

CURRICULUM for PULMONOLOGY

	Monday	Tuesday	Wednesday	Thursday	Friday
8 - 12	8 – 11 PULMONARY ROUNDS 11 - 12 MEDICAL MORNING REPORT	8 – 9 PULMONARY PATHOPHYS LECTURE SERIES 9-11 PULMONARY ROUNDS 11 -12 MEDICAL MORNING REPORT	8 – 12 PULMONARY ROUNDS	8 – 11 PULMONARY ROUNDS 11 -12 MEDICAL MORNING REPORT	8 – 12 PULMONARY CLINIC
Noon	RESEARCH CONFERENCE 1 ST MONDAY PULMONARY JOURNAL CLUB OTHER MONDAYS		PULMONARY PATHOLOGY SERIES (1 ST)	MEDCINE GRAND ROUNDS	
1-5			YALE STATE CHEST CONFERENCE 2:30 – 5:00		2 - 3 PULMONARY BOARD REVIEW (1 ST AND 3 RD) SLEEP TOPIC (2 ND) CRITICAL CARE TOPIC (4 TH)

Conference Format

- ✓ The format for the Journal Club is presentation of two selected articles by the Pulmonary Fellow including a basic science article and a clinical article. There will be critical analysis of the articles and context of the study and discussion of how the findings affect the practice of Pulmonary Medicine.
- ✓ The Pulmonary Pathophysiology series focuses on broader topics within Pulmonary Medicine. The fellows present a topic-based lecture based on applicable primary source and review literature.
- ✓ The combined Pulmonary/Pathology/Radiology series is case-presentation based with input from the Pathology and Radiology Departments to review applicable pathologic and radiographic studies.
- ✓ The Yale State Chest Conference series is a review lecture on various topics given by the Faculty and Fellows at Yale New Haven Hospital.
- ✓ The Board Review series is topic-based and includes pulmonary, critical care, and sleep medicine topics and will be followed by board type questions.
- ✓ The Pathology series is a review of recent pathology material and is facilitated by the Pathology Department Faculty.
- ✓ The Radiology series provides topic and case based lectures on topics in radiology and is facilitated by staff from the Radiology Department.

Rounds -Based and Informal Teaching: Faculty and Fellows teach on rounds and give short lectures on core curriculum topics.

**Principal Educational Goals by Relevant Competency
(Commensurate with Level of Training)**

***Legend for Learning Activities (See above for descriptions)**

AR-Attending Rounds	DPC-Direct Patient Care	JC-Journal Club	PR-Professor's Rounds
ARR-Asst Resident Rds	GR-Grand Rounds	MR-Morning Report	R1MR-R1Morning Rep
HTR-Health Team Rds	NC-Noon Conference	SR-Signout Rounds	OP-Outpatient Setting

1) Patient Care

Principal Educational Goals	Learning Activities
Learn how to take an occupational/environmental history pertinent to evaluation of patients with airway, parenchymal/interstitial, pulmonary vascular, or pleural disease.	DPC, JC,R1MR-R-1, ARR, HTR, OP evaluations with attending and fellows present
Learn how to take a sleep history and how to proceed with the evaluation and treatment of common sleep disorders, particularly sleep disordered breathing but including all primary dysomnias, disorders of alertness and disorders of sleep or wakefulness related to other medical diseases, medications or behaviors.	DPC, AR (supervised OP interactions Monday PM, Tuesday and Thursday PM, ARR, review of case histories and scored sleep studies of actual patients either seen by others or the resident on elective
Learn how to use spirometry, particularly the flow volume loop to evaluate pulmonary complaints or an abnormal CXR Understand how lung volume measurements, DLCO, and cardio-pulmonary exercise testing (CPEX) are used in clinical practice.	Didactic conferences and review of PFTs done daily in the pulmonary laboratory, particularly of patients seen in consultation
Improve ability to use an ABG and noninvasive monitoring (particularly pulse oximetry) to evaluate patients with dyspnea, acid base disorders and cardiopulmonary disease.	AR, R1MR, HTR, OP
Learn how to approach CXR interpretation and to use CT and PET scanning to evaluate clinical pulmonary problems in both the ambulatory setting and hospitalized patients.	DPC, AR, Conferences, AAR

2) Medical Knowledge

Principal Educational Goals	Learning Activities
Understand the evaluation and management of COPD	AR, DPC, lectures, review of actual studies, AAR, OP
Understand the evaluation and management of asthma	AR, DPC, lectures, review of actual studies, AAR, OP
Be able to recognize RADS, the pneumoconioses and hypersensitivity pneumonitis and their appropriate clinical contexts	AR, DPC, lectures, review of actual studies, AAR, OP
Understand the nosology and general diagnostic and treatment approach to sleep disorders including OSAS, CSA, sleep related limb movement disorders, Circadian rhythm disorders, parasomnias, and narcolepsy	AR, DPC, lectures, review of actual studies, AAR, OP
Understand approach to diagnosis and treatment of interstitial lung diseases	AR, DPC, lectures, review of actual studies, AAR, OP
Understand approach to the diagnosis and treatment of lung cancer, mesothelioma, mediastinal tumors, and malignancy metastatic to the lung/pleura	AR, DPC, lectures, review of actual studies, AAR, OP
Understand approach to diagnosis and treatment of pneumonia, TB, and other pulmonary infections	AR, DPC, lectures, review of actual studies, AAR, OP
Understand how to evaluate and manage pleural disease including pneumothorax and effusion	AR, DPC, lectures, review of actual studies, AAR, OP

3) **Practice-Based Learning and Improvement**

Principal Educational Goals	Learning Activities
Understand how to interpret spirometry (flow volume loop)	AR, DPC, lectures, review of actual studies, AAR, OP
Understand the risks for, the prevention of, and the diagnosis and treatment of thromboembolic disease with emphasis on Baysean analysis	AR, DPC, lectures, review of actual studies, AAR
Understand how to use the NHLB step guidelines to grade the severity of and treat asthma	AR, DPC, lectures, review of actual studies, AAR, OP
Learn how to evaluate patients with chronic and acute airway dysfunction including COPD	AR, DPC, lectures, review of actual studies, AAR, OP
Learn how to combine history, physical examination, spirometry and radiographic imaging techniques to evaluate pulmonary disorders	AR, DPC, lectures, review of actual studies, AAR, OP
Understand the approach to the diagnosis and treatment of pleural disease	AR, DPC, lectures, review of actual studies, AAR, OP
Understand how to evaluate, diagnose and treat obstructive sleep apnea syndrome and CSAS. Learn the health implications and varied presentations of this disorder.. Understand the factors and treatments that enhance or detract from alertness during wakefulness and sleep as a restorative process. This also includes an understanding of the use of PSG, MSLT, and other studies.	AR, DPC, lectures, review of actual studies, AAR, OP
Understand the role of invasive diagnostic procedures including bronchoscopy, TTNA, EUS, mediastinoscopy, thoracentesis, pleural biopsy and VATS in evaluating pulmonary disorders	AR, DPC, lectures, review of actual studies, AAR, OP

4) **Interpersonal Skills and Communication**

Principal Educational Goals	Learning Activities
Learn how to use specialists in other disciplines to assist in patient diagnosis and care (physicians, PAs, nurses, technicians)	AR, DPC, lectures, review of actual studies, AAR, OP
Learn to work collaboratively with health care team, particularly for inpatients approaching discharge (for aftercare) and for outpatients	AR, DPC, lectures, review of actual studies, AAR, OP

5) **Professionalism**

Principal Educational Goals	Learning Activities
Respect patient autonomy and privacy	AR, DPC, lectures, review of actual studies, AAR, OP
Learn how to effectively include patients and family members in conversations regarding illness and the plan of care, including end of life issues	AR, DPC, lectures, review of actual studies, AAR, OP
Learn how to use alternative sources of relevant patient information (family, employers, friends) to improve history and assessment of care while respecting patient privacy and autonomy	AR, DPC, lectures, review of actual studies, AAR, OP
Understand the importance of and improve engagement of the patient and their family in the management of care	AR, DPC, lectures, review of actual studies, AAR, OP
Identify problems due to cognitive limits, socio-economic circumstances, patient values and beliefs that must be recognized and incorporated for optimal patient care.	AR, DPC, lectures, review of actual studies, AAR, OP
Accept responsibility for ensuring that a care plan for a patient seen in consultation is appropriately implemented, that care of outpatients is appropriate and continuous and how to develop appropriate follow up including failsafe measures	AR, DPC, OP consults and IP consults

6) **Systems-Based Practice**

Principial Educational Goals	Learning Activities
Understand how to use discharge planning services, office follow up protocols, record keeping, and home health care services in the treatment of pulmonary disorders	AR, DPC, lectures, review of actual studies, AAR, OP
Understand how insurance issues and community resources impact implementing an effective care plan	AR, DPC, lectures, review of actual studies, AAR, OP
Identify family and community resources to improve outpatient care	AR, DPC, OP

Evaluating achievement of educational objectives:

Residents will be evaluated by direct observation by Faculty and Fellows during the course of patient care during the rotation. Residents will be included in the discussion of the differential diagnosis and the determination of the diagnostic strategy. Exit interview with program director will be held at the end of the rotation, and residents will be provided a written evaluation of their performance.

Trainee evaluation of the rotation: Direct feedback will be provided during the exit interview with Pulmonary and Medical Training Program Directors and residents will provide written evaluations of the elective.

Recommended Resources:

All residents are expected to read about their patients in an appropriate general medicine text such as Harrison's Internal Medicine and pulmonary medicine textbooks such as Murray and Nadel. Because it is frequently updated, extensively referenced, and includes abstracts of referenced articles, the program highly recommends UpToDate as a further primary resource.

There is a Pulmonary Library in the Fellows office which includes: Clinics in Pulmonary Medicine, Journal of Critical Care Medicine, Chest, ARRD, AJSM, and Sleep Medicine Reviews. On line access to the literature is available through PubMed, NHLB and individual journal sites. Additional resources are available at the Health Resources Library of Bridgeport Hospital.

Clinical Faculty

Primary Teaching Faculty

- David Kaufman, MD, Chief, Pulmonary Medicine Section
- Constantine Manthous, MD, Program Director Internal Medicine Residency
- Armand Wolff, MD, Program Director Pulmonary Medicine Fellowship

Associated Teaching Clinical Faculty

- Nelson Chao, MD, Pulmonary Medicine, Allergy and Immunology
- Arthur Turetsky, MD
- Daniel Rudolph, MD
- Adil Salam, MD
- John Ayala, MD

Evaluation of Bridgeport Hospital Internal Medicine Residents**General Competencies**

The residency program must evaluate residents' competencies in the 6 areas below. Toward this end, programs must define the specific knowledge, skills, and attitudes required and provide educational experiences in order for their residents to demonstrate:

Patient Care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health

Medical Knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care

Practice-Based Learning and Improvement that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care

Interpersonal and Communication Skills that result in effective information exchange and teaming with patients, their families, and other health professionals

Professionalism, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population

Systems-Based Practice, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value

The ACGME Core Competencies and this Curriculum

Beginning in July 2001, the Accreditation Council for Graduate Medical Education (ACGME) has introduced six newly defined areas of competency that residents must obtain over the course of their training. Our curriculum is organized around these core competencies.

The competencies are as follows:

- 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 care at the end of life.
 - Gather accurate, essential information from all sources, including medical interviews, physical examination, 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 sciences that underlie the practice of internal medicine.
 - Apply this knowledge in developing critical thinking, clinical problem solving, and clinical decision-making skills.
 - Access and critically evaluate current medical information and scientific evidence and modify knowledge base accordingly.

- 3. Practice-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 practice.
 - 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 education.

- 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, families, and other members of health care teams.
 - Provide effective and professional consultation to other physicians and health care professionals and sustain therapeutic and ethical relationships with patients, their families, and colleagues.
 - Use effective listening, nonverbal, questioning, and narrative skills to communicate with patients and families.
 - Interact with consultants in a respectful and appropriate fashion.
 - 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 of 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, in areas including gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors 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 to 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 systematic processes of care.