

<b>Module Title</b>	<b>Lungs and pleura</b> <span style="float: right;">August 16, 2006</span>
<b>Module Rationale and Competencies</b>	<p>In contemporary practice the assessment of the Cardiothoracic patient requires a thorough understanding of the anatomy and pathology of the lungs and pleura. The role of currently available investigations and the indications for therapies currently utilised in pulmonary disease must be appreciated.</p> <p>The Graduating Trainee will be able to:</p> <ul style="list-style-type: none"> <li>▪ Apply scientific knowledge in practice</li> <li>▪ Consistently demonstrate sound surgical skills</li> <li>▪ Formulate and implement a management plan for cardiothoracic surgical disorders taking into account that intervention may include operative and non-operative options</li> <li>▪ Accurately identify the risks and benefits of the chosen management plan and its alternatives</li> <li>▪ Appraise and interpret results of investigations against patients' and system needs</li> <li>▪ Promote health maintenance for patients</li> <li>▪ Appreciate and act according to ethical standards within cardiothoracic surgery</li> <li>▪ Communicate to patients (and their family) the treatment options, potential benefits, complications and risks associated with all treatment modalities</li> <li>▪ Critically appraise new trends in cardiothoracic surgery</li> </ul>
<b>Essential Reading</b>	General Thoracic Surgery Thomas W. Shields, M.D. (Editor), Thomas W. Shields, M.D. , Joseph Locicero, III, , Ronald B. Ponn, M.D. , Valerie W. Rusch, M.D. August 2004 ISBN: 078173889X
<b>Recommended Reading</b>	Glenn's Thoracic and Cardiovascular Surgery (6th edition) Authors: Arthur E. Baue (Editor), Hillel Laks (Editor),
<b>References</b>	<a href="http://www.ctsnet.org/">http://www.ctsnet.org/</a> <a href="http://www.ctsnet.org/residents/ctsn/">http://www.ctsnet.org/residents/ctsn/</a>
<b>Learning Opportunities and Methods</b>	<p>Clinical-Ward teaching</p> <ul style="list-style-type: none"> <li>- supervised ward rounds with consultant surgeon</li> <li>- multidisciplinary meetings within each unit</li> <li>- clinical audit meetings within each unit</li> <li>- structured teaching programme within each unit including trainee presentations and journal club</li> </ul> <p>Clinical-Operating room teaching</p> <ul style="list-style-type: none"> <li>- structured programme for progression and assessment of surgical skills</li> <li>- assistance with and observation of methods and techniques used for complicated surgery</li> </ul> <p>Online Image Bank with Case Scenarios  Online access to current journals within each unit  Access to unit database for research purposes</p>
<b>Assessment and Examination</b>	<p>Self Assessment Tasks</p> <ul style="list-style-type: none"> <li>- multiple choice and short answer questions (have hyperlink)</li> </ul> <p>Essay Questions</p> <ul style="list-style-type: none"> <li>- set by and submitted regularly to unit's supervisor of surgical training</li> </ul> <p>Clinical Vivas</p> <ul style="list-style-type: none"> <li>- short and long cases performed with consultant surgeons</li> </ul> <p>Clinical Assessment and Mentor Reports</p>

Level One	Level Two	Level Three	Level Four
<ul style="list-style-type: none"> <li>• Analyse the normal and variant anatomy of the lungs and pleura</li> <li>• Interpret radiographic anatomy of the lungs and pleura</li> <li>• Discuss the development of the tumours of the lung</li> <li>• Discuss the physiology of the respiration, the mechanisms of breathing</li> <li>• Discuss tests of lung function</li> <li>• Discuss non invasive and invasive procedures for staging of lung cancer</li> <li>• Take a history, examine, diagnose patients exhibiting diseases of the lungs and pleura</li> <li>• Select medically appropriate investigative tools to carry out clinical investigations and monitoring techniques in a cost-effective, ethical and effective manner</li> <li>• Apply their thorough knowledge of the anatomy, physiology, and pathology of disorders of the lungs and pleura to accurately diagnose and effectively manage patients</li> </ul>	<ul style="list-style-type: none"> <li>• Describe staging of lung cancer</li> <li>• Manage patients (operatively and non-operatively) with the lungs and pleura</li> <li>• Explain the indications and techniques for either medical or surgical treatment of pulmonary metastases</li> <li>• Accurately identify risk factors associated with surgery of the lungs and pleura</li> <li>• Explain the role of VATS in neoplastic disease resections</li> <li>• Explain epidemiology and etiologically relevant factors in lung cancer</li> <li>• Explain how to recognize the complications of pulmonary resection and discuss their management;</li> <li>• Recognises complications requiring operative treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss indications, complications and surgical techniques of standard resections for neoplastic disease;</li> <li>• Discuss evaluation, clinical features and treatment of carcinoid and solitary nodules</li> <li>• Perform (and/or arrange for) appropriate therapeutic procedures, and manage patients exhibiting diseases of the lungs and pleura</li> <li>• Understand TNM system and its application to the diagnosis and therapeutic planning;</li> <li>• Communicate information about procedures and risks in relation to disorders of the lungs and pleura to patients (and/or their family) in ways that encourage their participation in informed decision making and on-going management</li> </ul>	<ul style="list-style-type: none"> <li>• Interpret and discuss the available literature regarding the outcomes of interventions for diseases of lungs and pleura</li> <li>• Discuss indications and technical aspects of surgical procedures for special circumstances</li> <li>• Carry out the pre and postoperative care of patients undergoing surgery of the lungs and pleura</li> <li>• Perform surgery for the management of diseases of the lungs and pleura</li> <li>• Advocate patient health along with primary and secondary prevention of disease</li> <li>• Consider all issues relevant to the patient</li> <li>• Audit their own performance</li> </ul>
<ul style="list-style-type: none"> <li>• Evaluate patients with pleural and lung disease</li> <li>• Read and interpret invasive and non invasive tests of patients with pleural and lung disease</li> <li>• Direct the critical care management of pre and post operative patients with pleural and lung disease</li> <li>• Perform tube thoracostomy</li> </ul>	<ul style="list-style-type: none"> <li>• Perform operative and non-operative management of patients with pleural disease</li> <li>• Perform bronchoscopy</li> </ul>	<ul style="list-style-type: none"> <li>• Perform operative and non-operative management lung resection</li> </ul>	<ul style="list-style-type: none"> <li>• Perform operative and non-operative management of patients with lung malignancy</li> <li>• Perform complex lung and pleural resection</li> </ul>