

**MRVAMC PULMONARY PATHOLOGY: Rotation Director: Li Lu, M.D., Ph.D., Clinical Assistant Professor**

**1. Description of the rotation:** Using a combination of current pulmonary pathology cases and teaching sets, the resident is provided with a broad and in-depth exposure to the pathology of pulmonary diseases. Current cases from Shands Hospital, the Veterans Administration Medical Center, and the Diagnostic Referral Laboratory are reviewed initially by the resident and subsequently by the resident and attending pathologist on service. The workup of these cases frequently includes immunohistochemistry, and occasionally immunofluorescence (Goodpasture syndrome) or electron microscopy (pleural tumors, other unusual tumors) (Competency #1,#2,#3,#5, see note). The resident interfaces with clinicians and radiologists regarding questions about the clinical history and radiologic findings, provides feedback about pathologic interpretations, and answers questions related to pathologic workup of cases. The attending and/or resident present some of these cases at the weekly interdisciplinary pulmonary conference (Competency #1,#4, see note).

A comprehensive teaching sets of glass slides with case description illustrating the common and the uncommon pulmonary diseases are a valuable learning resource for the resident. A large collection of slides from lung transplant cases is a unique feature of the set (Competency #2,#3, see note).

Depending upon the resident's interests other educational and/or research activities may also be included in this rotation. Participation in bronchoscopies, pulmonary medicine rounds, and evaluation of radiologic studies with radiologists can be arranged. A research project can also be completed during this rotation. The resident is encouraged to discuss his/her interests with the attending faculty prior to the rotation so that desired activities can be scheduled. As appropriate to the individual case or consultation under review, the ethical, socioeconomic, medicolegal, and cost-containment issues are reviewed and discussed (Competency #6, see note). As well, research design, statistics and critical review of the literature are discussed. By use of the literature, Medline, and textbooks, the resident is trained to become a lifelong learner (Competency #2, #3, see note).

**2. Goals of the rotation:** During the first 4 weeks of the rotation, the resident is expected to gain a solid foundation in the pathology of common pulmonary diseases, including common lung neoplasms, lung transplant pathology, obstructive lung diseases, infections, and pleural processes. As the resident progresses, greater attention will be given to the differential diagnosis of more unusual processes, including interstitial lung diseases, lymphoproliferative diseases, collagen vascular diseases, unusual infections and tumors, vasculitis and other vascular abnormalities, congenital abnormalities, etc. Correlation of pathologic lesions with clinical and radiologic findings will be addressed (Competency #2, #3, see note).

**3. Duration of the rotation:** Four weeks. This rotation may also be scheduled in combination with another VA rotation.

**4. Duties and responsibilities of residents:** Independent review of active cases prior to signout with the attending pathologist is expected at each year of training to maximize the learning value of the signout experience. Independent review of the teaching sets, followed by discussion and review of the cases, will provide a systematic introduction to categories of diseases. The resident will serve as a consultant to clinicians and radiologists and participate in the case discussion in the weekly multidisciplinary pulmonary conference. (Competency #1,#2,#3,#4,#5, see note).

**5. Teaching staff:** Li Lu, M.D., Ph.D., Peter A. Drew, M.D., M.D., Robert Allan, M.D., Clinicians and radiologists, depending upon the residents interests.

**6. Supervision and evaluation of residents:** Residents are supervised by the teaching staff. Evaluation of the resident is based upon the resident's competencies in patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism and systems-based practice as recommended by ACGME guidelines.

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Note: The 6 ACGME competencies: #1. patient care; #2. medical knowledge; #3. practice-based learning and improvement; #4. interpersonal and communication skills; #5. professionalism; #6. systems-based practice.

### **Pulmonary Pathology Rotation CORE CURRICULUM**

**Submitted by** Li LU, M.D., Ph. D.

During the first 4-week rotation, diagnostic competency should be achieved in the following areas:

- Normal lung histology
- Atelectasis
- Cystic fibrosis
- Diffuse alveolar damage
- Thromboembolism and its consequences
- Pulmonary hypertensive arteriopathy
- Acute and organizing bronchopneumonia
- Manifestations of mycobacterial infections
- Manifestations of fungal infections
  - Histoplasmosis
  - Cryptococcosis
  - Coccidiomycosis
  - Aspergillosis,
  - Mucormycosis
- Cytomegalovirus pneumonia
- Herpes simplex virus pneumonia
- Pneumocystis carinii pneumonia
- Dirofilaria granuloma
- Aspiration pneumonia
- Emphysema
- Chronic bronchitis
- Bronchiectasis
- BOOP
- Asthma
- Asbestos exposure
- Sarcoidosis
- Usual interstitial pneumonia
- Desquamative interstitial pneumonia
- Alveolar proteinosis
- Langerhans cell histiocytosis
- Chronic eosinophilic pneumonia
- Hypersensitivity pneumonia (EAA)
- Chemotherapy/radiation pneumonitis
- Squamous cell carcinoma
- Adenocarcinoma
- Bronchioloalveolar carcinoma
- Small cell carcinoma
- Large cell carcinoma
- Carcinoid
- Hamartoma
- Inflammatory pseudotumor
- Mesothelioma
- Thymoma

During the second 4-week rotation, diagnostic competency should be extended to include the following:

Congenital cysts  
Congenital cystic adenomatoid malformation  
Pulmonary veno-occlusive disease  
Legionella pneumonia  
Manifestations of nocardia infection  
Manifestations of respiratory viral infections  
Strongyloides infection  
Types of bronchiolitis  
Allergic broncho-pulmonary aspergillosis  
Asbestosis  
Silicosis  
Coal worker's pneumoconiosis  
Lymphangioleiomyomatosis  
Lymphoid interstitial pneumonia  
Giant cell interstitial pneumonia  
Idiopathic hemosiderosis  
Amiodarone toxicity  
Manifestations of rheumatoid arthritis  
Manifestations of other collagen vascular diseases  
Manifestations of graft versus host disease  
Wegener's granulomatosis  
Churg-Strauss angiitis  
Spindle cell carcinoma  
Tumorlet  
Large cell neuroendocrine carcinoma  
Diffuse pulmonary neuroendocrine cell hyperplasia  
Mucoepidermoid carcinoma  
Adenoid cystic carcinoma  
Pleomorphic adenoma  
Granular cell tumor  
Pulmonary blastoma  
Sclerosing hemangioma  
Lymphomatoid granulomatosis  
MALT lymphoma  
Basaloid carcinoma  
Squamous papilloma  
Lung involvement by hematopoietic neoplasms  
Amyloidosis  
Atypical adenomatous hyperplasia  
Fibrous tumor of pleura  
Infectious causes of pleuritis  
Thymic carcinoma  
Pericardial cyst  
Other mediastinal tumors

Sclerosing mediastinitis  
Thymic cyst  
Lymphangioma