, especially around difficult issues such as end-of life decision-making in patients with end-stage heart failure.	→ Interpersonal And Communication Skills → Practice Based Learning
Provide effective and professional consultation to referring physicians and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.	→ Interpersonal And Communication Skills → Professionalism
Observe and when appropriate participate in cardiology-specific procedures including central IV line placement and invasive monitoring, echocardiography and cardiac catheterization.	→ Patient Care → Medical Knowledge → Practice Based Learning

Outpatient Service

Cardiology Clinic	
Evaluation of patients with coronary artery disease, valvular heart disease and heart failure.	→ Medical Knowledge → Patient Care → Practice Based Learning
Identification of signs and symptoms of secondary hypertension, possible etiologies and appropriate testing, as well as management appropriate management.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Identification of and management of patients with resistant hypertension including factors that contribute to difficult to control hypertension including noncompliance.	→ Medical Knowledge → Patient Care → Practice Based Learning → Interpersonal And Communication Skills
Appropriate implementation of preventive care including modification of risk factors for coronary artery disease.	→ Medical Knowledge → Practice Based Learning → System Based Learning

Didactics	
Present case conference involving an interesting patient seen on the inpatients consult service.	→ Scholarly Activity
Adhere to principles of confidentiality, scientific/academic integrity, and informed consent.	→ Professionalism → Scholarly Activity

3. PRINCIPAL TEACHING METHODS

Residents on the cardiology service will participate in patient evaluation and management on the inpatient consultation service for the wards and the CCU as well as the outpatient hypertension clinic, renal clinic and hemodialysis unit. Residents will also attend the various didactic sessions conducted/attended by the division.

The inpatient consult service sees patients on the medicine wards as well as the wards of other services including surgery and obstetrics and gynecology when recommended by the internal medicine consult service. These patients are discussed with the attending for the service before evaluation and management recommendations are made.

The hypertension clinic provides an opportunity for residents to participate in the care of patients with coronary artery disease, heart failure and valvular disease.

4. SUPERVISION OF RESIDENTS BY FACULTY

Inpatient Consultation Service: Rounds are conducted 5 days per week with the faculty attending physician. Both new and follow-up consults are discussed. All resident notes are signed by the attending.

Clinics: Every patient encounter is discussed with the attending physician before the patient leaves the clinic and every note is co-signed by the attending.

5. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs on a daily basis through close observation by the assigned teaching attending, who is also expected to provide formal oral summary evaluations to the residents at the end of the rotation. Residents also receive a written evaluation from the teaching attendings at the conclusion of the rotation via the myevaluations system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system.

6. SUGGESTED CORE READING LIST AND REFERENCES

(All Blue Text Is Hyperlinked Via The Columbia Library. You Will Need Your UNI to Access These Resources)

6.1 Core Textbooks

Harrison's Principles of Internal Medicine *(Available Via CUMC Library Online At http://www.accessmedicine.com.monstera.cc.columbia.edu:2048/resourceToc.aspx?resourceID=4)*

6.1.2 Other Suggested Reading: General

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Consultation Medicine Curriculum

1. EDUCATIONAL GOALS

General internists should have an appreciation of the body of knowledge that has developed in consultative medicine. Most important is an understanding of the physiologic response to surgery and anesthesia, disease-related and procedure-related risk, prophylactic therapy to prevent peri-operative problems, and postoperative medical complications. The general internist should also sufficiently understand the physiology of pregnancy and the categories of psychiatric disease and its pharmacologic treatment to manage medical problems in these patients effectively.

Given the broad nature of consultative medicine, the range of competencies in medical consultation varies little among practice settings. However, the extent and complexity of the role may be determined by the availability of surgical, anesthesia, trauma/critical care, obstetric, psychiatric, and other specialists, including internal medicine sub-specialists. Optimal consultative care requires skills that can be adapted to both office practice and a variety of hospital settings, including outpatient and day surgery.

Since medical consultation is practiced at the interface of internal medicine and other specialties, it requires familiarity with those specialties, skill in synthesizing information, and appropriate effective communication with attending and other consulting physicians, dentists, other health care workers, and families.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-3

Inpatient Consultation Service	
Demonstration of bedside skills necessary for the assessment of medical problems in patients on other services.	→ Patient Care → Medical Knowledge
Demonstrate an understanding of the knowledge base necessary for effective consultation: • Assessment of need for antibiotic prophylaxis for invasive procedure • Assessment of need for anticoagulation as a prophylactic procedure • Assessment of need for transfer to medical service • Assessment and management of preoperative risk • Medical problems arising during postoperative recovery • Medical problems during pregnancy • Medical problems in psychiatric patients	→ Medical Knowledge
Identify appropriate utilization of specialty consultation in a cost-effective and evidence based manner	→ Medical Knowledge → System Based Learning
Understand the tests and radiological imaging utilized in the pre-operative evaluation of patients on the surgery and gynecology services, specifically cardiac and pulmonary non-invasive testing, and assessment of the risk of thrombo-embolic disease.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning

Actively participate in making informed recommendations about preventive, diagnostic, and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning
Communicate effectively with patients and their families in all situations.	→ Interpersonal And Communication Skills → Practice Based Learning
Provide effective and professional consultation to referring physicians and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues; develop an understanding of the role of the consultant. This includes: • Learning to perform an appropriately extensive or focused history and physical exam relate to the question asked • Clear verbal and written communication of the assessment and recommendations • Appropriate follow-up and re-assessment • Teaching with tact	→ Patient care → Interpersonal and Communication skills → Professionalism

Outpatient Service

Ambulatory Surgery	
Evaluation of ambulatory patients scheduled for elective surgery.	→ Medical Knowledge → Patient Care → Practice Based Learning
Request appropriate pre-operative diagnostic testing and make recommendations based on the results.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Communicate directly with referring physicians when appropriate.	→ Medical Knowledge → Patient Care → Communication Skills

3. PRINCIPAL TEACHING METHODS

Residents on the will participate in patient evaluation and management on the inpatient consultation service for other services including surgery and obstetrics and gynecology.

The ambulatory surgery clinic provides an opportunity for residents to evaluate outpatients who are being prepared for elective surgery.

The reading list at the end of this document will help residents orient their learning plan for the rotation and this is discussed with the attending.

There is a lecture each year for all residents that emphasize the principles of consultation medicine.

4. SUPERVISION OF RESIDENTS BY FACULTY

Inpatient Consultation Service: Rounds are conducted 5 days per week with the faculty attending physician. Both new and follow-up consults are discussed. All resident notes are signed by the attending.

Clinics: Every patient encounter is discussed with the attending physician before the patient leaves the clinic and every note is co-signed by the attending.

5. EVALUATION PROCESS

Oral feedback of clinical performance occurs on a daily basis through close observation by the assigned teaching attending, who is also expected to provide formal oral summary evaluations to the residents at the end of the rotation. Residents also receive a written evaluation from the teaching attendings at the conclusion of the rotation via the myevaluations system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system.

6. SUGGESTED CORE READING LIST AND REFERENCES

General:

- Goldman, et. al. Ten commandments for effective consultations. Archives of Internal Medicine 1983; 143: 1753-1755.

Pre-Operative Evaluation:

- Gross and Caputo, eds. Kammerer and Gross' Medical Consultation, 3rd Edition, Williams and Wilkins, 1998.
- Fleisher LA, Beckman JA, Brown KA, et.al. ACC/AHA 2006 Guideline update on perioperative cardiovascular evaluation for noncardiac surgery: focused update on perioperative beta-blocker therapy. Circulation 2006; 113: 2662-2674.
- Fleisher LA, Beckman JA, Brown KA, et.al. ACC/AHA 2007 Guidelines on perioperative cardiovascular evaluation and care for noncardiac surgery. JACC 2007; 50: e159-241.
- Lee TH. Reducing cardiac risk in noncardiac surgery. N Engl J Med 1999 341: 1838-1840.
- Lindauer PK, Pekow P, Wang K, et.al. Perioperative beta-blocker therapy and mortality after major noncardiac surgery. N Engl J Med 2005; 353 (4): 349-361.
- Smetana GW, Lawrence VA, Cornell JE. Preoperative pulmonary risk stratification. Annals of Internal Medicine 2006; April 18, 144: 581-595.
- Wilson W, Taubert K, Gewitz M, et.al. Prevention of infective endocarditis. Guidelines from the American Heart Association. Circulation AHA 2007; 106 (May 8, 2007).

Medical Problems in Pregnancy:

- Barron and Lindenheimer, eds. Medical Disorders During Pregnancy, 3rd edition, Mosby, 2000.
- Wood AJJ. Treatment of hypertension in pregnant women. N Engl J Med 1996 335: 257-265.
- Kjos SL, Buchanan TA. Gestational diabetes mellitus N Engl J Med 1999 341: 1749-1756.

Other:

- Jeremias A, Gibson CM. Narrative review: Alternative causes for elevated cardiac troponin levels when acute coronary syndromes are excluded. Ann Intern Med 2005 142: 786-791.

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Coronary Care Unit

1. EDUCATIONAL GOALS

The goal of the CCU rotation is to teach residents to provide quality medical care to patients with hypertension, acute myocardial infarction, congestive heart failure, valvular heart and cardiac arrhythmias disease as well as the associated complications of these disorders in the intensive care setting.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-1

CCU	
Demonstration of bedside skills necessary for the assessment and on-going care of patients with cardiac problems	→ Patient care → Medical knowledge
Identification of common etiologies, presentations, complications of heart failure, chest pain, valvular disease and cardiac arrhythmias and their management	→ Medical knowledge → Practice based learning
Understanding and interpretation of the tests and radiological imaging utilized in the evaluation, management and monitoring of patients with cardiac diseases such EKG, exercise stress testing, echocardiogram and radionuclide imaging.	→ Medical knowledge → Patient care → Practice based learning → System based learning
Observe and when appropriate participate in cardiology-specific procedures including central IV line placement and invasive monitoring.	→ Patient care → Medical knowledge → Practice based learning

PGY-2 and PGY-3

CCU	
Identification of common etiologies, presentations, complications of heart failure, chest pain, valvular disease and cardiac arrhythmias their management.	→ Medical Knowledge → Practice Based Learning
Understanding and interpretation of the tests and radiological imaging utilized in the evaluation, management and monitoring of patients with cardiac diseases such EKG, exercise stress testing, Echocardiogram and radionuclide imaging.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Actively participate in making informed recommendations about diagnostic and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning

Communicate effectively with patients and their families in all situations, especially around difficult issues such as end-of life decision-making in patients with end-stage heart failure.	→ Interpersonal And Communication Skills → Practice Based Learning
Observe and when appropriate participate in cardiology-specific procedures including central IV line placement and invasive monitoring. Manage emergency situations requiring ACLS.	→ Patient Care → Medical Knowledge → Practice Based Learning
Actively participate in the management of patients with advanced heart failure presentations, including appropriate utilization of inotropic therapies, invasive hemodynamic monitoring and referral for left ventricular assist devices and cardiac transplant.	→ Medical Knowledge → Patient Care → Practice Based Learning
Actively participate in the management of patient with high risk Acute Coronary Syndrome, including risk stratification based on presenting symptoms, cardiac biomakers and noninvasive imaging (Echocardiogram), appropriate utilization of antiplatelet and anticoagulation therapies, indications for cardiac catheterization and recognition of complications requiring referral for emergent intervention (PCI and CABG).	→ Medical Knowledge → Patient Care → Practice Based Learning
Actively participate in the management of patients with high risk cardiac arrhythmias not requiring ACLS (sustained stable VTACH, SVT with hemodynamic comprise and symptomatic bradyarrhythmias) including appropriate utilization of electrical and chemical cardioversion therapy, indications for temporary transvenous pacing and referrals for emergent pacemaker and AICD implantation.	→ Medical Knowledge → Patient Care → Practice Based Learning

Didactics	
Present case conference involving an interesting patient seen on the inpatients CCU service.	→ Scholarly Activity
Participate in the conferences organized by the Cardiology Division including EKG Conference and Cardiology Lecture Series.	→ Medical Knowledge

3. PRINCIPAL TEACHING METHODS

Residents on the cardiology service will participate in patient evaluation and management on the inpatient consultation service for the wards and the CCU as well as the outpatient hypertension clinic, renal clinic and hemodialysis unit. Residents will also attend the various didactic sessions conducted/attended by the division.

The inpatient consult service sees patients on the medicine wards as well as the wards of other services including surgery and obstetrics and gynecology when recommended by the internal medicine consult service. These patients are discussed with the attending for the service before evaluation and management recommendations are made.

The hypertension clinic provides an opportunity for residents to participate in the care of patients with coronary artery disease, heart failure and valvular disease.

4. SUPERVISION OF RESIDENTS BY FACULTY

Inpatient Consultation Service: Rounds are conducted 5 days per week with the faculty attending physician. Both new and follow-up consults are discussed. All resident notes are signed by the attending.
Clinics: Every patient encounter is discussed with the attending physician before the patient leaves the clinic and every note is co-signed by the attending.

5. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs on a daily basis through close observation by the assigned teaching attending, who is also expected to provide formal oral summary evaluations to the residents at the end of the rotation. Residents also receive a written evaluation from the teaching attendings at the conclusion of the rotation via the myevaluations system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system.

6. SUGGESTED CORE READING LIST AND REFERENCES

(*All Blue Text Is Hyperlinked Via The Columbia Library. You Will Need Your UNI to Access These Resources)*

6.1 Core Textbooks

Harrison's Principles of Internal Medicine *(Available Via CUMC Library Online At http://www.accessmedicine.com.monstera.cc.columbia.edu:2048/resourceToc.aspx?resourceID=4)*

6.1.2 Other Suggested Reading

General: Braunwald's Heart Disease
American College of Cardiology Practice Guidelines

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Emergency Medicine Curriculum

1. EDUCATIONAL GOALS

The goal of the Emergency Medicine rotation is to teach residents to manage common emergency conditions and provide consultation and management for a variety of acute serious illnesses.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-2 and PGY-3

Emergency Department	
Demonstration of bedside skills necessary for the assessment and on-going care of patients with serious acute problems.	→ Patient Care → Medical Knowledge
Demonstration of the medical knowledge and clinical judgment to appropriately evaluate common presenting problems in the ED including abdominal pain, back pain, chest pain, arrhythmias, altered mental status and coma, dyspnea, fever, headache, GI bleeding, hemoptysis, lower extremity edema, severe hypertension, shock, syncope, vaginal bleeding, volume depletion, vomiting, wheezing.	→ Patient Care → Medical Knowledge
Understanding of the tests and radiological imaging utilized in the evaluation, management and monitoring of patients with emergency conditions, including: 1) Computed tomography of the head, chest, and abdomen and interpretation of results for life-threatening conditions, especially dissecting aortic aneurysm and pulmonary embolism, 2) Abdominal and pelvic ultrasound, 3) non-invasive vascular studies, 4) EKG in the evaluation of acute coronary syndromes and arrhythmias.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Communicate effectively with patients and their families in all situations, especially around difficult issues such as serious illness with a poor prognosis.	→ Interpersonal And Communication Skills → Practice Based Learning
Perform or participate in procedures in the ED setting including: Advanced cardiac life support, arterial and venous access, arthrocentesis, mask ventilation to maintain airway, placement of nasogastric tube, suturing of laceration, use of temporary external pacemaker.	→ Patient Care → Medical Knowledge → Practice Based Learning

3. PRINCIPAL TEACHING METHODS

Residents will participate in evaluation and management of patients presenting to the ED and urgent care area. This will include first contact and triage during some days on the rotation. They will discuss cases with Emergency Medicine attendings during the evaluation of the patient.

4. SUPERVISION OF RESIDENTS BY FACULTY

Every patient encounter is discussed with the attending physician before the patient leaves the ED and every note is co-signed by the attending.

5. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs on a daily basis through close observation by the assigned teaching attending, who is also expected to provide formal oral summary evaluations to the residents at the end of the rotation. Residents also receive a written evaluation from the teaching attendings at the conclusion of the rotation via the myevaluations system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system.

6. SUGGESTED CORE READING LIST AND REFERENCES

(All Blue Text Is Hyperlinked Via The Columbia Library. You Will Need Your UNI to Access These Resources)

6.1 Core Textbooks

Harrison's Principles of Internal Medicine *(Available Via CUMC Library Online At http://www.accessmedicine.com.monstera.cc.columbia.edu:2048/resourceToc.aspx?resourceID=4)*

6.2 Required Reading

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM Harlem Hospital Center in Affiliation with Columbia University Medical Center
Endocrinology Curriculum

1. EDUCATIONAL GOALS

The goal of the endocrinology rotation is to teach residents to provide quality medical care to patients with:

- Type 1, 2, and gestational diabetes mellitus and hypoglycemic disorders
- Disorders of lipid metabolism
- Care of the surgical patient with diabetes
- Thyroid disorders (hyperthyroidism, hypothyroidism, thyroid nodules, thyroiditis, and thyroid cancer)
- Disorders of calcium and skeletal metabolism (vitamin D deficiency, hyperparathyroidism, osteoporosis, hypercalcemia of malignancy, hypocalcemia, hypomagnesemia)
- Disorders of the pituitary (prolactinomas, acromegaly, non-secreting tumors, pre-operative evaluation and post-operative care)
- Hyponatremia, diabetes insipidus, SIADH
- Disorders of the adrenal gland (adrenal insufficiency, Cushing's syndrome, hirsutism, endocrine hypertension, incidental adrenal masses)
- Hypogonadism, and sexual dysfunction
- Endocrine emergencies (diabetic ketoacidosis, hyperosmolar coma, adrenal insufficiency, pituitary apoplexy, thyroid storm, myxedema coma)
- Obesity including endocrinologic evaluation of patients before and after bariatric surgery.

Residents will learn to recognize and evaluate these disorders and their associated complications in the inpatient and outpatient settings. They will learn how to manage these conditions and how to determine when further consultation is needed.

2. PGY 2 & 3 ROTATION-SPECIFIC OBJECTIVES
(With Corresponding ACGME Competencies)

Inpatient Consultation Service	
Demonstration of bedside clinical skills necessary for the assessment and on-going care of patients with endocrinologic disorders.	→ Patient Care → Medical Knowledge
Identification of common etiologies, presentations, complications of endocrinologic disorders and their management.	→ Medical Knowledge → Practice Based Learning
Identify appropriate utilization of the endocrinology subspecialty consultation in a cost-effective and evidence based manner.	→ Medical Knowledge System Based Learning
Understanding individual tests, dynamic testing protocols, and radiologic imaging utilized in the evaluation, management and monitoring of patients with endocrinologic diseases.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning

Actively participate in making informed recommendations about preventive, diagnostic, and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning
Communicate effectively with patients and their families and with other providers in all situations, especially around difficult issues such as considering risks and benefits of endocrinologic surgery, or the management of hypercalcemia in end stage malignancy.	→ Interpersonal And Communication Skills → Practice Based Learning → Professionalism
Provide effective and professional consultation to referring physicians and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.	→ Interpersonal And Communication Skills → Professionalism
Understand and when possible observe endocrinology related procedures including fine needle aspiration of the thyroid, bone mineral density evaluation, and formal visual field evaluation.	→ Patient Care → Medical Knowledge → Practice Based Learning
Review use of radiology and nuclear medicine imaging in the diagnosis and management of endocrinologic disease.	→ Medical Knowledge → Practice Based Learning → System Based Learning

Outpatient Service

Endocrinology Clinic	
Identification of common endocrinologic disorders including relevant historical findings, physical findings laboratory findings and associated complications.	→ Medical Knowledge → Patient Care → Practice Based Learning
Management of endocrinologic diseases and their associated complications.	→ Medical Knowledge → Patient Care → Practice Based Learning
Communicate effectively with patients and their families in all situations, especially around difficult treatment choices.	→
Appropriate implementation of preventive care including nutrition counseling and pharmacologic management for diabetes and obesity and for osteoporosis.	→ Medical Knowledge → Practice Based Learning → System Based Learning

Bariatric Surgery Unit Clinic	
Understanding clinical features and complications unique to patients being assessed for and undergoing bariatric surgery.	→ Medical Knowledge → Practice Based Learning

Understand the indications for and risks and benefits associated with bariatric surgery.	→ Practice Based Learning → System Based Learning
Residents will interact with multi-disciplinary team approach to patient care for bariatric surgery patients.	→ Interpersonal And Communication Skills → Professionalism → System Based Learning
Communicate effectively with patients and their families in all situations, including sensitivity training associated with caring for bariatric surgery patients.	→ Interpersonal And Communication Skills → Professionalism

Didactics	
Attend didactic sessions including journal presentations and when relevant the radiology conferences of the neurology and ophthalmology services.	→ Practice Based Learning → Scholarly Activity
Present interesting cases at conferences at Harlem and at pituitary and pathology conferences at Columbia University with review of pertinent radiologic studies and slides.	→ Scholarly Activity
Adhere to principles of confidentiality, scientific/academic integrity, and informed consent.	→ Professionalism → Scholarly Activity

3. PRINCIPAL TEACHING METHODS

Residents on the endocrinology service will participate in patient evaluation and management on the inpatient consultation service for the wards and the ICU as well as the outpatient clinics. Every two weeks the endocrine clinic meets in the bariatric surgery unit and residents focus on the pre and post operative endocrinologic evaluation of bariatric surgery patients. Residents also attend didactic sessions conducted or attended by the division.

The inpatient consult service sees patients on the medicine wards as well as on the wards of other services including surgery and obstetrics and gynecology who call for consults, or when recommended by the internal medicine consult service. These patients are discussed with the attending for the service before evaluation and management recommendations are made.

The endocrinology clinic provides an opportunity for residents to participate in the care of patients with common endocrinologic conditions, as well as provides exposure to patients with less common diagnoses. Residents will learn to identify the associated clinical clues, understand how to investigate these patients and identify when to obtain consultation for the management of these patients.

The bariatric surgery clinic provides an opportunity for residents to participate in the care of patients with severe or morbid obesity and its complications. Residents actively participate in the care of pre and post-operative bariatric surgery patients allowing them to understand the challenges that are unique to this subset of patients.

4. SUPERVISION OF RESIDENTS BY FACULTY

Inpatient Consultation Service: All routine consult cases are presented to and discussed, including for follow-up, with the attending five days a week with attending availability for emergency discussion on all days.

Rounds are conducted at least 2 days per week with the faculty attending physician. Both new and follow-up consults are discussed. All resident notes are reviewed and signed by the attending.

Endocrinology clinic meets on Tuesdays and Thursdays. Residents attend clinics during their endocrinology rotation and as part of their primary care rotations. Every patient is presented to the attending who sees the patient, reviews history, physical exam, and lab tests. The assessment and plan is discussed with the attending physician before the patient leaves the clinic and every note is co-signed by the attending. Phone contact is established and maintained with some of the clinic patients between visits to augment hospital follow-up visits.

5. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs periodically through close observation by the assigned teaching attending, who is also provides oral summary evaluations to the residents at the end of the rotation. Residents also receive a written evaluation from the teaching attendings at the conclusion of the rotation via the www.myevaluations.com web based system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system. Residents are also provided with an opportunity to evaluate the assigned teaching faculty.

6. SUGGESTED CORE READING LIST AND REFERENCES

(All Blue Text Is Hyperlinked Via The Columbia Library. You Will Need Your UNI to Access These Resources)

6.1 Core Textbooks:

Harrison's Principles of Internal Medicine *(Available Via CUMC Library Online At http://www.accessmedicine.com.monstera.cc.columbia.edu:2048/resourceToc.aspx?resourceID=4)*

6.2 Required Reading:

Chapter 332 Principles of Endocrinology
Chapter 333 Disorders of the Anterior Pituitary and Hypothalamus
Chapter 334 Disorders of the Neurohypophysis
Chapter 335 Disorders of the Thyroid Gland
Chapter 336 Disorders of the Adrenal Cortex
Chapter 337 Pheochromocytoma
Chapter 338 Diabetes Mellitus
Hot Topic: Intensive Glucose Control Does Not Improve Cardiovascular Outcomes
Chapter 339 Hypoglycemia
Chapter 340 Disorders of the Testes and Male Reproductive System
Including Multigenic Causes of Hypogonadotropic Hypogonadism
Chapter 341 The Female Reproductive System: Infertility and Contraception
Chapter 342 The Menopause Transition and Postmenopausal Hormone Therapy
Chapter 343 Disorders of Sex Development
Chapter 344 Endocrine Tumors of the Gastrointestinal Tract and Pancreas
Chapter 345 Disorders Affecting Multiple Endocrine Systems
Chapter 346 Bone and Mineral Metabolism in Health and Disease
Chapter 347 Diseases of the Parathyroid Gland and Other Hyper- and Hypocalcemic Disorders
Chapter 348 Osteoporosis and Management of Glucocorticoid-Induced Osteoporosis
Chapter 349 Paget Disease and Other Dysplasias of Bone
Chapter 350 Disorders of Lipoprotein Metabolism

6.3 Other Suggested Reading:

1. *Williams Textbook of Endocrinology*, 10th Edition Saunders, 2002 (print and CD-ROM).
2. *Endocrine Secrets,* 4th Edition (M McDermott) Elsevier Mosby 2004
3. Principles and Practice of Endocrinology and Metabolism (K. Becker ed.) Lippincott Williams and Wilkins, 2002

4. Greenspan's Basic & Clinical Endocrinology, 7th Edition, Appleton & Lange, 2003
5. MKSAP 14
6. Manual of Endocrinology and Metabolism 3rd Edition (N Lavin ed.), Lippincott Williams and Wilkins, 2002

6.4 Online Resources:

- UptoDate: http://www.utdol.com
- MDConsult: http://www.mdconsult.com
- Endotext: http://www.endotext.com
- American Association of Clinical Endocrinologists: http://www.aace.com
- Thyroid Disease Manager: http://www.thryoidmanager.org

6.5 References *(Available In The Endocrinology Office Or The 12th Floor Medicine Library)***:**

Greenspan's Basic & Clinical Endocrinology, 7th Ed. Appleton & Lange, 2003.
Williams Textbook of Endocrinology, Saunders, 2002

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Gastroenterology Curriculum

1. EDUCATIONAL GOALS

The goal of the cardiology rotation is to teach residents to provide quality medical care to patients with peptic ulcer disease, liver disease, inflammatory bowel disease, GI cancers and other problems as well as the associated complications of these disorders in the inpatient and outpatient settings.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-2 and PGY-3

Inpatient Consultation Service	
Demonstration of bedside skills necessary for the assessment and on-going care of patients with GI problems.	→ Patient Care → Medical Knowledge
Identification of common etiologies, presentations, complications of gastrointestinal and hepatobiliary disorders and their management.	→ Medical Knowledge → Practice Based Learning
Identify appropriate utilization of the gastroenterology subspecialty consultation in a cost-effective and evidence based manner.	→ Medical Knowledge System Based Learning
Understanding and interpretation of the tests and radiological imaging utilized in the evaluation, management and monitoring of patients with gastrointestinal problem, including use of endoscopy, ultrasound and CT imaging.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Actively participate in making informed recommendations about preventive, diagnostic, and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning
Communicate effectively with patients and their families in all situations, especially around difficult issues such as end-of life decision-making in patients with end-stage cirrhosis.	→ Interpersonal And Communication Skills → Practice Based Learning
Provide effective and professional consultation to referring physicians and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.	→ Interpersonal And Communication Skills → Professionalism
Observe and when appropriate participate in gastroenterology-specific procedures including endocsopic procedures.	→ Patient Care → Medical Knowledge → Practice Based Learning

Outpatient Service

Gastroenterology Clinic	
Evaluation of patients with gastrointestinal and hepatobiliary disorders.	→ Medical Knowledge → Patient Care → Practice Based Learning
Identification of signs and symptoms of GERD, peptic ulcer disease, diarrhea and malabsorption, acute and chronic pancreatitis, small bowel malabsorbtion, inflammatory bowel disease and diverticular disease, colon cancer.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Identification of and management of patients with chronic problems such as hepatitis, cirrhosis, inflammatory bowel disease.	→ Medical Knowledge → Patient Care → Practice Based Learning → Interpersonal And Communication Skills

Didactics	
Present case conference involving an interesting patient seen on the inpatients consult service	→ Scholarly Activity
Adhere to principles of confidentiality, scientific/academic integrity, and informed consent	→ Professionalism → Scholarly Activity

3. PRINCIPAL TEACHING METHODS

Residents on the gastroenterology service will participate in patient evaluation and management on the inpatient consultation service for the wards as well as the outpatient gastroenterology clinic. Residents will also attend the various didactic sessions conducted/attended by the division.

The inpatient consult service sees patients on the medicine wards as well as the wards of other services including surgery and obstetrics and gynecology. These patients are discussed with the attending for the service before evaluation and management recommendations are made.

4. SUPERVISION OF RESIDENTS BY FACULTY

Inpatient Consultation Service: Rounds are conducted 5 days per week with the faculty attending physician. Both new and follow-up consults are discussed. All resident notes are signed by the attending.

Clinics: Every patient encounter is discussed with the attending physician before the patient leaves the clinic and every note is co-signed by the attending.

5. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs on a daily basis through close observation by the assigned teaching attending, who is also expected to provide formal oral summary evaluations to the residents at the end of the rotation. Residents also receive a written evaluation from the teaching attendings at the conclusion of the rotation via the myevaluations system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system.

6. SUGGESTED CORE READING LIST AND REFERENCES

(All Blue Text Is Hyperlinked Via The Columbia Library. You Will Need Your UNI to Access These Resources)

6.1.1 Core Textbooks:
Harrison's Principles of Internal Medicine *(Available Via CUMC Library Online At http://www.accessmedicine.com.monstera.cc.columbia.edu:2048/resourceToc.aspx?resourceID=4)*

6.1.2 Other Suggested Reading: General

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Geriatrics Curriculum

1. EDUCATIONAL GOALS

The goal of curriculum in Geriatrics is to ensure that residents learn the fundamentals of care of elderly patients. To achieve clinical skills to identify medical diseases associated with aging, and altered presentation of disease in elderly.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-2 or PGY-3

Geriatrics Learning Objectives	
Residents are expected to be able to evaluate appropriately, presenting complaints such as dizziness, syncope, anxiety/depression, insomnia, incontinence, gait disturbances, memory loss, visual and auditory impairment, inability to cope, falls, etc.	→ Patient Care → Medical Knowledge
Residents are expected to be able to analyze the findings on physical exam and laboratory investigations to formulate a differential diagnosis and management plan, keeping in mind that age related changes can impact on disease presentation and complications.	→ Medical Knowledge → Practice Based Learning
Resident should demonstrate an understanding of the evaluation and management of geriatrics syndromes including dementia, delirium, depression, bowel and bladder incontinence, falls, and polypharmacy.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Practice
Residents are expected to be able to order tests appropriately. A risk benefit analysis should be performed before technically complex invasive procedures are considered.	→ Patient Care → Medical Knowledge → Practice Based Learning
Residents are expected to perform a detailed evaluation with emphasis on clinical signs of malnutrition, mental status, special senses such as vision and hearing, gait, musculoskeletal system, pressure sores, and signs of physical abuse. Resident should be able to perform a functional assessment.	→ Patient Care → Medical Knowledge → System Based Practice
Participate in the conferences organized by Geriatrics Division.	→ Medical Knowledge

3. PRIMARY TEACHING METHODS AND SETTINGS

Residents will encounter elderly patients on inpatient units, continuity clinic, Geriatrics clinic and providing inpatient consultations on medical and other services. Resident performs a history and physical examination which must include review of medications, geriatric assessment, functional and mental status. Based on the data collected, the resident formulates a diagnosis and management plan. Resident then presents the case to the attending physician, who verifies the findings, critiques the presentation and provides education, with discussion of pathophysiology of diseases, altered drug metabolism and special needs of elderly.

4. COMPETENCIES

Residents are expected to develop competencies that are relevant to problems of elderly and address all six (6) Internal Medicine Core Competencies. Specific examples are listed below:

a. **Patient Care:** Residents are expected to complete evaluations on patient as outlined above. Elderly individual are vulnerable and may be victims of physical or emotional abuse. This condition is unfortunately under recognized. While evaluating patients the residents must be alert, so as not to overlook signs of abuse. In addition, residents should appreciate that elderly are more prone to complications in the hospital such as pressure ulcers, incontinence, decondtioning and appropriate preventive measures should be put in place. Goals for diagnosis must be established based on previously expressed wishes if patient lacks decisional capacity, and discussion with family when appropriate. There is no other patient population in which knowledge of patient preferences is more important. Because most of the information regarding medication use comes from studies on patients who are not elderly or debilitated, recommendations from the studies must be applied cautiously to the patient being treated. Protocols must be adjusted for patient's age and comorbid conditions. Residents should also be aware if there are any environmental factors in patient's environment that pose a risk to patient health and give appropriate advice to caregiver, e.g. rugs that the patient can trip over, poor lighting, and unusable appliances.
b. **Medical Knowledge:** Evidence based approach is important when treating patient of any age. However, patients above a certain age and with chronic conditions are specifically excluded from the clinical trials. Medical literature should be carefully and critically read when caring for elderly patients.
c. **Practice Based Learning and Improvement:** Residents are expected to analyze their experience in taking care of elderly patients to determine how care of elderly differs from young patient with same medical condition. Some of the concepts outlined above such as altered drug metabolism, propensity to fall, nutritional status influence physician's action and patient's response to treatment. Resident should be always mindful of these concepts and continue to improve their practice.
d. **Interpersonal and Communication Skills:** Dementia, delirium, hearing impairment and depression may be encountered more frequently in elderly and pose challenges to the doctor-patient relationship. These challenges should be met by effective listening, attention to non verbal clues and narrative skills to communicate with patient and family/caregiver.
e. **Professionalism:** Residents are expected to demonstrate a respect for elderly patients' dignity, privacy and confidentiality. Sensitivity to issues related to patient's age is essential.
f. **System Based Practice:** Elderly patients usually require more services including rehabilitation, social services, home care, transportation, long term care etc. Residents are expected to have an understanding of the system and be able to collaborate with other members of the team to provide optimal care to elderly individuals.

5. DIDACTIC EXPERIENCE

The faculty in Geriatrics Division participates in all educational activities offered in the program such as Morning Report, Core conferences, Morbidity and Mortality conferences and Grand Rounds. Residents are expected to attend all of the educational activities. Some of the topics covered in the conferences include:

a. Dementia/ Delirium
b. Urinary Incontinence
c. Constipation In Elderly
d. Falls
e. Osteoporosis
f. Advance Directives
g. Age Related Biological Changes
h. Pressure Ulcers

6. SUGGESTED READING

a. Articles from Syllabus
b. Geriatric Section from Textbooks of Medicine

7. EVALUATION

Residents are given verbal feedback on ongoing basis and provided a written evaluation at the end of the rotation in Geriatrics service. Residents are also expected to evaluate their own performance at the end of the rotation and at periodic intervals to assess if learning objectives are being met.

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Hematology and Oncology Curriculum

1. EDUCATIONAL GOALS

The goal of the hematology/oncology rotation is to teach residents to provide quality medical care to patients with benign and malignant hematologic diseases as well as solid tumors in the inpatient and outpatient settings.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-2 and PGY-3

Inpatient Consultation Service	
Demonstration of bedside skills necessary for the assessment and on-going care of patients with hematologic and oncologic disorders.	→ Patient Care → Medical Knowledge
Identification of the risk factors, presentations, screening modalities, and complications of hematologic and oncologic disorders and their management.	→ Medical Knowledge → Practice Based Learning
Identify appropriate utilization of the hematology and oncology subspecialty consultation in a cost-effective and evidence based manner.	→ Medical Knowledge System Based Learning
Understanding of the tests (e.g. blood film) and radiological imaging utilized in the evaluation, management and monitoring of patients with hematologic and oncologic disorders.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Actively participate in making informed recommendations about preventive, diagnostic, therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning
Communicate effectively with patients and their families in all situations, especially around difficult issues such as palliative and hospice care.	→ Interpersonal And Communication Skills → Practice Based Learning
Provide effective and professional consultation to referring physicians and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.	→ Interpersonal And Communication Skills → Professionalism
Participate in hematology specific procedures including interpretation of the blood film and bone marrow aspirate and biopsy.	→ Patient Care → Medical Knowledge → Practice Based Learning

Outpatient Service

Hematology Clinic	
Evaluation and management of patients with blood dyscrasias (e.g. anemia, thrombocytopenia, leukocytosis).	→ Medical Knowledge → Patient Care → Practice Based Learning
Evaluation and management of patients with coagulation abnormalities.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Evaluation and management of patients with malignant hematologic disorders (lymphoproliferative and myeloproliferative disorders).	→ Medical Knowledge → Patient Care → Practice Based Learning → Interpersonal And Communication Skills

Oncology Clinic	
Identification of the common solid tumors (breast, lung, colon, prostate) and their clinical manifestations and complications.	→ Medical Knowledge → Patient Care → Practice Based Learning
Management of solid tumors with chemotherapy and its associated complications.	→ Medical Knowledge → Patient Care → Practice Based Learning
Identification and management of familial cancer syndromes.	→ Medical Knowledge → Patient Care → Practice Based Learning
Appropriate implementation of health maintenance for cancer patients (secondary cancer screening, long-term effects of cancer treatment).	→ Medical Knowledge → Practice Based Learning → System Based Learning

Didactics	
Attend didactic sessions including morphology rounds, multidisciplinary tumor board, and clinical case conferences.	→ Practice Based Learning → Scholarly Activity
Present case conferences involving interesting patients seen on the consult service.	→ Scholarly Activity
Adhere to principles of confidentiality, scientific/academic integrity, and informed consent.	→ Professionalism → Scholarly Activity

3. PRINCIPAL TEACHING METHODS

Residents on the hematology/oncology service will participate in patient evaluation and management on the inpatient consultation service for the wards and the ICU as well as the outpatient hematology clinic and oncology. Residents will also attend the various didactic sessions conducted/attended by the division.

The inpatient consult service sees patients on the medicine wards as well as the wards of other services including surgery and obstetrics and gynecology when recommended by the internal medicine consult service. These patients are discussed with the hematology/oncology fellow assigned to the service as well as the attending for the service before evaluation and management recommendations are made.

The hematology clinic provides an opportunity for residents to participate in the care of patients with common benign hematologic conditions such as sickle cell disease, anemia and thrombocytopenia and coagulation disorders. Residents will learn to identify the clinical investigations necessary to evaluate these patients, and when to obtain a hematology consultation.

The oncology clinic provides an opportunity for residents to participate in the care of patients with cancer and its complications. Residents will learn the basic epidemiology, screening, staging and management of patients with solid tumors.

4. SUPERVISION OF RESIDENTS BY FACULTY

Inpatient Consultation Service: Rounds are conducted 5 days per week with the faculty attending physician. Both new and follow-up consults are discussed. All resident notes are signed by the attending.

Clinics: Every patient encounter is discussed with the attending physician before the patient leaves the clinic and every note is co-signed by the attending.

5. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs on a daily basis through close observation by the assigned teaching attending, who is also expected to provide formal oral summary evaluations to the residents at the end of the rotation. Residents also receive a written evaluation from the teaching attending at the conclusion of the rotation via the myevaluations system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system.

6. SUGGESTED CORE REFERENCE TEXTBOOKS
(Available In The Hematology/Oncology Laboratory)

- Cancer: Principles and Practice of Oncology 8th edition, edited by DeVita et. al. Lippincott Williams & Wilkins. 2008
- Harrison's Principles of Internal Medicine 16th edition, edited by Braunwald et. al. McGraw Hill. 2005
- Williams Hematology 7th edition, edited by Beutler et. al. McGraw Hill. 2006

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Infectious Diseases Curriculum

1. EDUCATIONAL GOALS

The Harlem Hospital Division of Infectious Diseases offers a rich and comprehensive experience in the field of infectious diseases. The goal of the rotation is to teach and guide the residents to acquire an understanding of the approach to patients with infections, master the art of careful follow-up of patients, interpret basic laboratory data related to infectious diseases and become familiar with core knowledge related to infectious diseases. In addition, learn the importance of working in close collaboration with other services such as Pathology, Microbiology, Pharmacy, Antibiotic Control Program and the Infection Control Programs.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-2 and PGY-3

Inpatient Consultation Service	
Demonstration of bedside skills necessary: To identify infectious diseases and their complications. To describe appropriate evaluations for these conditions. To appropriately assess patients with theses conditions. To recognize methods to appropriately monitor such patients and response to treatment.	→ Patient Care → Medical Knowledge → Professionalism
Identification of common etiologies, presentations, complications of core infectious diseases and their management.	→ Medical Knowledge → Practice Based Learning
Identify appropriate utilization of the infectious diseases subspecialty consultation in a cost-effective and evidence based manner.	→ Medical Knowledge → System Based Learning
Understanding and interpreting some of the common and basic laboratory investigations such as Gram Stain, special stains and culture results, antibiotic susceptibility, HIV RNA, CD4 cell interpretation, and radiological imaging utilized in the evaluation, management and monitoring of patients with infectious diseases.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Actively participate in making informed recommendations about preventive, diagnostic, and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning
Communicate effectively with patients and their families with regards to diagnosis and treatment options related to infectious diseases while preserving patient confidentiality.	→ Interpersonal And Communication Skills → Practice Based Learning → Professionalism

Provide effective and professional consultation to referring physicians and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.	→ Interpersonal And Communication Skills → Professionalism
Understand the proper collection technique and appropriate transportation of specimens for culture from various sites.	→ Patient Care → Medical Knowledge → Practice Based Learning
Understand basic Infection control practices and appropriate isolation practices.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning

Ambulatory Care Service

Infectious Diseases Clinic /HIV Clinic	
To identify infectious diseases and their complications.	→ Medical Knowledge → Patient Care → Practice Based Learning
To appropriately assess patients with theses conditions To identify signs and symptoms acute and chronic infections.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning → Professionalism
To describe appropriate evaluations for these conditions.	→ Medical Knowledge → Patient Care → Practice Based Learning → Interpersonal And Communication Skills
Understanding and interpreting some of the common and basic laboratory investigations such as Gram Stain, special stains and culture results, antibiotic susceptibility, HIV RNA, CD4 cell count, basic genotype/phenotype interpretation, and radiological imaging utilized in the evaluation, management and monitoring of patients with infectious diseases.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
To develop management plans that take into account medical, social and psychosocial status of the patient.	→ Medical Knowledge → Patient Care → Practice Based Learning → Interpersonal And Communication Skills → System Based Learning

To recognize methods to appropriately monitor patients and to monitor response to treatment. To provide continuity of care.	→ Medical Knowledge → Patient Care → Practice Based Learning → Interpersonal And Communication Skills → System Based Learning
To identify local and community resources to assist in patient management.	→ Practice Based Learning → Interpersonal And Communication Skills → System Based Learning

Didactics	
Attend didactic sessions including journal club, clinical case conference, ID monthly grand rounds, monthly morbidity / mortality conference and research conference.	→ Practice Based Learning → Scholarly Activity
Present at case conferences and journal club.	→ Scholarly Activity → Medical Knowledge → Interpersonal And Communication Skills → Practice Based Learning
Adhere to principles of confidentiality, scientific/academic integrity, and informed consent.	→ Professionalism → Scholarly Activity

Core Diseases:

- HIV disease
- Tuberculosis
- Upper and lower respiratory infections
- Gastrointestinal infections
- Infections of the nervous system
- Ocular infections
- Skin and soft tissue infections
- Urinary tract infections
- Infections in the immunosuppressed host
- Infections associated with travel
- Passive and active immunization practices
- Sexually transmitted diseases
- Infections in the intensive care units
- Healthcare associated infections
- Parasitic infections
- Mechanisms of microbial resistance
- Functions of the immune system

Principal Teaching Methods and Venues:

- Inpatient Infectious Disease and HIV consult services
- Infectious Diseases/HIV clinic
- Tuberculosis management through inpatient consultation
- Daily teaching rounds in which consultations are discussed in detail and didactic presentations are made
- Weekly didactic Infectious Disease conference at Harlem Hospital

- Weekly journal club at Harlem Hospital
- Twice weekly didactic ID conference at New York Presbyterian Medical Center
- Monthly ID grand rounds

3. SUPERVISION OF RESIDENTS BY FACULTY

Inpatient Consultation Service: Rounds are conducted 5 days per week with the faculty attending physician. Both new and follow-up consults are discussed. All resident notes are signed by the attending physician.

Clinics: Every patient encounter is discussed with the supervising attending physician before the patient leaves the clinic and every note is co-signed by the attending physician.

4. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs on a daily basis through close observation by the assigned teaching faculty. At the end of the rotation, the attending physician will provide a formal oral summary evaluation as well as a written evaluation via "myevaluations" system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system.

5. SUGGESTED CORE READING LIST

Core Textbooks:
Harrison's Principles of Internal Medicine (*Available Via CUMC Library Online At http://www.accessmedicine.com.monstera.cc.columbia.edu:2048/resourceToc.aspx?resourceID=4*)

Required Reading:

Part 7. Infectious Diseases
Section 1: Basic consideration in Infectious diseases.
Chapters 113, 114, 115,116,
Section 2: Clinical syndromes: Community acquired infections
Chapters 118 to 124
Section 3: Health care associated infections
Chapters 125, 126
Section 4: Approach to therapy for bacterial diseases
Chapters 127
Section 5: Diseases caused by Gram – positive bacteria
Chapters 128 to 135
Section 6: Diseases caused by Gram – negative bacteria
Chapters 136 to 154
Section 7: Miscellaneous bacterial infections
Chapters 155 to 157
Section 8: Mycobacterial diseases
Chapters 158 to 161
Section 9: Spirochetal diseases
Chapters 162 to 166
Section 10: Diseases caused by Rickettsiae, Mycoplasmas, & Chlamydiae
Chapters 167 to 169
Section 11 & 12: Viral diseases
Chapters 170 to 178
Section 13: Infections due to respiratory viruses
Chapters 179 & 180
Section 14: Infections due to HIV

Chapters 181 & 182
Section 15: Infections due to RNA viruses
Chapter 183 to 190
Section 16: Fungal and Algal infections
Chapters 191 to 200
Section 17, 18 and 19: Protozoal and Helminthic infections
Chapters 201 to 213
Part 8. Bioterrorism and Clinical Medicine
Chapters 214

Other Suggested Reading:

1. Principles and Practice of Infectious Diseases - Mandell, Douglas and Bennet
2. A practical Approach to Infectious Diseases - Betts, Chapman and Penn
3. Medical Management of HIV Infection - Bartlett & Gallant
4. Handbook of Antibiotics - Reese, Betts & Gumustop
5. APIC Handbook of Infection Control

Useful Medical Websites:

Infectious Diseases Society of America - www.idsociety.org
American Society of Microbiology - www.asmuse.org
American Academy of HIV Medicine - aahivm.org
International AIDS Society - www.iasusa.org
Centers for Disease Control - www.cdc.gov
Travelers' Health | CDC - wwwn.cdc.gov/travel/
CDC Emergency Preparedness & Response Site - www.bt.cdc.gov/
CDC's Journal of Emerging Infectious Diseases - www.cdc.gov/ncidod/EID/index.htm
Morbidity & Mortality Weekly Report - www.cdc.gov/mmwr
AIDS Info Web Site - http://AIDSinfo.nih.gov
National Institute of Allergy and Infectious Diseases - www.niaid.nih.gov
Infectious Diseases Links - www.idlinks.com
Society of Healthcare Epidemiology of America - www.shea-online.org
Association for Professionals in Infection Control & Epidemiology (APIC) - www.apic.org
National Institute of Health - www.nih.gov
National Library of Medicine - www.nlm.nih.gov
Food & Drug Administration - www.fda.gov
Dept. of Health & Human Services - www.os.dhhs.gov
MedScape - www.medscape.com
Immunization Action Coalition - www.immunize.org
Clinical Infectious Diseases Journal - www.journals.uschicago.edu/CID
New England Journal of Medicine - www.nejm.org
Infection Control & Hospital Epidemiology - www.journals.uchicago.edu/loi/iche
National Clinicians' Post-Exposure Prophylaxis Hotline - http://www.ucsf.edu/hivcntr/

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Inpatient Medicine Curriculum

1. EDUCATIONAL GOALS

The goal of the inpatient medicine rotation at Harlem Hospital Medical Center is to provide a comprehensive clinical training while delivering care to the community in a venerable city institution. The inpatient ward experience will provide residents with the opportunity to develop the core medical competencies through a combination of direct patient care, bedside teaching rounds, independent and guided reviews of the medical literature, rotation syllabi, as well as didactic sessions. A graduate of this program will be well-equipped with the skills both to care for patients in a primary care or specialized setting, and well as with the skills needed to interpret the complex and continuous body of medical literature essential to maintaining high-quality medical practice. The following in a statement of the core clinical competencies of internal medicine as well as the stated goal of the ACMGE (Accreditation Council for Graduate Medical Education), followed by the specific tasks expected on the inpatient service by year, and how these tasks align with the stated ACGME goals.

A. THE CORE VALUES OF INTERNAL MEDICINE

Humanism

Specific Competencies:

- Create and sustain doctor-patient relationships that maximize the likelihood of the best outcome for the patients and the greatest personal satisfaction for the physician.
- In dealing with dying patients, demonstrate knowledge and skill in obtaining and interpreting advanced directives for care at the end of life, and in providing comfort care, including managing the patient's pain and anxiety and the family's grief.
- Recognize and appropriately manage so-called "difficult patients", including their personality disorders and problematic behavioral patterns.
- Understand one's own personal reactions to difficult situations; use these reactions to generate explanatory hypotheses and to understand potential barriers to communication.
- Understand the concept of the health belief model; know how to elicit it and how to work constructively in a patient-centered way with persons from different cultural groups.

Professionalism

Professionalism is a core set of values, attitudes, and behaviors that motivate physicians to make the interests of patients and society their first priority. The elements of professionalism, which have been identified by the American Board of Internal Medicine, from which this list is drawn, encompass: 1) a commitment to the highest standards of excellence in the practice of medicine and in generating and disseminating knowledge; 2) a commitment to seek to know the interests of individual patients and to protect their interests; and 3) a commitment to be responsive to the health needs of society. These elements require residents to acquire the competencies that are listed below.

Specific Competencies:

- Demonstrate a personal sense of altruism by consistently acting in one's patients' best interest.
- Maintain accountability - to the patient, to society, and to the profession - by fulfilling all agreements, both written and implied.

- Show a commitment to standards for lifelong excellence by continuously adding to one's knowledge of medicine and drawing the distinction between knowledge that is based on high-quality evidence and knowledge from anecdote and personal experience.
- Demonstrate a sustained commitment to service by accepting inconvenience to meet patients' needs, advocating for the best possible care for every patient, seeking active roles in professional organizations, and volunteering one's skills and expertise to advance the welfare of patients and the community.
- Demonstrate honesty and integrity through one's behaviors by recognizing and avoiding conflicts of interest and relationships and by refusing to allow personal gain to supersede the best interest of patients.
- Behave with high regard and respect for colleagues, other members of the health care team, and patients and their families.

Medical Ethics[1][2]

As with professionalism, medical ethics set forth a core set of principles guiding the patient-doctor interaction. The primary interests of physicians should be:

- Promotion of the health and well-being of their patients
- Advancement of biomedical knowledge through research
- Education of future physicians and health care providers
- Promotion of the public health

Residents Should Show Mastery Of The Core Principles Of Medical Ethics As Listed Below:

The Four Main Principles of Medical Dilemmas

1. *Autonomy*
2. *Malfeasance*
3. *Beneficence*
4. *Justice*

[1] *Cecil's Medicine 23rd Edition, pp 3-10*

[2] *AMA http://www.ama.com.au/node/2803 "The Role of the Medical Practitioner in End of Life Care -2007"*

Informed Consent, Including:

1. Diagnosis and prognosis
2. Nature of proposed intervention
3. Reasonable alternative interventions
4. Risks associated with alternative interventions
5. Benefits associated with each alternative intervention and
6. Probable outcomes of each alternative intervention

- Consideration of termination of care.
- The AMA (American Medical Association) position on euthanasia especially as it relates to providing high-quality end-of-life care.
- Financial conflicts of interests as they may interfere with the primary interests of physicians.

B. THE MEDICAL INTERVIEW OR HISTORY

Specific Competencies:

- Understand that the medical history has several stages - the opening, the characterization of symptoms and life setting, the review of symptoms, and the closing: each requires mastery
- Understand the interview's several functions: eliciting the data, pointing toward a diagnosis, forging a relationship, and healing.
- Shape the interview to fit the individual characteristics of the patient and the patient's illness or symptoms.
- Elicit the patient's history (story) and the context (family, occupational and social milieu) in which the illness or symptoms occur.
- Be alert to the patient's verbal and nonverbal behaviors, which are often the way to obtaining the clearest, most consistent narrative of the illness or symptoms.
- Develop verbal and nonverbal communication skills in order to facilitate communication, elicit the emotional content of the interview, and provide comfort.
- Overcome barriers to communication, including those derived from cultural differences or physical and mental impairment.
- Use the interview to identify cognitive impairment, anxiety, denial, and defensiveness; be able to manage each during the interview.
- Take a history of sensitive topics such as alcoholism, substance abuse, and sexual functioning and sexuality.
- Engage the patient as an ally in treatment planning.

C. PHYSICAL DIAGNOSIS

Specific Competencies:

- Understand how to apply the concept of operating characteristics (specificity, sensitivity, and likelihood ratios) to the interpretation of physical examination findings.
- Understand the pathophysiologic explanation for common physical findings.
- Know when to *abandon* a physical finding because new evidence has impugned its validity and when to *adopt* new findings that have been shown to be clinically useful.
- Examine patients efficiently and systematically, maximizing accuracy and completeness, ensuring that the patient is comfortable, and protecting the patient's modesty.
- Use the physical examination in the context of the entire clinical database to evaluate the patient efficiently and effectively.
- Know the content of the screening physical examination that is appropriate for each patient's age, sex, and particular risk factors.

- Utilize repeated, focused physical examinations to follow the course of a patient's illness.
- Use physical findings to make decisions in settings that do not allow for extensive diagnostic testing.

D. INTERPRETATION OF DIAGNOSTIC TESTS

Specific Competencies:

Be Able To Inspect And Interpret, or "Read," Data From:

☐☐ Chest x-ray	☐☐ Liver function tests
☐☐ Abdominal flat plate and upright x-ray	☐☐ Coagulation studies
☐☐ Arterial blood gases	☐☐ Urine analysis
☐☐ Serum electrolytes and routine chemistry panel	☐☐ Peripheral smear
	☐☐ Electrocardiogram

E. CLINICAL METHOD

Specific Competencies:

- Demonstrate skill in generating hypotheses early in the interview by integrating the patient's demographic characteristics, the initial complaint, his or her appearance, and other information into a preliminary diagnostic opinion.
- Obtain appropriate data from the interview, physical examination and diagnostic tests to support or refute the leading hypotheses.
- Accurately scan for asymptomatic diseases and their risk factors, applying evidence-based preventive health guidelines to the patient's population, preferences and personal agenda.
- Demonstrate diagnostic strategies that deal with ambiguous or incomplete data by the application of probabilistic reasoning, all the while being aware of not-to-be-missed diagnoses.
- Utilize the literature, expert opinion and colleagues to support one's diagnostic process.
- Function as a personal health manager to organize, arrange and monitor effective delivery of health services, particularly when patients have chronic or complicated illness.
- Maintain accurate records, communicate effectively with other providers, and bridge the gaps that can occur when the focus of care shifts between office, hospital, home or chronic care facility.

F. CLINICAL EPIDEMIOLOGY AND QUANTITATIVE CLINICAL REASONING

Specific Competencies:

- Understand how bias and chance affect the accuracy of observations on individual patients.
- Assess the validity of original research concerning diagnosis, prognosis, treatment, and prevention.
- Know the strengths and weaknesses of randomized clinical trials, case-control studies, cohort studies (retrospective, prospective), and meta-analyses.
- Demonstrate a practical strategy for judging the validity of colleagues' synthesis of clinical evidence (for example, review articles, continuing medical education courses, or consultant advice).
- Understand the meaning, uses, and limitations of statistical power, *P* values and confidence intervals, relative risk, attributable risk, and "number needed to treat".
- Understand how to estimate the pretest probability of a disease and how to use Bayes' theorem to estimate post-test probability.
- Define and use sensitivity, specificity, and likelihood ratios of diagnostic information.
- Know and be able to detect potential biases in estimates of sensitivity and specificity.
- Understand the value of decision trees and expected value decision making.
- Know how to measure patients' preferences.

- Understand and utilize sensitivity analysis and cost effectiveness analysis.

G. CLINICAL PHARMACOLOGY

Specific Competencies:

- Know the basic pharmacokinetic parameters of drugs; apply this knowledge to drug monitoring and drug dosage regimen design and adjustment.
- Describe a pharmacotherapeutic approach that includes definition of therapeutic objectives and options, selection of dose and parameters to monitor, and measurement of therapeutic outcome.
- Be able to evaluate the individual patient's therapeutic response by monitoring drug levels, pharmacologic effects, and adverse reactions and by assessing individual variability in drug metabolism.
- Know when to alter drug dosage because of altered drug disposition or conditions that place the patient at unusual risk.
- Know the principles of adverse drug reactions, drug allergies, and drug interactions and how the characteristics of the patient may alter them.
- Know how to use pharmacologic principles and information from poison control centers to diagnose and mange poisonings and drug overdose.

H. THE MANAGEMENT OF THE QUALITY OF HEALTH CARE

Specific Competencies:

- Know methods for evaluating the effectiveness and efficiency of one's practice patterns.
- Be able to describe how to use comparative data to measure variations in practice and thus identify best medical practices.
- Know some of the standard measures of care (for example, functional status, return to work rates, measures of morbidity) and how to obtain them.
- Know how to interpret the analytic tools utilized in quality improvement (for example, flow charts, fishbone diagrams, control charts).
- Be able to describe the methods used by external agencies and third-party payers to evaluate quality of care.
- Know the method used to develop practice guidelines and critical pathways and how physicians use them in the management of disease.
- Be able to describe how to develop a quality improvement project.
- Know how to lead a health care team that is trying to improve the quality of its services (understand team behavior, working with a team, and reshaping a team).

I. LIFELONG LEARNING

Specific Competencies:

- Develop a personal method for "keeping up" with new advances and changes in knowledge.
- Participate actively in didactic programs and other learning experiences organized within a residency program.
- Maintain an attitude of healthy skepticism and curiosity, as evidenced by thoughtful questioning, independent study, and critical analysis of published materials.
- Demonstrate facility in using electronic databases, literature retrieval services, and computer-based diagnostic reasoning programs.
- Be able to critically appraise the medical literature, identifying the strengths and weaknesses of an article and its relevance to one's patient population.

J. METHODS AND VENUES

Many sources contribute to the educational experience in the inpatient service.
The team structure on the inpatient ward, including first and second-year residents, permits residents to have "graded responsibility" for decisions regarding patient care. There are three separate inpatient ward experiences, all of which are general inpatient medical ward experiences. In each of these ward rotations, the attending physician is directly involved with patient care on a daily basis. Attendings may be general internists or specialists in internal medicine. All teaching rounds focus on the patient and include bedside teaching of history and physical examination. Teaching rounds also provide an opportunity to refine case presentation skills, discuss appropriate selection of diagnostic tests and management strategies, review pathophysiology, relevant medical literature related to the presented case, and teach psychosocial issues related to patient care.

K. PROCEDURAL SKILLS

Be Able To Identify Proper Indications And Safely Perform:

- *Lumbar Puncture*
- *Thoracentesis*
- *Paracentesis*
- *Nasogastric Intubation*
- *Foley Catheter Placement*
- *Insertion Of Intravenous Catheters (Peripheral And Central)*
- *Arterial Puncture*
- *Arthrocentesis*

ACGME Core Competencies

In July 2001, the Accreditation Council for Graduate Medical Education (ACGME) introduced six newly defined areas in which residents must attain competence over the course of their training. The competencies and their definitions are listed below:

1. ***Patient Care*** - Residents are expected to provide patient care that is compassionate, appropriate and effective for the promotion of health, prevention of illness, treatment of disease and end of life care.
   - Gather accurate, essential information from all sources, including medical interviews, physical examination, medical records, and diagnostic/therapeutic procedures.
   - Make informed recommendations about preventive, diagnostic, and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.
   - Develop, negotiate and implement patient management plans.
   - Perform competently the diagnostic procedures considered essential to the practice of general internal medicine.
2. ***Medical Knowledge*** - Residents are expected to demonstrate knowledge of established and evolving biomedical, clinical and social sciences, and demonstrate the application of their knowledge to patient care and education of others.
   - Apply an open-minded and analytical approach to acquiring new knowledge.
   - Develop clinically applicable knowledge of the basic and clinical science that underlies the practice of internal medicine.
   - Apply this knowledge in developing critical thinking, medical education, clinical problem solving, and clinical decision-making skills.
   - Access and critically evaluate current medical management and scientific evidence and modify knowledge base accordingly.

3. ***Practiced-Based Learning and Improvement*** - Residents are expected to be able to use scientific methods and evidence to investigate, evaluate, and improve their patient care practices.
    - Identify areas for improvement and implement strategies to improve their knowledge, skills, attitudes, and processes of care.
    - Analyze and evaluate their practice experiences and implement strategies to continually improve the quality of their patient practices.
    - Develop and maintain a willingness to learn from errors and use errors to improve the system or processes of care.
    - Use information technology or other available methodologies to access and manage information and support patient care decisions and their own educations.
4. ***Interpersonal Skills and Communication*** - Residents are expected to demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, patients' families, and other members of health care team.
    - Provide effective and professional consultation to other physicians and health care professionals and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.
    - Use effective listening, nonverbal, questioning, and narrative skills to communicate with patients and families.
    - Interact with colleagues, staff, and consultants in a respectful and appropriate manner.
    - Maintain comprehensive, timely, and legible medical records.
5. ***Professionalism*** - Residents are expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, an understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society.
    - Demonstrate respect, compassion, integrity, and altruism in their relationships with patients, families, and colleagues.
    - Demonstrate sensitivity and responsiveness to patients and colleagues, including gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behavior, and disabilities.
    - Adhere to principles of confidentiality, scientific/academic integrity, and informed consent.
    - Recognize and identify deficiencies in peer performance.
6. ***Systems-Based Practice*** **-** Residents are expected to demonstrate an understanding of the contexts and systems in which health care is provided, and demonstrate the ability to apply this knowledge to improve and optimize health care.
    - Understand, access, and utilize the resources and providers necessary to provide optimal care.
    - Understand the limitations and opportunities inherent in various practice types and delivery systems, and develop strategies to optimize care for the individual patient.
    - Apply evidence-based, cost-conscious strategies for prevention, diagnosis, and disease management.
    - Collaborate with other members of the health care team to assist patients in dealing effectively with complex systems and to improve systemic processes of care.

2. PGY-1 INPATIENT MEDICINE ROTATION
(Specific Objectives with Corresponding ACGME Competencies)

Rotation Specific Objective	ACGME Competency (Ies)
Interns will demonstrate willingness to take on primary responsibility for patient care.	→ Patient Care
Interns will be able to perform a complete and accurate history and physical.	→ Patient Care → Interpersonal Skills And Communication

Interns will be able to generate a comprehensive differential diagnosis and management plans for the most common chief complaints, as listed below, based on the assessment of the patient's complaint.	→ Patient Care → Medical Knowledge
Interns will incorporate current evidence in to developing management plans at the time of admission and during the course of a patient's stay.	→ Systems-Based Practice
Interns will learn the indications for and safely perform the procedural skills listed above (pp 8, section J.).	→ Patient Care → Practice-Based Learning And Improvement
Interns will be learn to select and interpret tests and treatment modalities while taking efficiency and cost-effectiveness into account.	→ Patient Care
Interns will demonstrate the ability to communicate effectively, verbally or in writing, with patients, supervisors, colleagues, students, and multi-disciplinary team members.	→ Patient Care → Interpersonal Skills And Communication
Interns will use the electronic medical record to generate comprehensive and timely medical records.	→ Interpersonal Skills And Communication
Interns will be demonstrating effective discharge planning.	→ Systems-Based Practice
Interns will demonstrate commitment to the ideals of professionalism, ethics, respect, compassion, and altruism in all of their interactions with patients, families, and colleagues.	→ Interpersonal Skills And Communication
Interns will demonstrate the ability to access and critically evaluate medical literature, and be able to apply knowledge to clinical practice.	→ Practice-Based Learning And Improvement
Interns will demonstrate an enthusiasm for self-improvement, evidencing on-going self –learning, responsiveness to criticism, ability to learn from past experiences, and willingness to identify and improve systemic deficiencies.	→ Practice-Based Learning And Improvement → Systems-Based Practice
Interns will learn to understand the system in which they work, and demonstrate the ability to access various resources, providers, information technology, and multidisciplinary team members in the care of their patients.	→ Systems-Based Practice → Interpersonal Skills And Communication
Interns will demonstrate behaviors that engender sensitivity and responsiveness to issues related to patients' and colleagues' gender, age, culture, religion, sexual preferences, socioeconomic status, beliefs behaviors and disabilities.	→ Interpersonal Skills And Communication

3. PGY-2 INPATIENT MEDICINE ROTATION
(Specific Objectives with Corresponding ACGME Competencies)

Rotation Specific Objective	ACGME Competency (ies)
Residents will demonstrate the ability to serve effectively as a role model and leader for the inpatient team.	→ Professionalism
Residents will demonstrate the ability to triage patients based on severity of illness.	→ Patient Care → Medical Knowledge

Residents will be able to determine the likelihood of various differential diagnoses and develop a management plan accordingly.	→ Patient Care → Medical Knowledge
Residents will continue to incorporate current evidence in to developing management plans and directing junior housestaff in using medical evidence in practice.	→ Systems-Based Practice
Residents will master the indications for and become certified in the procedural skills listed above (pp 8, section J.).	→ Patient Care
Residents will demonstrate the appropriate communication/interpersonal skills with the attendings, the junior house officers, the multi-disciplinary team members, and consultant staff, in the implementation of patient care recommendations.	→ Patient Care → Interpersonal Skills And Communication
Residents will offer appropriate guidance in communication of transfer of care and ensuring safe sign-outs.	→ Interpersonal Skills And Communication
Residents will demonstrate behaviors that reflect his/her commitment to continuing the development of professional and ethical behaviors.	→ Professionalism
Residents will demonstrate active pursuit of self-learning/improvement and scholarly activities.	→ Practice-Based Learning And Improvement
Residents will demonstrate the ability to teach and communicate knowledge effectively to others, including medical students and junior housestaff and create a nurturing atmosphere for learning.	→ Medical Knowledge → Interpersonal Skills And Communication
Based on a more sophisticated understanding of the system, residents will identify and help to improve limitations in their work environment.	→ Systems-Based Practice
By refining time-management skills, residents will demonstrate efficiency and effectiveness in the care of hospitalized patients.	→ Patient Care

Common Chief Complaints and Presentations of Disease [3]

Pain/Nervous System
Pain affecting the periphery
Chest Discomfort
Abdominal Pain
Headache
Back and Neck Pain
Fever and Hyperthermia
Fever and Rash
Fever of Unknown Origin
Hypothermia and Frostbite
Syncope
Dizziness and Vertigo
Weakness and Paralysis
Gait and Balance Disorders
Numbness, Tingling, and Sensory Loss
Confusion and Delerium

Ear Nose and Throat
Pharyngitis, Sinusitis and Otitis

Pulmonary/Cardiac
Dyspnea and Pulmonary Edema
Cough and Hemoptysis
Hypoxia and Cyanosis
Edema
Palpitations

Gastrointestinal
Dysphagia
Nausea, Vomiting, and Indigestion
Diarrhea and Constipation
Weight Loss
Gastrointestinal Bleeding
Jaundice
Abdominal Swelling and Ascites

Renal and Urinary Tract
Azotemia and Urinary Abnormalities
Fluid and Electrolyte Disturbances
Hypercalcemia and Hypocalcemia
Acidosis and Alkalosis

Alterations in the Skin
Eczema
Psoriasis
Cutaneous Infections
Acne
Skin Manifestations of Internal Disease
Immunologically Mediated Skin Disease
Cutaneous Drug Reactions

Hematologic
Anemia and Polycythemia
Bleeding and Thrombosis
Enlargement of the Lymph Nodes and Spleen
Disorders of Granulocytes and Monocytes

[3] *Harrison's Principles of Internal Medicine. Cardinal Manifestations of Disease.*

4. PRINCIPAL TEACHING METHODS

Teaching on the inpatient medical service occurs in concert with delivery of medical care. An intern may be responsible for up to 10 patients on the inpatient medical service. Each medical team has 2 attendings who are also responsible for teaching who are also responsible for supervising patient care. As far as possible, one teaching attending is a general internist and the other is a subspecialist to allow residents to be able to see different approaches to patient care as they develop their own individual styles.

Care begins with an inpatient evaluation at admission from the emergency room. After the intern and resident assess the patient, they initiate testing and preliminary treatment. For challenging cases or difficult clinical questions, the supervising attending is available on call, and a third year supervising resident - the Medical Admitting Resident - is available to help.

Each case is individually reviewed at morning rounds with the supervising attending with a complete history and physical, with review of lab data, imaging, and discussion of the assessment and plan. If applicable, recent data from the medical literature is also discussed at the entire team. All patients currently on the inpatient service under the care of the team are discussed with the intern, primarily responsible for each individual case, and two residents on the inpatient team.

Each team has two residents who together are responsible for the supervision of both medical student and junior housestaff in teaching throughout the course of the day with respect to patients on the service, assisting them in composing thorough but concise history and physicals, follow-up assessments, as well as supervising them in any procedures that need to be done (see above for complete list.)

Teaching is further supplemented by morning and early afternoon teaching sessions. These sessions include morning report, chief of service rounds as well as the other regularly scheduled conferences.

5. SUPERVISION OF RESIDENTS BY FACULTY

Rounds are conducted daily with a supervising attending who admits the patient and follows the patient daily throughout the course of their stay. Residents read and co-sign resident and intern notes daily. Attendings are available for any procedures that require supervision and are available overnight for questions that arise with inpatients or new admissions.

6. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs on a daily basis through close observation by the assigned teaching attending, who is also expected to provide formal oral summary evaluations to the residents at the midpoint of the rotation as well as at the end of the rotation. Residents also receive a written evaluation from both the teaching attendings at the conclusion of the rotation via the www.myevaluations.com web based system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system. Residents are also provided with an opportunity to evaluate the assigned teaching faculty.

7. SUGGESTED CORE READING LIST AND REFERENCES

(All Blue Text Is Hyperlinked Via The Columbia Library. You Will Need Your UNI to Access These Resources)

Core Textbook:
Harrison's Principles of Internal Medicine *(Available via CUMC Library Online At http://www.accessmedicine.com.monstera.cc.columbia.edu:2048/resourceToc.aspx?resourceID=4)*

Required Reading:
Part 2. Cardinal Manifestations and Presentation of Diseases
Section 1: Pain
Pain: Pathophysiology and Management

Chest Discomfort
Abdominal Pain
Headache
Back and Neck Pain

Part 2. Section 2: Alterations in Body Temperature
Fever and Hyperthermia
Fever and Rash
Fever of Unknown Origin
Hypothermia and Frostbite

Nervous System Dysfunction
Chapter 21 Syncope
Chapter 22 Dizziness and Vertigo
Chapter 23 Weakness and Paralysis
Chapter 24 Gait and Balance Disorders
Chapter 26 Confusion and Delerium
Part 2. Section 4: Disorders of Eyes, Ears, Nose and Throat
Chapter 31 Pharyngitis, Sinusitis, Otitis and Other Upper Respiratory Tract Infections

Part 2. Section 5: Alterations in Circulatory and Respiratory Functions
Chapter 33 Dyspnea and Pulmonary Edema
Chapter 34 Cough and Hemoptysis
Chapter 35 Hypoxia and Cyanosis
Chapter 36 Edema
e8 Approach to the Patient with a Heart Murmur
Chapter 37 Palpitations

Part 2. Section 6: Alterations in Gastroinstestinal Function
Chapter 38 Dysphagia
Chapter 39 Nausea, Vomiting and Indigestion
Chapter 40 Diarrhea and Constipation
Chapter 41 Weight Loss
Chapter 42 Gastrointestinal Bleeding
Chapter 43 Jaundice
Chapter 44 Abdominal Swelling and Ascites

Part 2. Section 7: Alterations in Renal and Urinary Tract Function
Azotemia and Urinary Abnormalities
Atlas of Urinary Sediments and Renal Biopsies
Fluid and Electrolyte Disturbances
Hypercalcemia and Hypocalcemia
Acidosis and Alkalosis

Part 2. Section 9: Alterations in the Skin
Chapter 52 Approach to the Patient with a Skin Disorder
Chapter 53 Eczema, Psoriasis, Cutaneous Infections, Acne, and Other Common Skin Disorders
Chapter 54 Skin Manifestations of Internal Diseases
Chapter 55 Immunologically Mediated Skin Diseases
Chapter 56 Cutaneous Drug Reactions
Chapter 57 Photosensitivity and Other Reactions to Light
e10 Atlas of Skin Manifestations of Internal Disease

Additional Required Reading by System:
Part 9: Disorders of the Cardiovascular System
Section 1: Introduction to Cardiovascular Disorders
Chapter 217 Basic Biology of the Cardiovascular System pp 1373-1375, starting from "Assessment of Cardiac Function" to end
Section 2: Diagnosis of Cardiovascular Disorders
Chapter 220 Physical Examination of the Cardiovascular System
Chapter 221 Electrocardiography
Section 3: Disorders of Rhythm
Chapter 225 The Bradyarrythmias
Chapter 226 The Tachyarrythmias
e21 Atlas of Cardiac Arrythmias
Section 4: Disorders of the Heart
Chapter 227 Heart Failure and Cor Pulmonale
Chapter 230 Valvular Heart Disease
Chapter 231 Cardiomyopathy and Myocarditis
Chapter 232 Pericardial Heart Disease
Chapter 233 Tumors and Trauma of the of the Heart, pp 1495-1496, "Primary Tumors"
Section 5: Vascular Disease
Chapter 237 Ischemic Heart Disease
Chapter 238 Unstable Angina and Non-ST-Elevation Myocardial Infarction
Chapter 239 ST-Segment Elevation Myocardial Infarction
Chapter 242 Diseases of the Aorta
Chapter 243 Vascular Diseases of the Extremities

Relevant Medical Literature: Please see individual rotation curricula for more in-depth reading by organ-system

Atrial Fibrillation
Gage Brian F. et al: "Validation of Clinical Classification Schemes for Predicting Stroke: Results From the National Registry of Atrial Fibrillation" JAMA. 2001; 285(22):2864-2870

PCI
Boden, William E. et al: "Optimal Medical Therapy with or without PCI for Stable Coronary Disease" NEJM 2007; 356(15):1503-1516

NSTEMI
Antman EM et al: "The TIMI risk score for unstable angina/non-ST elevation MI: A method for prognostication and therapeutic decision making" JAMA 284:835 2000

The Clopidogrel in Unstable Angina to Prevent Recurrent Events Trial Investigators "Effects of Clopidogrel in Addition to Aspirin in Patient with Acute Coronary Syndromes without ST-Segment Elevation" 2001 345(7):494-502

STEMI
Farkouh ME, et al: "Design of the Future Revascularization Evaluation in patients with Diabetes Mellitus: Optimal management of Multivessel disease (FREEDOM) Trial." Am Heart J. 2008 Feb; 155(2): 215-23

Javaid Aamir et al: "Outcomes of Coronary Artery Bypass Grafting Versus Percutaneous Coronary Intervention With Drug-Eluting Stents for Patients with Multivessel Coronary Artery Disease" Circulation 2007;116:200-206

Part 13 Disorders of the Gastrointestinal System
Section 1 Disorders of the Alimentary Tract
Chapter 286 Disease of the Esophagus

Chapter 285 Gastrointestinal Endoscopy
Chapter 287 Peptic Ulcer Disease and Related Disorders
Chapter 288 Disorders of Absorption start at pp 1877 "Approach to the Patient with Malabsorption" to end
Chapter 291 Diverticular Disease and Common Anorectal Disorders
Chapter 292 Mesenteric Vascular Insufficiency
Chapter 293 Acute Intestinal Obstruction
Chapter 294 Acute Appendicitis and Peritonitis, start at p. 1916 "Acute Peritonitis" to end

Section 2 Liver and Biliary Tract Disease
Table 295-1 "Liver Diseases" pp 1919
Table 295-3 "Important Diagnostic Tests in Common Liver Diseases" pp 1921
Figure 295-1 "Evaluation of Abnormal Liver Tests" pp 1922
Table 296-1 "Liver Tests in Hepatobiliary Disorders" pp 1926
Chapter 298 Acute Viral Hepatitis
Chapter 299 Toxic and Drug-Induced Hepatitis
Chapter 301 Alcoholic Liver Disease
Chapter 302 Cirrhosis and its Complications
Chapter 303 Genetic, Metabolic, and Infiltrative Diseases Affecting the Liver
Chapter 305 Diseases of the Gallbladder and Bile Ducts

Section 3 Disorders of the Pancreas
Chapter 306 Approach to the Patient with Pancreatic Disease
Chapter 307 Acute and Chronic Pancreatitis

Relevant Medical Literature: Please see individual rotation curricula for more in-depth reading by organ-system

Acute GI Bleed
Gralnek IM, Barkun AN, Bardou M "Management of Acute Bleeding from a Peptic Ulcer" NEJM 3008 359(9):928-937

Sung J.J. Y. MD, et al: "Octreotide Infusion or Emergency Sclerotherapy for Variceal Haemorrhage" Lancet 1993 342:637-641

Acute Peritonitis
Sort, Pau MD et al: "Effect of Intravenous Albumin on Renal Impairment and Mortality in Patients with Cirrhosis and Spontaneous Bacterial Peritonitis" NEJM 1999 341(6):403-409

Part 16: Neurologic Disorders
Section 1: Diagnosis of Neurologic Disorders
Chapter 360 Mechanisms of Neurologic Disease-

- *Ion Channels and Channelopathies pp 2477-2478*
- *Neurotransmitters and Neurotransmitter Receptors pp2478-2479*
- *Stem Cells and Transplantation pp2480-2481*

Chapter 361 Approach to the Patient with Neurologic Disease

Section 2: Diseases of the Central Nervous System
Chapter 363 Seizures and Epilepsy: SKIP

- *"Basic Mechanisms" pp 2503-2504*
- *"Surgical Treatment of Refractory Epilepsy" p 2510*
- *"Beyond Seizures: Other Management Issues: pp 2511-2512*

Chapter 364 Cerebrovascular Diseases

Chapter 365 Dementia
Chapter 366 Parkinson's Disease and Other Extrapyramidal Movement Disorders STOP after "Dementia in Parkinson's Disease" on p 2558
Chapter 369 Amyotrophic Lateral Sclerosis and Other Motor Neuron Diseases
Chapter 370 Disorders of the Autonomic Nervous System

- *"Approach to the Patient: Orthostatic Hypotension and other ANS Disorders" pp 2578-2579*
- *"Peripheral Nerve and Neuromuscular Junction Disorders: p 2580*
- *"Diabetes Mellitus" p 2580*
- *"Amyloidosis" p 2580*
- *"Alcoholic Neuropathy" p 2580*
- *"Porphyria" p 2580*
- *"Guillan-Barre Syndrome" p 2580*
- *"Botulism" p 2580*
- *"Reflex Sympathetic Dystrophy and Causalgia" pp2581-2*
- *"Autonomic Failure" p 2582*

Chapter 372 Diseases of the Spinal Cord:

- *"Approach to the Patient: Spinal Cord Disease" pp2588-2590*
- *"Approach to the Patient: Compressive and Noncompressive Myelopathy" p 2591*
- *"Compressive Myelopathies" pp 2591*
- *"Neoplastic Spinal Cord Compression" pp 2591-2591*
- *"Spinal Epidural Abscess" p2592*
- *"Subacute Combined Degeneration (Vitamin B12 deficiency)" p 2595*
- *"Tabes Dorsalis" p 2595*

Chapter 373 Concussion and Other Head Injuries- Start with "Cranial Nerve Injuries" p 2598 to end
Chapter 375 Multiple Sclerosis and other Demyelinating Diseases
Chapter 376 Meningitis, Encephalitis, Brain Abscess and Empyema
Chapter 378 Prion Diseases

Section 3: Nerve and Muscle Disorders
Chapter 379 Peripheral Neuropathy
Chapter 380 Guillan-Barré Syndrome and Other Immune-Mediated Neuropathies
Chapter 381 Myasthenia Gravis and Other Diseases of the Neuromuscular Junction
Chapter 383 Polymyositis, Dermatomysitis and Inclusion Body Myositis

Section 5: Psychiatric Disorders
Chapter 386 Mental Disorders

Section 6: Alchoholism and Drug Dependency
Alcohol and Alcoholism
Opioid Drug Abuse and Dependence
Cocaine and Other Commonly Abused Drugs
Nicotine Addiction

Disorders of the Kidney and Urinary Tract
Acute Renal Failure
Chronic Kidney Disease
Glomerular Diseases
Polycystic Kidney Disease and Other Inherited Tubular Disorders
Tubulointerstitial Diseases of the Kidney
Vascular Injury to the Kidney

Nephrolithiasis
Urinary Tract Infections, Pyelonephritis, and Prostatitis
Urinary Tract Obstruction

Endocrinology and Metabolism
Endocrinology
Chapter 332 Principles of Endocrinology "Approach to the Patient: Endocrine Disease" pp 2194-2195
Chapter 333 Disorders of the Anterior Pituitary and Hypothalamus
Chapter 334 Disorders of the Neurohypophysis
Chapter 335 Disorders of the Thyroid Gland
Chapter 336 Disorders of the Adrenal Cortex
Chapter 337 Pheochromocytoma
Chapter 338 Diabetes Mellitus
Chapter 339 Hypoglycemia
Chapter 340 Disorders of the Testes and Male Reproductive System- start at pp 2315, "Disorders of the Male Reproductive System During Adulthood" to the end
Chapter 344 Endocrine Tumors of the Gastrointestinal Tract and Pancreas
Chapter 345 Disorders Affecting Multiple Endocrine Systems

Section 2: Disorders of Bone and Mineral Metabolism
Chapter 346 Bone and Mineral Metabolism in Health and Disease
Chapter 347 Diseases of the Parathyroid Gland and Other Hyper- and Hypocalcemic Disorders
Chapter 349 Paget Disease and Other Dysplasias of the Bone
Chapter 350 Disorders of Lipoprotein Metabolism
Chapter 351 Hemochromatosis
Chapter 352 The Porphyrias
Chapter 353 Disorders of Purine and Pyrimidine Metabolism
Chapter 354 Wilson Disease
Chapter 355 Heritable Disorders of Connective Tissue

- *"Ehler's Danlos Syndrome" pp2465-2467*
- *"Marfan Syndrome" pp 2468-2469*

Part 6: Oncology and Hematology
Section 1: Neoplastic Disorders
Chapter 77 Approach to the Patient with Cancer
Chapter 81 Principles of Cancer Treatment
Chapter 82 Infections in Patients with Cancer
Chapter 84 Head and Neck Cancer
Chapter 85 Neoplasms of the Lung
Chapter 86 Breast Cancer
Chapter 87 Gastrointestinal Tract Cancer
Chapter 88 Tumors of the Liver and Biliary Tree
Chapter 89 Pancreatic Cancer
Chapter 90 Bladder and Renal Cell Carcinomas
Chapter 91 Benign and Malignant Diseases of the Prostate
Chapter 94 Soft Tissue and Bone Sarcomas and Bone Metastases
Chapter 96 Paraneoplastic Syndromes: Endocrinologic/Hematologic
Chapter 97 Paraneoplastic Neurologic Syndromes
e13 Late Consequences of Cancer and its Treatment

Section 2: Hematopoetic Disorders
Chapter 98 Iron Deficiency and Other Anemias

Chapter 99 Disorders of Hemoglobin
Chapter 100 Megaloblastic Anemias
Chapter 101 Hemolytic Anemias and Anemia Due to Acute Blood Loss
Chapter 102 Aplastic Anemia, Myelodysplasia, and Related Bone Marrow Failure Syndromes
Chapter 103 Polycythemia Veran and Other Myleoproliferative Diseases
Chapter 104 Acute and Chronic Myeloid Leukemia
Chapter 105 Malignancies of Lymphoid Cells
Chapter 106 Plasma Cell Disorders
Chapter 107 Transfusion Biology and Therapy

Relevant Medical Literature: Please see individual rotation curricula for more in-depth reading by organ-system

DVT/ PE Treatment and Prophylaxis
Palareti G. et al: "D-Dimer Testing to Determine the Duration of Anticoagulation Therapy" NEJM 2006; 355:1780-1789

Lee, Agnes Y. Y. "Low-molecular-weight heparin versus a coumarin for the prevention of recurrent venous thromboembolism in patients with cancer". N Engl J Med 2003 349:146-53

Part 10: Disorders of the Respiratory System
Section 1: Diagnosis of Respiratory Disorders
Chapter 245 Approach to the Patient with Disease of the Respiratory System
Chapter 246 Disturbances of Respiratory Function
Chapter 247 Diagnostic Procedures in Respiratory Disease
e24 Atlas of Chest Imaging
Section 2 Diseases of the Respiratory System
Chapter 248 Asthma
Chapter 249 Hypersensitivity Pneumonitis and Pulmonary Infiltrates with Eosinophilia
Chapter 250 Environmental Lung Disease
Chapter 251 Pneumonia
Chapter 252 Bronchiectasis and Lung Abcess
Chapter 254 Chronic Obstructive Pulmonary Disease
Chapter 255 Interstitial Lung Disease
Chapter 256 Deep Venous Thrombosis and Pulmonary Embolism
Chapter 257 Disorders of the Pleura and Mediastinum
Chapter 258 Disorders of Ventilation
Chapter 259 Sleep Apnea

Part 11 Critical Care Medicine
Section 4 Oncologic Emergencies
Chapter 270 Oncologic Emergencies

Part 5 Nutrition
Chapter 71 Vitamin and Trace Mineral Deficiency and Excess

Part 8 Bioterrorism and Clinical Medicine
Chapter 215 Chemical Bioterrorism

Part 17 Poisoning Drug Overdose and Envenenomation
e34 Heavy Metal Poisoning
e35 Poisoning and Drug Overdose
Chapter 392 Ectoparasite Infestations and Arthropod Bites and Stings

Part 14 Disorders of the Immune System, Connective Tissue and Joints
Section 1 The Immune System in Health and Disease
Chapter 310 Primary Immune Deficiency Diseases

Section 2 Disorders of Immune-Mediated Injury
Chapter 311 Allergies, Anaphylaxis and Systemic Mastocytosis
Chapter 313 Systemic Lupus Erthematosus
Chapter 314 Rheumatoid Arthritis
Chapter 316 Systemic Sclerosis (Scleroderma) and Related Disorders
Chapter 317 Sjögren's Syndrome
Chapter 318 The Spondylarthropathies
Chapter 319 The Vasculitis Syndromes
e28 Atlas of Clinical Imaging in the Vasculitc Syndromes
Chapter 320 Behçet's Syndrome
Chapter 321 Relapsing Polychondritis
Chapter 322 Sarcoidosis
Chapter 324 Amyloidosis

Section 3 Disorders of the Joints and Adjacent Tissues
Chapter 325 Approach to Articular and Musculoskeletal Disorders
- *Table 325-2 "Drug-Induced Musculoskeletal Conditions" p 2152*
- *Figure 325-4 "Sites of hand or wrist involvement and their potential disease associations" p 2153*
- *Table 325-4 "Antinuclear Antibody (ANA) Patterns and Clinical Associations"*

Chapter 326 Osteoarthritis
Chapter 327 Gout and Other Crystal-Associated Arthropathies
Chapter 328 Infectious Arthritis
Chapter 331 Periarticular Disorders of the Extremities

Part 7 Infectious Diseases
Section 1 Basic Considerations in Infectious Diseases
Chapter 115 Approach to the Acutely Ill Infected Febrile Patient
Section 2 Clinical Syndromes: Community Acquired Infections
Chapter 118 Infective Endocarditis
Chapter 119 Infections of the Skin, Muscle, and Soft Tissues
Chapter 120 Osteomyelitis
Chapter 121 Intrabdominal Infections and Abcesses
Chapter 122 Acute Infectious Diarrheal Disease and Bacterial Food Poisoning
Chapter 123 Clostridium Difficile-Associated Disease, Including Pseudomembranous Colitis
Chapter 124 Sexually Transmitted Infections: Overview and Clinical Approach

Section 3 Clinical Syndromes: Health-Care Associated Infections
Chapter 125 Health-Care Associated Infections

Section 4 Approach to Therapy for Bacterial Diseases
Chapter 127 Treatment and Prophylaxis of Bacterial Infections
- *Table 127-7 Most Clinically Relevant Adverse Reactions to Common Antibacteral Drugs pp 862*
- *Table 127-8 Interactions of Antibacterial Agents with Other Drugs pp 863*

Section 5 Diseases Caused by Gram-Positive Bacteria
Chapter 128 Pneumococcal Infections
Chapter 129 Staphylococcal Infections

Chapter 130 Streptococcal Infections
Chapter 132 Infections Caused by Listeria Monocytogenes
Chapter 133 Tetanus

Section 6 Diseases Caused by Gram-Negative Bacteria
Chapter 136 Meningococcal Infections
Chapter 137 Gonococcal Infections
Chapter 143 Diseases Caused by Gram-Negative Enteric Bacilli
Chapter 145 Infections due to Pseudomonas Species and Related Organisms-
Table 145-2 Antibiotic Treatment of Infections Due to Pseudomonas Aeruginosa and Related Species
Chapter 146 Salmonellosis
Chapter 150 Brucellosis
Chapter 151 Tularemia
Chapter 153 Bartonella Infections, Including Cat-Scratch Disease

Tuberculosis
Section 9 Spirochetal Diseases
Chapter 162 Syphilis
Chapter 166 Lyme Borreliosis

Section 10 Diseases Caused by Rickettsiae Mycoplasmas, and Chlamydiae
Chapter 167 Rickettsial Diseases
Chapter 169 Chlamydial Infections

Section 12 Infections due to DNA Viruses
Chapter 172 Herpes Simplex Viruses
Chapter 173 Varicella-Zoster Virus Infections
Chapter 174 Epstein-Barr Virus Infections, Including Infectious Mononucleosis
Chapter 175 Cytomegalovirus and Human Herpesvirus 6, 7, and 8
Chapter 177 Parvovirus Infections

Section 13 Infections Due to DNA and RNA Respiratory Viruses
Chapter 180 Influenza

Section 14 Infections Due to Human Immunodeficiency Virus and Other Human Retroviruses
Chapter 182 Human Immunodeficiency Virus Disease: AIDS and Related Disorders

Section 15 Infections Due to RNA Viruses
Chapter 188 Rabies and Other Rhabdovirus Infections
Chapter 189 Infections Caused by Arthropod and Rodent-Borne Viruses- start at "Dengue Fever" p 1230 and continue to the end

Section 16 Fungal and Algal Infections
Diagnosis and treatment of fungal infections
Chapter 192 Histoplasmosis
Chapter 193 Coccidiomycosis
Chapter 194 Blastomycosis
Chapter 195 Cryptococcosis
Chapter 196 Candidiasis
Chapter 197 Aspergillosis
Chapter 198 Mucormycosis
Chapter 200 Pneumocystis Infection

Section 18 Protozoal Infections
Chapter 202 Amebiasis and Infection with Free-Living Amebas
Chapter 203 Malaria
Chapter 207 Toxoplasma Infections
Chapter 208 Protozoal Intestinal Infections and Trichomoniasis

Relevant Medical Literature: Please see individual rotation curricula for more in-depth reading by organ-system

Moran GJ et al: "Methicillin-Resistant S. aureus Infections among Patients in the Emergency Department" NEJM 2006 355(7):666-674

Part 1 Introduction to Clinical Medicine
e4 Ethical Issues in Clinical Medicine

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Nephrology Curriculum

1. EDUCATIONAL GOALS

The goal of the nephrology rotation is to teach residents to provide quality medical care to patients with acute kidney injury, chronic kidney disease, glomerulonephritides, acid-base and electrolyte disorders as well as the associated complications of these disorders in the inpatient and outpatient settings.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-2 and PGY-3

Inpatient Consultation Service	
Demonstration of bedside skills necessary for the assessment and on-going care of patients with renal and electrolyte disorders.	→ Patient Care → Medical Knowledge
Identification of common etiologies, presentations, complications of electrolyte disorders and their management.	→ Medical Knowledge → Practice Based Learning
Identify appropriate utilization of the nephrology subspecialty consultation in a cost-effective and evidence based manner.	→ Medical Knowledge System Based Learning
Understanding of the tests and radiological imaging utilized in the evaluation, management and monitoring of patients with renal diseases.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Actively participate in making informed recommendations about preventive, diagnostic, and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning
Communicate effectively with patients and their families in all situations, especially around difficult issues such as initiation of renal replacement therapy and when appropriate withdrawal of support.	→ Interpersonal And Communication Skills → Practice Based Learning
Provide effective and professional consultation to referring physicians and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.	→ Interpersonal And Communication Skills → Professionalism
Observe and when appropriate participate in nephrology specific procedures including urinalysis, urine sediment microscopy, temporary catheter placement, renal biopsy and various renal replacement therapies.	→ Patient Care → Medical Knowledge → Practice Based Learning

Outpatient Service

Hypertension Clinic	
Evaluation of patients with uncontrolled hypertension or secondary hypertension.	→ Medical Knowledge → Patient Care → Practice Based Learning
Identification of signs and symptoms of secondary hypertension, possible etiologies and appropriate testing, as well as management appropriate management.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning

Identification of and management of patients with resistant hypertension including factors that contribute to difficult to control hypertension including noncompliance.	→ Medical Knowledge → Patient Care → Practice Based Learning → Interpersonal And Communication Skills

Renal Clinic	
Identification of the common etiologies of chronic kidney disease its clinical manifestations and complications	→ Medical Knowledge → Patient Care → Practice Based Learning
Management of chronic kidney disease and its associated complications	→ Medical Knowledge → Patient Care → Practice Based Learning
Identification and management of other renal diseases including glomerulonephritides and chronic acid-base and electrolyte disorders	→ Medical Knowledge → Patient Care → Practice Based Learning
Identifying patients requiring chronic renal replacement therapy and preparing them for this.	→ Practice Based Learning → System Based Learning
Appropriate implementation of preventive care including renoprotective strategies	→ Medical Knowledge → Practice Based Learning → System Based Learning

Hemodialysis Unit	
Understanding clinical features and complications unique to patients receiving hemodialysis.	→ Medical Knowledge → Practice Based Learning
Understand the limitations and opportunities in providing care to patients with end stage renal disease.	→ Practice Based Learning → System Based Learning
Residents will interact with multi-disciplinary team approach to patient care for hemodialysis patients.	→ Interpersonal And Communication Skills → Professionalism → System Based Learning
Attend vascular conference and the hemodialysis monthly QA meetings.	→ Practice Based Learning → System Based Learning → Scholarly Activity

Didactics	
Attend didactic sessions including journal club, clinical case conference, pathophysiology conference, radiology conference, renal biopsy conference, and research conference.	→ Practice Based Learning → Scholarly Activity
Present case conference involving an interesting patient seen on the inpatients consult service.	→ Scholarly Activity
Adhere to principles of confidentiality, scientific/academic integrity, and informed consent.	→ Professionalism → Scholarly Activity

3. PRINCIPAL TEACHING METHODS

Residents on the nephrology service will participate in patient evaluation and management on the inpatient consultation service for the wards and the ICU as well as the outpatient hypertension clinic, renal clinic and

hemodialysis unit. Residents will also attend the various didactic sessions conducted/attended by the division.

The inpatient consult service sees patients on the medicine wards as well as the wards of other services including surgery and obstetrics and gynecology when recommended by the internal medicine consult service. These patients are discussed with the nephrology fellow assigned to the service as well as the attending for the service before evaluation and management recommendations are made.

The hypertension clinic provides an opportunity for residents to participate in the care of patients with difficult to control hypertension, resistant hypertension, and secondary hypertension. Residents will learn to identify the associated clinical clues, understand how to investigate these patients and identify when to obtain a nephrology consultation for the management of these patients.

The renal clinic provides an opportunity for residents to participate in the care of patients with chronic kidney disease and its complications, glomerulonephritides, chronic electrolytes complications. Residents will learn when to refer these patients for further management and identify when to refer these patients for preparation for renal replacement therapy. Residents actively participate in the care of patients on hemodialysis when they are admitted to the inpatient service allowing them to understand the challenges that are unique to this subset of patients.

4. SUPERVISION OF RESIDENTS BY FACULTY

Inpatient Consultation Service: Rounds are conducted 5 days per week with the faculty attending physician. Both new and follow-up consults are discussed. All resident notes are signed by the attending.

Clinics: Every patient encounter is discussed with the attending physician before the patient leaves the clinic and every note is co-signed by the attending.

5. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs on a daily basis through close observation by the assigned teaching attending, who is also expected to provide formal oral summary evaluations to the residents at the end of the rotation. Residents also receive a written evaluation from the teaching attendings at the conclusion of the rotation via the myevaluations system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system.

6. SUGGESTED CORE READING LIST AND REFERENCES

(All Blue Text Is Hyperlinked Via The Columbia Library. You Will Need Your UNI To Access These Resources)

1.2. Core Textbooks:

Harrison's Principles of Internal Medicine *(Available Via CUMC Library Online At http://www.accessmedicine.com.monstera.cc.columbia.edu:2048/resourceToc.aspx?resourceID=4)*

6.1.2 Required Reading:

Part 2. Section 7: Alterations in Renal and Urinary Tract Function
Chapter 45 Azotemia and Urinary Abnormalities
Chapter e9 Atlas of Urinary Sediments and Renal Biopsies
Chapter 46 Fluid and Electrolyte Disturbances
Chapter 47 Hypercalcemia and Hypocalcemia
Chapter 48 Acidosis and Alkalosis

Part 9. Section 5. Vascular Disease
Chapter 241 Hypertensive Vascular Disease
Chapter 7 Medical Disorders during Pregnancy

Part 12. Disorders of the Kidney and Urinary Tract
Chapter 271 Cellular and Molecular Biology of the Kidney
Chapter 272 Adaptation of the Kidney to Renal Injury
Chapter 273 Acute Renal Failure
Chapter 274 Chronic Kidney Disease
Chapter 275 Dialysis in the Treatment of Renal Failure
Chapter 276 Transplantation in the Treatment of Renal Failure
Chapter 277 Glomerular Diseases
Chapter 278 Polycystic Kidney Disease and Other Inherited Tubular Disorders
Chapter 279 Tubulointerstitial Diseases of the Kidney
Chapter 280 Vascular Injury to the Kidney
Chapter 281 Nephrolithiasis
Chapter 282 Urinary Tract Infections, Pyelonephritis, and Prostatitis
Chapter 283 Urinary Tract Obstruction

Part 15. Endocrinology and Metabolism
Section 1. Endocrinology
Chapter 336 Disorders of the Adrenal Cortex
Chapter 337 Pheochromocytoma
Chapter 338 Diabetes Mellitus

Section 2. Disorders of Bone and Mineral Metabolism
Chapter 346 Bone and Mineral Metabolism in Health and Disease
Chapter 347 Diseases of the Parathyroid Gland and Other Hyper- and Hypocalcemic Disorders

6.1.3 Primer on Kidney Diseases by Arthur Greenberg

6.1.5 Other Suggested Reading:

General:

- *Masterclasses in Medicine – pathophysiology of acid-base and electrolyte disorders discussed in the journal QJM*
- *Assessing Kidney Function -- Measured and Estimated Glomerular Filtration Rate N Engl J Med 2006 354: 2473-2483*
- *Intravenous Fluids -- Getting the Balance Right N Engl J Med 2005 353: 941-944*
- *Mind the Gap N Engl J Med 2003 349: 1465-1469*
- *Serum Anion Gap: Its Uses and Limitations in Clinical Medicine Clin. J. Am. Soc. Nephrol., Jan 2007; 2: 162 - 174.*
- *Microscopic Hematuria, N Engl J Med 2003 348: 2330-2338*
- *Toxic Alcohol Ingestions: Clinical Features, Diagnosis, and Management Clin. J. Am. Soc. Nephrol., Jan 2008; 3: 208 - 225.*
- *Progression of Renal Disease: Renoprotective Specificity of Renin-Angiotensin System Blockade Clin. J. Am. Soc. Nephrol., Sep 2006; 1: 1054 - 1065*
- *Hepatorenal Syndrome: Pathophysiology and Management Clin. J. Am. Soc. Nephrol., Sep 2006; 1: 1066 - 1079.*

Hyponatremia:

- *Hyponatremia N Engl J Med 2000 342: 1581-1589*
- *Hyponatremia among Runners in the Boston Marathon N Engl J Med 2005 352: 1550-1556 (exercise associated hyponatremia)*
- *The Syndrome of Inappropriate Antidiuresis N Engl J Med 2007 356: 2064-2072*

Hypernatremia:

- *Hypernatremia N Engl J Med 2000 342: 1493-1499*

Hypokalemia:

- *Hypokalemia--consequences, causes, and correction, J Am Soc Nephrol 8: 1179-1188*

Hyperkalemia:
- *Managing Hyperkalemia Caused by Inhibitors of the Renin-Angiotensin-Aldosterone System N Engl J Med 2004 351: 585-592*
- *Hyperkalemia: a potential silent killer, J. Am. Soc. Nephrol., Aug 1998; 9: 1535 - 1543.*
- *The Utility of the Transtubular Potassium Gradient in the Evaluation of Hyperkalemia J. Am. Soc. Nephrol., Mar 2008; 19: 424 - 426.*

Hypomagnesemia:
- *Clinical Consequences and Management of Hypomagnesemia*
- *Hypomagnesemia, J Am Soc Nephrol 1999 10: 1616-1622*

Hypertension:
- *Initial Treatment of Hypertension N Engl J Med 2003 348: 610-617*
- *Resistant or Difficult-to-Control Hypertension, N Engl J Med 2006 355: 385-392*
- *Sodium and Potassium in the Pathogenesis of Hypertension, N Engl J Med 2007 356: 1966-1978*
- *Effects on Blood Pressure of Reduced Dietary Sodium and the Dietary Approaches to Stop Hypertension (DASH) Diet N Engl J Med 2001 344: 3-10*
- *Treatment of Treatment of Hypertension in Patients 80 Years of Age or Older Hypertension in Patients 80 Years of Age or Older N Engl J Med 2008 358: 1887-1898*
- *Calcium-Antagonist Drugs, N Engl J Med 1999 341: 1447-1457*

Acute Renal Failure:
- *Intensity of Renal Support in Critically Ill Patients with Acute Kidney Injury N Engl J Med 2008 359: 7-20*
- *Normotensive Ischemic Acute Renal Failure N Engl J Med 2007 357: 797-805*
- *Diagnosis, Epidemiology and Outcomes of Acute Kidney Injury, Clin. J. Am. Soc. Nephrol., May 2008; 3: 844 - 861.*

Chronic Renal Failure:
- *Uremia N Engl J Med 2007 357: 1316-1325*

Glomerulonephritis:
- *Systemic Lupus Erythematosus, N Engl J Med 2008 358: 929-939*

Transplantation:
- *Immunosuppressive Drugs for Kidney Transplantation, N Engl J Med 2004 351: 2715-2729*

6.1.5 References (All Available At The Nephrology Office):

The Kidney by Brenner & Rector
Diseases of the kidney by Schrier
Clinical physiology of acid-base and electrolyte disorders by Rose & Post
The Kidney: Physiology and Pathophysiology by Seldin and Giebisch

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Neurology Curriculum

1. EDUCATIONAL GOALS

The goal of curriculum in Neurology is to ensure residents develop competency in evaluation of neurological symptoms, signs and conditions as encountered by a practitioner of internal medicine. After completing the training, residents must be able to work in managed care environment to evaluate neurological symptoms, make use of technologies and know when to make referrals to a neurologist.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-2 and PGY-3

Inpatient/Outpatient Consultation Service	
Physical Examination Skills: Perform a detailed neurological examination including funduscopic exam.	→ Patient Care → Medical Knowledge
Presenting Complaints: Evaluate presenting complaints suggestive of central nervous system disease, such as weakness, cognitive disturbances, imbalance, vertigo, neuropathic pain, tremors and headache.	→ Medical Knowledge → Practice Based Learning
Differential Diagnosis, Evaluation and Management of Diseases of Nervous System: These include cerebrovascular accidents, seizure disorder, CNS complications of HIV infection, critical illness polyneuropathy, parkinsonism, metabolic encephalopathies, persistent vegetative state, and brain death evaluation.	→ Medical Knowledge System Based Learning
Use and Interpretation of Specific Tests and Procedures: Perform and interpret the findings from a lumbar puncture in CSF (cerebrospinal fluid) analysis. Tests for brain death are performed by attending in the presence of residents. Expected to acquire knowledge of criteria for brain death. Similarly, residents review CT scans with the attending and develop an understanding of appearance of hemorrhage, infarct, obstructive hydrocephalous, brain atrophy, etc.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Patient Care: Expected to be able to provide effective, efficient, and safe care, based on clinical judgment, scientific evidence and patient preference. End of life issues such as advance directives, pain management, and use of life prolonging measures must be discussed with the patient/family. For optimal care, these discussions should preferably start when the patient is still capable of participating in decision making.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning
Medical Knowledge: Expected to be knowledgeable about the medical problems listed above. Knowledge of guidelines for prevention of disabling diseases such as stroke is essential for management.	→ Interpersonal And Communication Skills → Practice Based Learning
Practice Based Learning and Improvement: Expected to analyze their performance with regards to eliciting pertinent history and physical findings, utilization of technologies and ability to synthesize the data and make a differential diagnosis and management plan continuously. Based on this analysis, expected to develop strategies to improve quality of care.	→ Interpersonal And Communication Skills → Professionalism

Interpersonal and Communication Skills: It may at times be difficult to communicate with a patient with neurological problem because of aphasia or depression associated with some problems. For optimal care to occur, the resident must employ observational skills in addition to questioning and listening, to communicate effectively with the patient. When performing neurology consults on the medical units or on other services, the resident must be able to communicate effectively with the primary team, the possible diagnosis and recommendations. The written consult must be legible, clearly thought, and use evidence based approach. Whenever possible, it is desirable to include references for the recommendation being made for educational purpose. Discussion of patient preferences and end of life issues requires an ability to convey to the patient clearly the diagnosis and prognosis. Residents are expected acquire these essential skills and be able to communicate without discomfort by observing the senior residents or attending physicians in patient/family conferences. Role playing with other residents is a useful method of learning the skill.	→ Patient Care → Medical Knowledge → Practice Based Learning
Professionalism: Expected to demonstrate compassion and sensitivity when dealing with the patients. Attention must be paid to patient privacy and confidentiality.	→ Patient Care → Interpersonal And Communication Skills
System Based Practice: Residents care for patients with neurological problems in different settings such as inpatient unit, neurology and continuity clinics. Patients frequently require referrals for tests such as CT scan, MRI, EEG, and for social and rehabilitation services. Residents must have an understanding of both the opportunities and limitations of the setting and be able to collaborate with other team member to assist patient in dealing with the system and provide comprehensive and compassionate care.	→ Medical Knowledge → Practice Based Learning

Didactics	
Attend didactic sessions including morning reports, clinical case conferences and Grand Rounds. Some of the topics covered at these sessions include (1) stroke, (2) seizure disorders, and (3) peripheral neuropathy.	→ Practice Based Learning → Scholarly Activity
Present case conference involving an interesting patient seen on the inpatients consult service.	→ Scholarly Activity
Adhere to principles of confidentiality, scientific/academic integrity, and informed consent.	→ Professionalism → Scholarly Activity

3. PRINCIPAL TEACHING METHODS AND SUPERVISION OF RESIDENTS BY FACULTY

Patient care is taught in Neurology clinic and consultation service when on Neurology elective and during assignment on inpatient units (regular and special care). In the clinic, residents see patients individually in a comfortable, private and well equipped room. They obtain history and physical examination, review medical records and laboratory data, formulate a differential diagnosis and management plan, and then present the case to the attending physician. The attending critiques the presentation, examines the patient and provides in depth teaching on the neurologic issue including pathophysiology of the disease. When on consultation service, the resident evaluates the patient similarly and presents all the cases to the attending. As in the clinic setting, the attending critiques presentation, examines patient, reviews CT imaging of brain on the PACS radiology system, and provides teaching.

4. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs on a daily basis through close observation by the assigned teaching attending, who is also expected to provide formal oral summary evaluations to the residents at the end of the rotation. Residents also receive a written evaluation from the teaching attendings at the conclusion of the rotation via the myevaluations system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system.

5. SUGGESTED CORE READING

- Clinical Neurology by Aminoff et al (by Appleton and Lange).
- Articles from Syllabus.

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Non-Internal Medicine Specialty Clinic: OTOLARYNGOLOGY (ENT) CURRICULUM

1. EDUCATIONAL GOALS

The goal of the ENT rotation is to develop knowledge of the anatomy, physiology and pathophysiology of the ear, nose and throat and the head and neck as a unit and the ability to understand the surgical and non surgical management of problems related these conditions.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-2 and PGY-3

Ambulatory Clinic - ENT	
Demonstration of bedside skills necessary for the assessment and on-going care of patients head & neck problems.	→ Patient Care → Medical Knowledge
Identification of common etiologies, presentations, complications of head & neck problems and their management.	→ Medical Knowledge → Practice Based Learning
Understanding and interpretation of the tests and radiological imaging utilized in the evaluation, management and monitoring of patients with head & neck diseases such as CT, MRI, plain X-rays Isotope scan Ultrasound, sialography and radionuclide imaging.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Observe and when appropriate participate in office based procedures such as flexible direct laryngoscopy, indirect laryngoscopy, nasal endoscopy, incision and drainage of head and neck abscesses audiogram, tympanogram, removal of cerumen, cauterization of nasal septum, inferior turbinate reduction.	→ Patient Care → Medical Knowledge → Practice Based Learning

ENT Surgery	
Identification of common etiologies, presentations, complications of ENT surgery and management.	→ Medical Knowledge → Practice Based Learning
Understanding and interpretation of the tests and radiological imaging utilized in the evaluation, management and monitoring of patients after surgery.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Actively participate in making informed recommendations about diagnostic and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning

Didactics	
Present interesting ENT case with review of the literature at the ambulatory care conference.	→ Scholarly Activity
Participate in the conferences organized by ENT Division.	→ Medical Knowledge

3. PRINCIPAL TEACHING METHODS

Resident participates in evaluating patients on the outpatient ENT service and assist with minor procedures. Residents will also attend the various didactic sessions conducted/attended by the division.

4. SUPERVISION OF RESIDENTS BY FACULTY

Every patient encounter is discussed with the attending physician before the patient leaves the clinic and every note is co-signed by the attending.

5. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs on a daily basis through close observation by the assigned teaching attending, who is also expected to provide formal oral summary evaluations to the residents at the end of the rotation. Residents also receive a written evaluation from the teaching attendings at the conclusion of the rotation via the myevaluations system or by paper evaluation based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system.

6. SUGGESTED CORE READING LIST AND REFERENCES

(All Blue Text Is Hyperlinked Via The Columbia Library. You Will Need Your UNI to Access These Resources)

6.2 Core Textbooks

Harrison's Principles of Internal Medicine *(Available Via CUMC Library Online At http://www.accessmedicine.com.monstera.cc.columbia.edu:2048/resourceToc.aspx?resourceID=4)*

6.1.1 Otolaryngology Head & Neck Surgery, Clinical Reference Guide By Raza Pasha

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Primary Care Medicine/Continuity Clinic Curriculum

The primary care rotation along with the general medicine continuity clinic is intended to give residents a firm foundation in outpatient medicine. During this rotation the resident will acquire the skills and knowledge required for the diagnosis and management of both acute and chronic medical conditions through a rigorous educational yet enjoyable experience. Residents typically have 1 four week primary care block during the first two years of training and at least 3 four week blocks during the final year of residency training.

1. EDUCATIONAL GOALS

The main goal of the primary care rotation is to teach residents how to provide comprehensive as well as continuous care to ambulatory patients. The focus of teaching is the management of both acute and chronic medical problems in a diverse patient population. Emphasis on the 'whole patient' will be made, addressing concurrent psychosocial issues commonly found in this patient population.

2. EDUCATIONAL OBJECTIVES (With Corresponding ACGME Competencies)

Perform comprehensive and focused history and physical examinations.	Patient Care Medical Knowledge
Order and interpret appropriate outpatient laboratory, radiographic, and diagnostic studies for the purposes of disease management and periodic preventive care.	Patient Care Medical Knowledge Practice Based Learning System Based Learning
Residents will learn the current adult preventive services recommendations by the USPSTF.	Patient Care Medical Knowledge Practice Based Learning System Based Learning
Residents will learn to access the current adult immunization schedule recommendations by the ACIP.	Patient Care Medical Knowledge Practice Based Learning System Based Learning
Residents will learn to identify and modify risk factors for disease by counseling to achieve behavioral change.	Patient Care Medical Knowledge Interpersonal And Communication Skills
Understand the principles of epidemiology, pathophysiology, therapeutics, and prevention in a diverse group of illnesses.	Patient Care Medical Knowledge Scholarly Activity
Learn how to organize their patient's care and help them to gain access to the care they need.	Patient Care Medical Knowledge Practice Based Learning System Based Learning
Learn to provide compassionate, efficient yet appropriate care in the outpatient setting.	Patient Care Medical Knowledge Practice Based Learning System Based Learning Interpersonal Skills

Become familiar with how an outpatient office practice works (Billing, Consultations, Preoperative Evaluations, and Walk-Ins).	Patient Care Medical Knowledge Practice Based Learning System Based Learning
Understand and become familiar with the "whole patient" approach to care in the outpatient setting.	Patient Care Medical Knowledge Practice Based Learning System Based Learning Interpersonal Skills
Maintain accurate and complete patient records.	Patient Care Medical Knowledge Practice Based Learning System Based Learning
Demonstrate ethical, humanistic, respectful, empathetic demeanors with their patients, peers, and clinic staff at all times.	Interpersonal Skills Practice Based Learning
Provide culturally competent appropriate care at all times.	Patient Care Medical Knowledge Practice Based Learning System Based Learning Interpersonal Skills

3. COMMON CLINICAL PROBLEMS

Abdominal Pain
Anemia
Arthritis
Asthma
Chest Pain
Chronic Pain Syndromes
Cough
COPD
Diabetes
Dizziness
Dyspnea
Dysuria
Fatigue
Fever
Gastritis/PUD
GERD/Dyspepsia
Low Back Pain
Musculoskeletal Complaints/Injuries
Substance Abuse
Thyroid Disease
Weight Gain/Weight Loss
Women's Health

4. PRINCIPAL TEACHING METHODS

Residents learn in the outpatient setting through case-based discussions under the guidance and supervision of general medicine attendings or subspecialty attendings when appropriate. Each patient is presented to the attending systematically. The resident along with the guidance of the attending formulates an appropriate diagnostic and therapeutic/management plan.

Residents also learn through primary care didactic sessions. Discussions are prepared and led by both residents and medical students emphasizing diagnostic, therapeutic, and preventive guidelines for commonly encountered clinically problems. In addition to these weekly didactic sessions, residents also attend the Department of Medicine noon conference lecture series.

Examples Of Typical Weekly Schedules Are Below:

PGY-1

	Monday	Tuesday	Wednesday	Thursday	Friday
8:30 - 11:30	Walk-In Clinic	Walk-In Clinic	Primary Care Didactic Session	Rheumatology Clinic	Walk-In Clinic

11:30 - 12:30	Conference	Conference	Conference	Conference	Conference
1:00 - 5:00	Continuity Clinic	General Medicine Clinic	General Medicine Clinic	Cardiology Clinic	General Medicine Clinic

PGY-2

	Monday	Tuesday	Wednesday	Thursday	Friday
8:30 - 11:30	Ophthalmology Clinic	Walk-In Clinic	Primary Care Didactic Session	Endocrinology Clinic	Walk-In Clinic
11:30 - 12:30	Conference	Conference	Conference	Conference	Conference
1:00 - 5:00	General Medicine Clinic	Continuity Clinic	Renal Clinic	Cardiology Clinic	Dermatology Clinic

PGY-3

	Monday	Tuesday	Wednesday	Thursday	Friday
8:30 - 11:30	ENT Clinic	Walk-In Clinic	Primary Care Didactic Session	Rheumatology Clinic	Walk-In Clinic
11:30 - 12:30	Conference	Conference	Conference	Conference	Conference
1:00 - 5:00	GI Clinic	Gynecology Clinic	General Medicine Clinic	Cardiology Clinic	Continuity Clinic

5. SUPERVISION OF RESIDENTS BY FACULTY

Each patient encounter is presented to an attending physician before the patient leaves the clinic; each clinic note is reviewed and co-signed by the attending.

Each primary care didactic session is moderated by a general medicine attending.

6. EVALUATION PROCESS

Oral feedback of clinical performance is given with each case presentation by the supervising general medicine attending. Similarly oral feedback is given at the close of each primary care didactic session. At the completion of each primary care block, residents receive a written evaluation from the attending via the MyEvaluations system based on the ACGME competencies. Residents may review these evaluations at any time by logging into this system.

7. REQUIRED TEXTBOOK

Barker, Burton, and Zieve's Principles of Ambulatory Medicine, 7th Edition.

8. SUGGESTED KEY REVIEW ARTICLES LIST

(Articles May Be Accessed Electronically Via The CUMC Library Website)

Preventive Care

The Guide to Clinical Preventive Services 2007, USPSTF, www.ahrq.gov/clinic/uspstf
Recommended Adult Immunization Schedule 2007-2008, www.cdc.gov/vaccines

Cardiology
ACC/AHA 2007 Guidelines on Perioperative Cardiovascular Evaluation and Care for Noncardiac Surgery, Circulation 2007:116:e418-e499
Ambulatory Blood Pressure Monitoring, NEM 2006; 354:2368-2374
Effects on Blood Pressure of Reduced Dietary Sodium and the Dietary Approaches toStop Hypertension (DASH) Diet, NEJM 2000; 344:3-10
Resistant or Difficult to Control Hypertension, NEJM 2006; 55:385-392
Isolated Systolic Hypertension in the Elderly, NEJM 2007; 357:789-796
Role of Blood Pressure and Other Variables in the Differential Cardiovascular Events Rates Noted in the Anglo-Scandinavian Cardiac Outcomes Trial (ASCOT-BPLA), Lancet 2005;366:907-913
The Seventh Report of the Joint national Committee on prevention, Detection, Evaluation, and Treatment of High Blood Pressure, The JNC Report, JAMA 2003;289:2560-2572
The Third Report of the National Cholesterol Education Program (NCEP), NIH Publication No.01-3670 May 2001
Hypertriglyceridemia, NEJM 2007; 357:1007-1017
Management of Stable Coronary Disease, NEJM 2007; 357:1762-1766
Low Dose Aspirin for the Prevention of Atherothrombosis, NEJM 2005; 353:2373-2383
Medical Treatment of Peripheral Artery Disease and Claudication, NEJM 2001; 344:1608-1621
Syncope, NEJM 2000; 343:1856-1862
Thoracic and Abdominal Aneurysms, Circulation 2005; 111:816-828
Newly Diagnosed Atrial Fibrillation, NEJM 2004; 351:2408-2416

Dermatology
Atopic Dermatitis, NEJM 2005; 352:2314-2324
Hyperhydrosis, Mayo Clin Proceedings 2005; 80:657-666
Scabies, NEJM 2006; 354:1718-1727
Does this patient have a mole or melanoma, Rational Clinical Examination Series, JAMA 1998; 279:696-701

Endocrinology
Does this woman have osteoporosis? Rational Clinical Examination Series, JAMA 2004; 292:2890-2900
Screening for Osteoporosis, NEJM 2005; 353:
Subclinical Hypothyroidism, NEJM 2006; 345:260-265
The Thyroid Nodule, NEJM 2004; 351:1764-1771
Obesity, NEJM 2002; 346:591-602
Guidelines for Healthy Weight, NEJM 1999; 341:427-432
Medical Management of Hyperglycemia in Type 2 Diabetes, Diabetes Care 2008; 31:1-11

Gastroenterology
Can the clinical history distinguish between organic and functional dyspepsia? Rational Clinical Examination Series, JAMA 2006; 295:1566-1576
Dyspepsia, Ann Intern Medicine 2001; 134:815-822
Functional Dyspepsia, managing the Conundrum, NEJM 2006; 354:791-793
Chronic Constipation, NEJM 2003; 349:1360-1368
Evaluation of Abnormal Liver Enzymes in Asymptomatic Patients, NEJM 2000; 342:1266-1271
Hepatitis C Virus Infection, NEJM 2001; 345:41-52

Gynecology/Genitourinary
Evaluation of Vaginal Complaints, Rational Clinical Examination Series, JAMA 2004; 291:1368-1379
Is This Woman Perimenopausal? Rational Clinical Examination Series, JAMA 2003; 289:895-902
Does this Woman Have an Acute Uncomplicated Urinary Tract Infection? Rational Clinical Examination Series, JAMA2002; 287:2701-2710
What Type of Urinary Incontinence Does This Woman Have? Rational Clinical Examination Series, JAMA 2008; 299:1446-1456

Management of Overactive Bladder, NEJM 2004; 350:786-799
Hormonal Contraceptive Update, Mayo Clin Proceedings 2006; 81:949-955

Hematology/Oncology
Anemia in Adults, Mayo Clin Proceedings 2003; 78:1274-1280
Anemia of Chronic Disease, NEJM 2005; 352:1011-1023
How to Interpret and Pursue an Abnormal Complete Blood Cell Count in Adults, Mayo Clin Proceedings 2005;80:923-936
Does this patient have a family history of cancer? Rational Clinical examination Series, JAMA 2004; 292:1480-1489

Infectious Disease
Does This Patient Have Strep Throat, Rational Clinical Examination Series, JAMA 2000; 284:2912-2918
Principles of Appropriate Antibiotic Use for Acute Pharyngitis in Adults, Ann Intern Medicine 2001; 134:506
Principles of Appropriate Antibiotic Use for Acute Bronchitis in Adults, Ann Intern Medicine 2001; 134:518
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Effectiveness of Pneumococcal Polysaccharide vaccine in Older Adults, NEJM 2003; 348:1747-1755
Empirical Validation of Guidelines for the Management of Pharyngitis in Children and Adults, JAMA 2004; 292:1587-1595
Does this patient have influenza? Rational Clinical Examination Series, JAMA 2005; 293:987-997
Acute Infectious Diarrhea, NEJM 2004; 350:38-47

Musculoskeletal (Orthopedics/Rheumatology)
Common Musculoskeletal Disorders in Women, Mayo Clinic Proceedings2005; 80:796-802
Does This Patient Have Carpal Tunnel Syndrome? Rational Clinical Examination Series, JAMA 2000; 283:3110-3117
Does This Patient Have an Instability of the Shoulder or a Labrum Lesion? Rational Clinical Examination Series, JAMA 2004; 292:1989-1999
Does this patient have a torn meniscus or ligament of the knee? Rational Clinical examination Series, JAMA 2001; 286:1610-1620
Osteoarthritis of the Knee, NEJM 2006; 354:842-848
Osteoarthritis of the Hip, NEJM 200; 357; 1413-1421
Evaluation of Acute Knee Pain in Primary Care, Annals of Internal Medicine 2003; 139:575-588
Cervical Radiculopathy, NEJM 2005; 353:392-399
Low back Pain, NEJM 2001; 344:363-370
Persistent Low Back Pain, NEJM 2005; 352:1891-1899
Plantar Fasciitis, NEJM 200; 350:2159-2166
Gout, NEJM 2003; 349:1647-1655
Polymyalgia Rheumatica and Giant Cell Arteritis, NEJM 2002; 347:261-271
Therapeutic Strategies in rheumatoid Arthritis, NEJM 2007; 350:2591-2592

Neurology/Psychiatry
Does this patient with a headache have migraine or need neuroimaging? Rational Clinical Examination Series, JAMA 2006; 296:1274-1283
Migraine, Current Understanding and Treatment, NEJM 2002; 346:257-70
Chronic Daily Headache, NEJM 2006; 354:158-165
Does This Patient Have Parkinson's Disease? Rational Clinical Examination Series, JAMA 2003; 289:347-353
Does This Patient Have Dementia? Rational Clinical Examination Series, JAMA 2007; 297:2391-2404

Memory Dysfunction, NEJM 2005; 352:692-699
Is This Patient Clinically Depressed? Rational Clinical Examination Series, JAMA 2002; 288:1160-1170
Rehabilitation After Stroke, NEJM 2005; 352:1677-84

Pulmonary/Respiratory
Does This Patient Have Sinusitis? Rational Clinical Examination Series, JAMA 1993; 270:1242-1246
Chronic Obstructive Pulmonary Disease, NEJM 2000; 343:269-280
Management of Chronic Onstructive Lung Disease, NEJM 200?; 350-2689-2697
The Diagnosis and Treatment of Cough, NEJM 2000; 343:1715-1721
Classifying asthma, Chest 2006; 130(1Suppl):13S-20S
National Asthma Education and Prevention Program, Expert Panel Report II: Overview and Application to Primary Care, Lippincott's Prim Care Pract 1998; 6:578-588
Obstructive Sleep Apnea, Annals of Internal Medicine 2005; 142:187-197

Ophthamology/ENT
Does this patient have hearing impairment? Rational Clinical Examination Series, JAMA2006; 295:416-428
Hearing Loss and Hearing Aid Treatment Options, NEJM 2006; 381:234-237
Does this dizzy patient have a serious form of vertigo? Rational Clinical Examination Series, JAMA 1994; 271:385-388
Benign Paroxysmal Positional Vertigo, NEJM 1999; 341:1590-1596
Do Try This at Home, Self-treatment of BPPV, Neurology 2004; 63(1):8-9
Allergic Rhinitis, NEJM 2005; 353:1934-1944
Evaluation of the Optimal Oral Antihistamine for Patients with Allergic Rhinitis, Mayo Clin Proceedings 2005; 80:1170-1176
Does this patient have temporal arteritis? Rational Clinical Examination Series, JAMA 2002; 287:91-101

Miscellaneous
Common symptoms in Ambulatory Care: Incidence, Evaluation, Therapy, and Outcome, American Journal of Medicine 1989; 86:262
Allergic To Generics, Annals of Internal Medicine 2004; 141:131-136

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Pulmonary/Intensive Care Unit (ICU) Medicine Curriculum

1. EDUCATIONAL GOALS

The goal of the Pulmonary and critical care rotation is to teach residents to provide quality medical care to patients with respiratory illnesses, and coordinate the medical care in the ICU setting.

2. ROTATION-SPECIFIC OBJECTIVES (With Corresponding ACGME Competencies)

PGY-2 and PGY-3

Inpatient Consultation and ICU Service	
Demonstration of bedside skills necessary for the assessment and on-going care of patients with Respiratory illnesses.	→ Patient Care → Medical Knowledge
Identify appropriate utilization of the Pulmonary subspecialty consultation in a cost-effective and evidence based manner.	→ Medical Knowledge System Based Learning
Understanding of the Pulmonary function testing, the utility and interpretation of chest imaging. The appropriate use of intensive monitoring when indicated.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Actively participate in making informed recommendations about preventive, diagnostic, and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning
Communicate effectively with patients and their families in all situations, especially around difficult issues such as obtaining consent, initiation or withholding of mechanical ventilation, and when appropriate end of life decisions.	→ Interpersonal And Communication Skills → Practice Based Learning
Provide effective and professional consultation to referring physicians and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.	→ Interpersonal And Communication Skills → Professionalism
Observe and when appropriate participate in Pulmonary specific procedures including Bronchoscopy, Pleural biopsy and thoracentesis, Central venous and arterial line placement.	→ Patient Care → Medical Knowledge → Practice Based Learning

The ability to manage patient in intensive care sting in an organized and effective way, and coordinate the often complicated multidisciplinary needs.	→ Medical Knowledge → Practice Based Learning → System Based Learning → Patient Care → Professionalism

Outpatient Service: Chest Clinic	
Understanding of the Pulmonary function testing, the utility and interpretation of chest imaging.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Management of chronic Pulmonary disease and its associated complications.	→ Medical Knowledge → Patient Care → Practice Based Learning
Provide effective and professional consultation to referring physicians and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.	→ Interpersonal And Communication Skills → Professionalism
Engage in patient education as a tool for better outpatient monitoring and effective intervention.	→ Practice Based Learning → Patient Care → Professionalism
Appropriate implementation of preventive care including Smoke cessation, vaccination skin testing and LTBI treatment.	→ Medical Knowledge → Practice Based Learning → System Based Learning

Didactics	
Attend the divisional didactic sessions including journal club, clinical case conference, pathology conference, and research conference.	→ Practice Based Learning → Scholarly Activity
Present case conference involving an interesting patient seen on the inpatients consult service.	→ Scholarly Activity
Attend the Department of Medicine Pulmonary lecture series.	→ Scholarly Activity
Adhere to principles of confidentiality, scientific/academic integrity, and informed consent.	→ Professionalism → Scholarly Activity

3. PRINCIPAL TEACHING METHODS

a. Participation:
The resident will have the chance to evaluate patients of a wide variety of respiratory or critical illness. Formulate their plans of care then seek the help and guidance of their supervising attending. This guided hand on approach is the primary teaching method.

b. Supervision:
Residents are supervised and guided by attending Physician for every pulmonary/ICU related activity. This includes assessment planning, procedures and documentations.

- **Inpatient Consultation Service:** Rounds are conducted 5 days per week with the faculty attending physician. Both new and follow-up consults are discussed. All resident notes are signed by the attending.
- **Clinics:** Every patient encounter is discussed with the attending physician before the patient leaves the clinic and every note is co-signed by the attending.
- All ICU patients are discussed daily and in depth during the ICU round.

c. Didactics:
Residents will attend the various didactic sessions conducted/attended by the division.

d. Educational Material:
Major Pulmonary/Critical Care Textbook.
Internet access to Columbia University library and other major medical journal.

e. Counseling And Feed Back *(See Below)*

4. EVALUATION PROCESS

Oral feedback of clinical and didactic performance occurs on a daily basis through close observation by the assigned teaching attending, who is also expected to provide formal oral summary evaluations to the residents at the end of the rotation. Residents also receive a written evaluation from the teaching attending at the conclusion of the rotation via myevaluations system based on the ACGME competencies. Residents can review their evaluations at any time by logging on to this system.

INTERNAL MEDICINE RESIDENCY TRAINING PROGRAM
Harlem Hospital Center in Affiliation with Columbia University Medical Center
Rheumatology Curriculum

The Division of Rheumatology is designed to diagnose, treat and medically manage individuals with rheumatic disorders. The rheumatologist and medical residents interact with the patient and family as a resource for health information. All patients will be evaluated with a scope of practice in accordance with standard regulatory agencies.

PGY-2 and PGY-3

Inpatient Consultation Service	
Demonstration of bedside skills necessary for the assessment and on-going care of patients with rheumatologic disorders.	→ Patient Care → Medical Knowledge
Identification of common etiologies, presentations, complications of rheumatologic disorders and their management.	→ Medical Knowledge → Practice Based Learning
Identify appropriate utilization of the rheumatology subspecialty consultation in a cost-effective and evidence based manner.	→ Medical Knowledge System Based Learning
Understanding of the tests and radiological imaging utilized in the evaluation, management and monitoring of patients with rheumatologic diseases.	→ Medical Knowledge → Patient Care → Practice Based Learning → System Based Learning
Actively participate in making informed recommendations about preventive, diagnostic, and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences.	→ Patient Care → Medical Knowledge → Practice Based Learning → System Based Learning
Communicate effectively with patients and their families in all situations, especially around difficult issues such as initiation of immunosuppressive therapy.	→ Interpersonal And Communication Skills → Practice Based Learning
Provide effective and professional consultation to referring physicians and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.	→ Interpersonal And Communication Skills → Professionalism
Observe and when appropriate participate in rheumatology specific procedures including arthrocentesis, trigger point injection, microscopic evaluation of synovial fluid.	→ Patient Care → Medical Knowledge → Practice Based Learning

Rheumatology Clinic	
Identification of the common etiologies of systemic lupus erythematosus, its clinical manifestations and complications.	→ Medical Knowledge → Patient Care → Practice Based Learning
Management of rheumatoid arthritis and its associated complications.	→ Medical Knowledge → Patient Care → Practice Based Learning
Identification and management of other renal diseases including systemic sclerosis, gout and osteoarthritis.	→ Medical Knowledge → Patient Care → Practice Based Learning
Identifying patients requiring chronic immunosuppressive therapy and preparing them for this.	→ Practice Based Learning → System Based Learning
Appropriate implementation of preventive care including evaluation for osteoporosis.	→ Medical Knowledge → Practice Based Learning → System Based Learning

Didactics	
Attend didactic sessions and present a disease topic based on a clinical case.	→ Practice Based Learning → Scholarly Activity
Review board preparation questions.	→ Scholarly Activity
Adhere to principles of confidentiality, scientific/academic integrity, and informed consent.	→ Professionalism → Scholarly Activity

SCOPE OF SERVICE:

While on the rheumatology service, the medical residents assess patients with signs and symptoms of joint disorders. The ultimate goal is to relieve pain and physical symptoms, improve physical function and generally aid in the well-being of the patient. Common diseases that are treated by the rheumatology service include: rheumatoid arthritis, osteoarthritis, systemic lupus erythematosus, systemic sclerosis, gout, and osteoporosis.

Patients may be evaluated in an acute setting or, more regularly, in the weekly clinic session. Appropriate history and physical exam is performed, and additional laboratory and ancillary services may be used to complete the evaluation. In addition to administering medication, arthrocentesis and injection of tender points may be performed.

Other health care workers will be involved with the management of a patient when indicated. Social workers can explore personal and family financial concerns and provide assistance. Human Resource personnel, occupational therapists, rehabilitation specialists, and physical therapists might assist in modifying work requirements and settings. Mental health professionals should be used in some settings for psychological problems.

CONSULTATION

When an adult patient is evaluated in the Emergency Room, or has been admitted to the hospital, the referring physician can place a consult form in the Rheumatology box, or call the medical resident covering the service. The resident will do the initial evaluation; completing the history and exam, and obtaining all appropriate laboratory tests. This information will be discussed with the rheumatology attending, and recommendations will be made. Once the patient is seen by the rheumatologist, the recommendations may be updated, and the resident notes will be reviewed and co-signed. The patient will continue to be followed by the resident and the attending until the patient has been discharged, or it is no longer clinically indicated.

RHEUMATOLOGY CLINIC

Adult patients are referred to the rheumatology clinic after assessment by the patient's primary care physician, or from the Emergency Room. An appointment will be made by the rheumatologist, and the patient informed of the day and time. Clinic is held on Thursdays on the 3rd floor of the Ron Brown Ambulatory Care Center, from 8:30AM to 5:00PM.

A detailed medical history and physical examination will be performed by the medical residents. Blood work and ancillary tests will be obtained and reviewed with the attending. Diagnosis and specially tailored treatment will be made based on the findings of these tests. The patient will then be followed in appropriate intervals to manage the disease and monitor any side effects of the medication.

Medical residents participate in the clinic and will rotate through the rheumatology service, usually on a monthly basis. These residents will also be responsible for following patients who are in the hospital. Their work is supervised and the rheumatologist sees each of their patients. Medical students from Columbia University Medical Center may also evaluate patients with the residents.

HOURS OF OPERATION

The medical residents on the rheumatology service are available to evaluate consults Monday thru Friday from 8:00AM to 5:00PM. They will call the rheumatology attending, and discuss the findings. Preliminary recommendations will be made, and the patient will be seen by the rheumatologist either on the day of the consult, if indicated, or on the nearest Thursday. Rounds are made of all hospitalized rheumatology patients on Thursdays. On weekends, and after 5:00PM on weekdays, the on call staff can call the rheumatologist with urgent consults, and arrangements will be made for the patient evaluation.

SUGGESTED CORE READING

- Dubois Lupus Erythematosus, 4th Edition
- Primer on the Rheumatic Diseases, 11th Edition
- Kelly's Textbook of Rheumatology, 6th Edition