FELLOWSHIP IN ENDOBRONCHIAL ULTRASOUND (EBUS)

ABOUT THE UNIVERSITY

Malla Reddy Vishwavidyapeeth is a premier multidisciplinary institution based in Hyderabad, Telangana, recognized as a "Deemed to be University under Distinct Category." The university is committed to excellence in medical education, advanced clinical training, and research, offering cutting-edge fellowship programs across healthcare specialties.

PROGRAM OVERVIEW

The Fellowship in Endobronchial Ultrasound (EBUS) is a one-year advanced training program designed to provide specialized expertise in minimally invasive pulmonary diagnostics and interventions.

The program focuses on:
- Radial and convex-probe EBUS techniques
- EBUS-guided Transbronchial Needle Aspiration (EBUS-TBNA)
- Mediastinal lymph node evaluation
- Lung cancer diagnosis and staging
- Peripheral lung lesion assessment
- Integration of EBUS with bronchoscopy
- Diagnosis of infectious and interstitial lung diseases
- Advanced pulmonary interventions
- Clinical research in interventional pulmonology

This fellowship combines structured academic learning with extensive hands-on procedural training and real-time clinical exposure.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Graduates will be able to:

1. Perform and interpret advanced EBUS procedures.
2. Diagnose mediastinal and pulmonary diseases using EBUS.
3. Conduct EBUS-guided biopsy techniques (EBUS-TBNA).
4. Integrate bronchoscopy and EBUS for comprehensive care.
5. Apply evidence-based approaches in pulmonary diagnostics.
6. Collaborate effectively within multidisciplinary teams.
7. Conduct research in EBUS and interventional pulmonology.

PROGRAM OUTCOMES (POS)

1. **EBUS Expertise:** Master radial and convex-probe EBUS techniques.
2. **Diagnostic Proficiency:** Accurately diagnose lung and mediastinal diseases.
3. **Image Interpretation:** Advanced ability to interpret EBUS imaging.
4. **Interventional Skills:** Perform EBUS-guided biopsies and aspirations.
5. **Integrated Clinical Practice:** Combine EBUS with bronchoscopy for optimal outcomes.
6. **Research Capability:** Contribute to innovation in pulmonary diagnostics.

COURSE OUTCOMES (COS)

• CO1: Perform and interpret radial and convex-probe EBUS procedures.
• CO2: Conduct EBUS-TBNA for accurate tissue diagnosis.
• CO3: Diagnose lung cancer, TB, ILD, and lymphadenopathy using EBUS.
• CO4: Evaluate and biopsy peripheral lung lesions.
• CO5: Apply EBUS in infectious and granulomatous diseases.
• CO6: Utilize EBUS for clinical decision-making and patient management.
• CO7: Conduct research in EBUS and pulmonary interventions.

PROGRAM-SPECIFIC OUTCOMES (PSOS)

1. Expertise in minimally invasive EBUS-based pulmonary diagnostics.
2. Ability to perform accurate mediastinal staging and biopsy procedures.
3. Integration of imaging, bronchoscopy, and interventional pulmonology techniques.

PROGRAM DETAILS

• Certificate Awarded by: Malla Reddy Vishwavidyapeeth
• Program Duration: One-Year Fellowship
• Mode of Delivery: Clinical + Theoretical + Hands-on Training

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ELIGIBILITY CRITERIA

• Academic Qualification:
MBBS with MD/DNB in Pulmonary Medicine / Respiratory Medicine / Internal Medicine

• Professional Requirement:
As per institutional norms

KEY FEATURES

• Hands-on EBUS (radial & convex probe) training
• Advanced EBUS-TBNA procedures
• Lung cancer staging expertise
• Real-time mediastinal node evaluation
• Integration with bronchoscopy procedures
• Exposure to infectious & ILD diagnostics
• Multidisciplinary clinical approach
• Research-driven curriculum
• Training with advanced endoscopic technology

LEARNING OUTCOMES

KNOWLEDGE & UNDERSTANDING

• In-depth understanding of pulmonary diseases and mediastinal pathology

COGNITIVE SKILLS

• Analytical interpretation of EBUS findings and clinical correlation

PRACTICAL & PROFESSIONAL SKILLS

• Expertise in EBUS procedures, TBNA, and pulmonary interventions

TRANSFERABLE SKILLS

• Communication, teamwork, and clinical decision-making

SUBJECT-SPECIFIC SKILLS

• Specialized skills in minimally invasive pulmonary diagnostics

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CURRICULUM MODULES – THEORY

SEMESTER 1: FUNDAMENTALS OF ENDOBRONCHIAL ULTRASOUND

• Introduction to EBUS
• Bronchoscopy & EBUS Integration
• Radial vs Convex-Probe EBUS
• Mediastinal Lymphadenopathy Diagnosis

• EBUS-TBNA Techniques
• Clinical Rotations

SEMESTER 2: ADVANCED EBUS TECHNIQUES & APPLICATIONS

• Advanced EBUS-TBNA Procedures
• EBUS in Lung Cancer Diagnosis & Staging
• EBUS for Peripheral Lung Lesions
• EBUS in Infectious Diseases (TB, Fungal)
• EBUS in Interstitial Lung Disease
• Research Project & Case Studies

PRACTICAL COURSEWORK

• Radial and convex-probe EBUS procedures
• EBUS-TBNA guided biopsies
• Mediastinal lymph node sampling
• Peripheral lung lesion evaluation
• Case-based discussions and logbook
• Clinical rotations in pulmonology units
• Research and dissertation work

CAREER OUTCOMES

Graduates can pursue roles such as:
• Interventional Pulmonologist (EBUS Specialist)
• Bronchoscopy & EBUS Consultant
• Pulmonary Diagnostics Specialist
• Lung Cancer Staging Expert
• Academic Faculty in Pulmonary Medicine
• Clinical Researcher in Interventional Pulmonology