Pulmonary Pathophysiology

Course Directors:
Daniel Brodie, MD
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Purpose of the Course
To provide you with an understanding of the mechanisms responsible for major pathophysiologic abnormalities which may be encountered in cardiorespiratory disease.

Course Objectives
• To understand the important categories and causes of lung disease in humans
• To understand functional abnormalities in disease states
  – Mechanics
  – Gas exchange
  – Ventilation
  – Vascular changes

Course Objectives - 2
• To learn the significance of the signs and symptoms of pulmonary disease
• To understand the role of diagnostic testing in pulmonary disease
• To understand treatment approaches to patients with lung diseases

Course Outline
• 13 Lectures
• 6 Small Group Sessions
• 2 Pathology Lab Sessions
• 1 Pathology Review Session
• Textbook
  – Required reading
• Syllabus

Course Outline - 2
• Review and overview of pulmonary pathophysiology
• Airway disease
• Parenchymal disease
• Neoplasms
• Infections
• Respiratory failure
• Pulmonary vascular disease
New for 2009

• More review this week
• Team-Based Learning session
• Revised lectures
  – COPD
  – ILD (DPLD)
  – Pulmonary vascular disease

Instructors’ Responsibilities

• Clear communication
  – Visual
  – Oral
  – Logical
• Complete and timely answers to questions
• Consistency of required material

Students’ Responsibilities

• Presence at all scheduled sessions
• Completion of required reading prior to each session
• Active participation in small groups and laboratory sessions

Paradigm

Causes of Disease

Structural Change
• Physical examination
• Radiographic examination
  - Chest x-ray
  - Chest CT
• Histological examination
  - Transthoracic needle biopsy
  - Transbronchial biopsy
  - Surgical biopsies

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