

## **Pulmonary Medicine**

The subspecialty of Pulmonary Medicine offers complete diagnostic evaluation and clinical management of all respiratory disorders for inpatient and outpatient services.

The Pulmonary Medicine training programme was established at AKU in year 1999. Initially, we had one trainee per year till 2004, which was subsequently increased to two in 2005 due to increased services and workload of the programme. The programme has graduated 3 specialists till date, out of which one is working as a part-time faculty at AKU.

The programme is aimed at providing comprehensive training in all aspects of Pulmonary Medicine. The stress is on producing academically qualified and highly competent professionals who are current in their knowledge and clinical practice skills. It offers high-level training under the supervision of motivated specialists in this field. AKUH has eight Pulmonary specialists and one Allergist/ Immunologist, with varying interests in different respiratory diseases including tuberculosis, asthma and COPD, allergy and immunology, interstitial lung disease, sleep apnea, non-invasive ventilation and critical care medicine. The Pulmonary training programme at AKU offers the only programme of this kind in Pakistan.

The equipment and facilities available for training at this institution are latest and state-of-the-art like modern sleep lab, well-equipped bronchoscopy suite, pulmonary function lab and respiratory special care unit offering non-invasive ventilation. Recently, outpatient pulmonary rehabilitation service has been introduced. There is a close liaison with Department of Radiology and Cardio thoracic Surgery at our institution which is an essential component of a good training programme in this field. This programme offers organised structured training, availability of state-of-the-art equipment and a system of provision of quality care. The training is recognised for a degree of FCPS in Pulmonary Medicine by the College of Physicians and Surgeons (CPSP).

### **Objective**

The objective of the programme is to produce well-trained and academically-oriented pulmonary specialists. At the completion of training, the resident will be able to diagnose and treat commonly encountered pulmonary disorders in a cost-effective manner. They will be experienced in history-taking, physical examination, and judicious use of laboratory and other investigations and their interpretation. The trainee will have knowledge of applied basic sciences (Pathophysiology, Pharmacology, Molecular Biology, etc.), pertinent to the field of Pulmonary Medicine.

The Pulmonary resident will share on-call (in house) Rota for acute admission(s) and consult service. After completing three years of training, the resident is expected to be able to function as an independent consultant in Pulmonary Medicine. They will have adequate experience in applied Basic Sciences, Clinical Pulmonary Medicine, and relevant research. They will be able to teach Pulmonary Medicine to medical students, residents, sub-specialty trainees, and practicing physicians in the community.

### **Duration of Training**

Pulmonary Medicine Residency is a three year programme.

### **Eligibility**

- MBBS or equivalent degree approved by PM&DC;
- One year internship with six months in Medicine and allied and six months in Surgery and allied disciplines;

- FCPS (Medicine) Part I or MRCP Part I is mandatory. FCPS Part II or equivalent diploma (e.g. MRCP or Diplomate ABIM) is preferred;
- Two years approved training in Internal Medicine.

### **Scope and Content**

#### **a. Skills and Clinical Training:**

The programme emphasises heavily on clinical and practical skills in evaluating patients with pulmonary diseases. The resident will be able to perform procedures such as pleural aspiration and biopsy, chest tube insertion, and fiberoptic bronchoscopy. The resident will be able to manage critically-ill patients in special care units and ICU independently. He will be able to conduct independent Pulmonary clinics and to counsel patients regarding ways to prevent pulmonary diseases. The trainee will be able to teach and supervise the junior residents, interns and medical students rotating in Pulmonary Medicine.

#### **b. Didactic Content:**

The residents are taught at the bedside and also in the form of formal lectures and seminars. He/she will actively participate in teaching ward rounds and clinics, journal club, Pulmonary-Radiology session and other conferences. Residents also participate in other teaching activities such as medical grand round, presentation of clinical practice guidelines, and mortality and morbidity meetings.

#### **c. Research:**

The resident will participate in clinical and/or basic research under the supervision of a faculty member. He will acquire skills such as literature search and data analysis. With this background, the resident will be able to carry out basic or clinical research independently after the completion of his/her training.

#### **d. Evaluation:**

The trainees will be in almost daily contact with one or more faculty members. The faculty member will give regular feedback to the residents and to the Programme Director/ Coordinator. The Programme Director or Coordinator will discuss the performance with each trainee every three to four months. When necessary, the Programme Director/Coordinator will discuss the performance of the trainee with them more frequently than the above schedule and will provide appropriate counseling. Consistent inability on the part of the trainee to meet the required standard would lead to discontinuation from the training programme.

### **Positions Available**

Two candidates are taken per year. The programme is fully established with four residents in training (one each in year I and III, and two in year II).

### **Administrative Set-up**

There are five full-time and two part-time faculty members in the section of Pulmonary Medicine. In addition to clinical and teaching responsibilities, these faculty members have administrative responsibilities and research interests.

### **Full Time Faculty**

#### **Professors**

Dr Syed Fayyaz Hussain  
MBBS Karachi; FRCP London and Edinburgh

Dr Javaid Ahmed Khan  
MBBS Karachi; FRCP, Edinburgh

**Assistant Professors**

Dr Ahmed Suleman Haque  
MBBS, Karachi; MRCP UK

Dr Javed Husain  
MBBS Punjab;  
Diplomate American Boards of Internal Medicine, Pulmonary Disease and Critical Care  
Medicine, USA

Dr Nawal Salahuddin  
MBBS, AKU  
Diplomate American Boards of Internal Medicine, Pulmonary Disease and Critical Care  
Medicine, USA

Dr Ali Bin Sarwar Zubairi  
MBBS, Karachi  
Diplomate American Boards of Internal Medicine, Pulmonary Disease and Critical Care  
Medicine, USA

**Part Time Faculty**

Dr Asif Ali Imam  
MBBS Karachi;  
Diplomate American Boards of Allergy & Clinical Immunology USA

Dr Mohammad Irfan  
MBBS Karachi; FCPS Pakistan

Dr Nisar Ahmad Rao  
MBBS Karachi; FCPS Pakistan