

# Being a part of the largest public health programme in India – NTEP – where you can make a difference

Name of Block	Block- II Dept of Pulmonary Medicine
Name of Elective	NTEP
Location	New Medical College Hospital – OPD, WARD 11, CASUALTY, MDICU
Internal Preceptor	Dr. Sanjeev Nair, Additional Professor, Dr Anitha Thilakan, Associate Professor, Department of Pulmonary Medicine, Government Medical College, Thirssur
External Preceptor	Dr Thomas George P, HOD, Dept of Pulmonary Medicine, Government Medical College, Thirssur
Learning Objectives	1) Historic aspects of TB control in India and Kerala
	2) Epidemiology of TB in India and Kerala
	3) Diagnosis of TB
	4) Treatment of TB
	5) Special situations in TB, including childhood TB and MDR TB
	6) Management of TB Infection
	7) Research in NTEP
Pre-requisites	Candidate should know the basics of microbiology, pathology and pharmacology of Tuberculosis
No of Students	2
Who might benefit?	Candidates who are likely to benefit from the program include <ol style="list-style-type: none"> <li>1. Those who wish to learn an ideal mix of clinical medicine with public health</li> <li>2. Those with career aspirations of working for international agencies like WHO, International UNION</li> <li>3. Those who wish to take up further studies outside India – the work done in this course would further their admission prospects abroad</li> </ol>
Learning Resources	Guidelines on TB from the NTEP Website – <a href="http://www.tbcindia.gov.in">www.tbcindia.gov.in</a> Guidelines on TB from WHO website - <a href="https://www.who.int/health-topics/tuberculosis#tab=tab_1">https://www.who.int/health-topics/tuberculosis#tab=tab_1</a>
List of Activities	1) Familiarization with TB epidemiology and TB control / elimination - Seminar presentation and focused group discussion
	2) Observe and learn TB current TB elimination activities – Interaction with NTEP MO, TB HV and Laboratory technician
	3) Observe and learn current status of evaluation of respiratory symptomatics – interview 30 patients with cough >2 weeks in the Pulmonary Medicine OP
	4) Observe and learn vulnerability mapping and prevention – Interview 30 patients with “medium to high vulnerability score” in Pulmonary Medicine and General Medicine wards
	5) Learn data management – Practical exercises on assessing quality of data, program data analysis and data presentation
	6) Learn and perform operational research – pick up one OR topic of interest and finish a short study based on secondary data analysis
	7) Learn of future career opportunities in WHO and international NGOs –

	Interviews over telephone with Medical Consultants working with WHO, International UNION, FIND, Government of India.
Log Book Entries	1) Seminars and Focus group Discussions
	2) OP patients interviewed
	3) Hospitalised patients interviewed
	4) Summary of interview of key program staff
	5) Summary of data management exercises
	6) Summary of Operational research performed
Assessment	Log book will be evaluated daily by the preceptor. Short answer MCQ and VivaReport on analysis of program data – assignment Report of short OR Reflections on future job prospects
Outputs expected	Participant will gain clinical skills, public health skills, data management skills and analytical thinking One publication on the operational research performed One conference presentation in Students National Conference on research

## OBSTRUCTIVE AIRWAY DISEASE- The commonest yet the trickiest

<b>Name of Block</b>	Block- II Dept of Pulmonary Medicine
<b>Name of Elective</b>	Obstructive Airway diseases – The commonest yet the trickiest
<b>Location</b>	New Medical College Hospital – OPD, WARD 11, CASUALTY, MDICU
<b>Internal Preceptor</b>	Dr Bindu C G, Associate Professor, Dept of Pulmonary Medicine
<b>External Preceptor</b>	Dr Thomas George P, HOD, Dept of Pulmonary Medicine
<b>Learning Objectives</b>	<ol style="list-style-type: none"> <li>1) Clinical Diagnosis of OAD</li> <li>2) Assessment – Spirometry, Peak flow meter, Impulse Oscillometry, Blood eosinophil and IgE</li> <li>3) Management of Stable asthma</li> <li>4) Management of Exacerbation of Asthma</li> <li>5) Inhalers- Prescription, how to choose and use</li> <li>6) Uncontrolled asthma with usual medications</li> <li>7) Asthma in special situations</li> <li>8) COPD Definition, Diagnosis and Management]</li> <li>9) Spirometry</li> </ol>
<b>No of Students in each elective</b>	2 nos
<b>Pre-requisites</b>	Student should know basic respiratory system physiology and examination.
<b>Learning Resources</b>	Latest GINA guidelines, Learning resources by AAAI- JACI, Spirometry ERS guidelines, NCCP_ICS guidelines, GOLD Guideline, ATS Guidelines on Spirometry
<b>List of Activities</b>	<ol style="list-style-type: none"> <li>1) Familiarization of definition of OAD and guidelines- Seminar presentation and focused group discussion</li> <li>2) Attend a minimum of 30 OPD Obstructive airway disease patients</li> <li>3) Attend a minimum of 20 Casualty Obstructive airway disease patients</li> <li>4) Ward/ICU management of atleast 5 patients</li> <li>5) Reading of spirometry – atleast 20</li> <li>6) Inhaler usage- Demonstration to patients</li> <li>7) Uncontrolled asthma, ABPA- Evaluation</li> <li>8) Asthma in pregnancy and childhood management</li> <li>9) Class survey- Prevalence of Asthma, Allergic rhinitis, COPD risk in your batch</li> </ol>
<b>Portfolio Entries</b>	<p>Short summary of attended patients with OAD- Stable, And in exacerbation- atleast 6/day</p> <p>Evaluation and Treatment flowcharts</p> <p>Spirometry assessment flowcharts</p> <p>Assess the spirometry by patients- paste the results and analyse</p> <p>Difficult to treat asthma cases attended- with short summary of the same</p>
<b>Log Book Entries</b>	<ol style="list-style-type: none"> <li>1) Seminars and Focus group Discussions</li> <li>2) Stable OAD patients attended</li> <li>3) Emergency room asthma attended</li> <li>4) Spirometry evaluation done by the student</li> </ol>

	5) Inhalers demonstration by the student 6) Difficult to treat asthma cases attended 7) Prevalence study of Asthma and risk of COPD in the student's batch
<b>Assessment</b>	Log book will be evaluated daily by the preceptor. Case scenario based assessment at the end of posting.

## Elective learning experience in Block II

<b>Name of Block</b>	Block II
<b>Name of Elective</b>	“You learn what you see” Fascinating world of Interventional Pulmonology
<b>Location of hospital lab/research facility</b>	New Medical College hospital Thrissur
<b>Name of internal preceptor(s)</b>	Dr. Muraly C.P, Dr. Arjun Chandran
<b>Name of external preceptor(s) if applicable</b>	Dr Thomas George, Prof and HOD
<b>Learning objectives of electives</b>	<p>At the end of the electives the learner would be able to</p> <ol style="list-style-type: none"> <li>1) Enumerate different anatomical landmarks during bronchoscopy assessed by a video of simulated case with 90% accuracy</li> <li>2) Describe the indications, contraindications, complications of Flexible bronchoscopy</li> <li>3) Enumerate the different types of bronchoscopy with compare and contrast</li> <li>4) Enumerate different diagnostic procedures done during bronchoscopy</li> <li>5) Enumerate the steps in caring the bronchoscopy</li> <li>6) Indications and procedure of Thoracoscopy</li> <li>7) Endobronchial Ultrasound</li> </ol>
<b>Number of students that can be accommodated in this elective</b>	2
<b>Prerequisites for elective</b>	Basic knowledge of anatomy of nose, throat , trachea and bronchii
<b>Learning resources for students</b>	<ol style="list-style-type: none"> <li>1. Videos</li> <li>2. Web based self directed learning</li> </ol>
<b>List of activities of student participation</b>	<ol style="list-style-type: none"> <li>1) Knowing the bronchoscope and accessories</li> <li>2) Setting up of Endoscopy suite</li> <li>3) Communicating with the team members</li> <li>4) Presentation of clinical cases along with radiologic and bronchoscopic findings</li> <li>5) Hands on training on a manikin</li> <li>6) Assisting bronchoscopies EBUS and Thoracoscopic procedures</li> </ol>

<b>Portfolio entries required</b>	<ol style="list-style-type: none"> <li>1. Summary of cases seen with bronchoscopic findings . a reflection of learners experience also should be noted.</li> <li>2. Reflections on the working as a team</li> <li>3. Major challenges faced during the training</li> </ol>
<b>Log book entry required</b>	<ol style="list-style-type: none"> <li>1. Logbook will be verified by the preceptor</li> <li>2. Atleast 20 bronchoscopies should be seen</li> <li>3. Atleast 10 cases should be assisted</li> <li>4. Atleast 5 times should be done on a manikin</li> <li>5. Assist 2 cases each of EBUS and Thoracoscopy</li> <li>6. A topic Presentation before the faculty</li> </ol>
<b>Assessment</b>	<ol style="list-style-type: none"> <li>1. Simulated video for identification of landmarks</li> <li>2. OSCE</li> <li>3. MCQ</li> <li>4. Short notes</li> </ol>
<b>Other comments</b>	