

## **Internal Medicine**

Aga Khan University has been the pioneer institute for initiating structured medical residency programmes in Pakistan. These programmes are role models for other programmes. Internal medicine residency programme is the largest and one of the major strengths of the university.

## **Department of Medicine**

The mission of the Department of Medicine at Aga Khan University Medical College is to strengthen the discipline of internal medicine and its subspecialties, and to positively impact the diagnosis, treatment and control of diseases affecting the populations it serves. The department is committed to excellence in undergraduate and postgraduate medical education, to training primary health care professionals, to clinical, epidemiological and basic science research that expands the frontiers of medical knowledge, and to the provision of caring service to affected patients and their families.

The postgraduate teaching activities of the Department of Medicine includes structured internal medicine residency programme

## **Internist**

The graduates of the residency programme in internal medicine are Internists or general medical specialists.

The internist

- Is an expert in the assessment, diagnosis and management of general medical problems
- Is capable in the management of acute unselected medical emergencies and the management of patients in a holistic way
- Values the continuing care of all patients, irrespective of the nature of the patient's complaint
- Is trained in all of the major medical subspecialties as well as intensive care, palliative care, therapeutics and toxicology, and behavioral science
- Is trained in some aspects of clinical biochemistry, immunology, microbiology, radiology and nuclear medicine
- Formulates a total evaluation of the patient and prioritizes treatment, which may include surgery
- Coordinates the care for all patients and involves other specialists as required
- Functions in clinical, counseling, educating, leadership and management roles

## **Postgraduate Exam Results**

The Internal Medicine Residency Programme at AKU started in 1987. One hundred and three candidates have graduated from our Medicine Residency programme to date. The main aim of the residents in the medicine residency programme is to gain adequate medical knowledge, clinical skills and professional attitude to enable them to function as an excellent internist. In addition an important objective is to gain credentials through their postgraduate exam in due course of time.

The results of our candidates in FCPS are excellent. During the last five years more than 90% of our candidates have cleared FCPS in either first or second attempt, which is due to extensive structured interactive learning opportunities provided to the residents during their training.

## **Goals and Objectives**

The internal medicine residency programme is a 4-year structured training programme, offering clinical training in general medicine and medical subspecialties, adherent to the requirement of the College of Physicians and Surgeons of Pakistan.

It is designed to provide academic environment, formal teaching, and broad clinical experience to the trainee, necessary to become an excellent general medical specialist/ Internist.

**At the end of training, the resident is able to;**

- Acquire the ability to care for a wide range of clinical problems
- Perform thorough and comprehensive history and physical examination in an effective manner
- Document patient's history, physical examination and progress, clearly and concisely in the medical record
- Present the relevant history and physical findings in a coherent and precise manner.
- Formulate complete problem list from the initial data, and prepare an effective diagnostic and therapeutic plan.

Residents are given **graded responsibility** for patient care during their years of residency. The senior resident is able to demonstrate a level of knowledge, clinical skills, technical skills, and attitudes consistent with independent consulting practice. The residency programme provides adequate opportunities for residents to gain skills in the all the common and emergency procedures. The resident functions within the context of a **team approach** to patient care.

The residents are given provision of an appropriate **balance** of inpatient, outpatient, critical care, and ambulatory training experiences. Residents have sufficient exposure to each of the recognised **medical subspecialties** so as to become fully familiar with the role and contribution of each to effective patient care. In the residency programme, methods are in place of careful and fair **evaluation** of residents performances. Appropriate **feedback, guidance, and counseling** are given to assure proper development in all areas of training and professional behavior.

## **Curriculum**

### **Core curriculum**

During the four years of Residency training the core curriculum is covered through formal core lectures, clinical rotations, tutorials, problem based learning, grand rounds, morning report, journal club, mortality and morbidity meetings, practice guidelines, bedside examinations and group discussions.

### **Clinical Rotations**

As per CPSP requirements (See residency manual)

### **Teaching and Learning strategies**

Core Lectures	Weekly
Grand Rounds	Weekly
Morning Report	Twice a week
Journal Club	Twice a month
Mortality and Morbidity	Monthly
Grand Round by Resident	Monthly
Residents Hour	Weekly
Professors Lecture	Monthly
Residents Bedside Teaching	Twice a week
Clinicopathological Conference	Monthly
PGME Lectures	Twice a month

Clinical Practice Guidelines	Monthly
Teaching Ward Rounds	Daily
FCPS/MRCP-II COURSE	Yearly
Subspecialty Teaching sessions	Twice a week
Clinic Assignments	1-2 clinics a week
ACLS Course	Once in Residency

### **Evaluation and Feedback**

- Monthly Continuous In-training Evaluation
- Annual In-service/In-training exam (a three hour postgraduate mock exam)
- OSCE (Objective structured clinical examination)
- MCQs at the conclusion of each core lecture module.
- A Comprehensive yearly two-week, FCPS/MRCP-II Course for the Senior Residents
- Annual residents' appreciation evening

### **Duration of Training**

The programme comprises four years of training.

### **Eligibility**

- MBBS or equivalent degree approved by the PM&DC, with 58% or above marks in the final Examination.
- One year internship with six months in Medicine and allied and six months in Surgery and allied disciplines.
- FCPS Part I/MRCP Part I.

Candidates are required to sit for entry examination of Medicine Residency held in September each year. Selected candidates are then called for an interview to further assess their motivation, leadership potential, communication skills, ambition, and clinical judgment. Successful candidates are selected for the programme.

### **On-Call duties**

Each resident does an average of one night in four on-call within the Hospital premises, although occasionally one night in three may be necessary.

### **Positions Available**

The Department of Medicine has 44 resident positions at present. There are 11 first-year positions available each year.

### **Administrative Set-up**

The Departmental Residency Committee is mandated to oversee all aspects of the Internal Medicine Residency Programme and to ensure that it conforms to the Goals and Objectives of the Residency Programme.

This committee is responsible for the development, implementation, and review of the postgraduate curriculum.

The committee is responsible for the general administration of the programme, which includes; recruitment and selection of residents, teaching, and rotation of residents and interns in general

medicine and medical subspecialties inpatient and ambulatory care, supervision, counseling, evaluation and advancement of residents and interns. The committee is responsible for maintaining resident's personnel records. The Chair of the Committee is the Residency programme director Dr Muhammad Tariq.

### **Full Time Faculty**

#### **Professors**

Dr Saeed Sadiq Hamid  
MBBS Punjab; FRCP London and Ireland; FACP, FACG USA

Dr S. M. Wasim Jafri  
MBBS Karachi; FRCP London, Edinburgh and Glasgow; FACP, FACG USA

Dr Javaid Ahmed Khan  
MBBS Karachi; FRCP Edinburgh

Dr Mohammad Ataullah Khan  
MBBS Sindh; FRCP London; FACP USA

Dr Camer W. Vellani  
MBBCh; MD Wales; FRCP London

#### **Associate Professors**

Dr Shahab Abid  
MBBS Karachi; FCPS Pakistan; FRCP Edinburgh

Dr Jaweed Akhtar  
MBBS UK; ABIM, FRCP Edinburgh; FACP USA  
Diplomate American Boards of Internal Medicine and Medical Education

Dr Sajid Dhakam  
MBBS AKU; FACC, FSCAI  
Diplomate American Boards of Internal Medicine, Cardiovascular Diseases and Interventional Cardiology

Dr Najmul Islam  
MBBS Karachi; FRCP London

Dr Abdul Jabbar  
MBBS Karachi; FRCP London

Dr Khawar Abbas Kazmi  
MBBS Punjab; FCPS Pakistan

Dr Tazeen Jafar  
MBBS AKU; MPH Havard  
Diplomate American Boards of Internal Medicine, Nephrology and Paediatrics

Dr Fahim H. Jafary  
MBBS AKU;  
Diplomate American Boards of Internal Medicine, Cardiovascular Disease and Interventional  
Cardiology  
Diplomate Certification Board in Nuclear Cardiology

Dr S. Hasnain Ali Shah  
MBBS Punjab; MD, FRCP Edinburgh; FACG USA

Dr Saad Shafqat  
MBBS AKU; PhD Havard  
Diplomate American Boards of Psychiatry and Neurology

Dr Nadir Ali Syed  
MBBS AKU;  
Diplomate American Boards of Psychiatry, Neurology, Electrodiagnostic Medicine and Clinical  
Neurophysiology

### **Assistant Professors**

Dr Mohammad Baqir  
MBBS Karachi; FCPS Pakistan

Dr Maqsood Ahmed Bhatti  
MBBS Sindh;  
Diplomate American Boards of Internal Medicine and Infectious Diseases

Dr Ahmed Suleman Haque  
MBBS Karachi; MRCP UK

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

Dr Bushra Jamil,  
MBBS Karachi; MRCP UK

Dr Waqaruddin Kashif  
MBBS Karachi  
Diplomate American Board of Internal Medicine, Nephrology and Critical Care Medicine

Dr Sohail Abrar Ahmed Khan  
MBBS Karachi; FCPS Pakistan

Dr Mohammad Aslam Khan  
MBBS Karachi  
Diplomate American Boards of Internal Medicine and Infectious Diseases

Dr Nadeem Ullah Khan  
MBBS AKU; MD USA

Diplomate American Board of Internal Medicine

Dr Bhojo Asumal Khealani  
MBBS Sindh; FCPS (Neurology) Pakistan

Dr Nehal Masood,  
MBBS Karachi;  
Diplomate American Boards of Internal Medicine and Medical Oncology

Dr Abdur Rauf Mazhar,  
MBBS AKU;  
Diplomate American Boards of Nephrology and Internal Medicine

Dr S.M. Najaf Ali Nadeem  
MBBS Karachi; FCPS Pakistan

Dr Junaid Razzak  
MBBS AKU; FACEP  
Diplomate American Board of Emergency Medicine

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

Dr Mughis Sheerani  
MBBS Karachi; MD Utah  
Diplomate American Boards of Psychiatry and Neurology

Dr Muhammad Tariq  
MBBS Karachi; MRCP UK

Dr Mohammad Wasay  
MBBS Karachi; FRCP Edinburgh  
Diplomate American Boards of Psychiatry, Neurology and Neuro-imaging

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

Dr Lubna Zuberi  
MBBS AKU;  
Diplomate American Boards of Internal Medicine, Endocrinology, Diabetes and Metabolism

**Senior Instructors**

Dr Amir Hameed Khan  
MBBS Punjab; FCPS Pakistan

Dr Khalid Mumtaz  
MBBS Karachi; FCPS Pakistan

Dr Junaid Patel  
Dr Hafiz M. Mehmood Riaz  
MBBS Punjab; FCPS Pakistan

Dr Javed Majid Tai  
MBBS Karachi; FCPS (Medicine and Cardiology) Pakistan

### **Part Time Faculty**

#### **Senior Lecturer**

Dr Aziz Sonawalla  
MBBS, MD, DM Bombay

#### **Lecturers**

Dr Nageeb Basir  
MBBS Peshawar; FRCP Ireland

Dr Khursheed Hassan  
MBBS Karachi; FCPS Pakistan

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

Dr Muhammad Irfan  
MBBS Karachi; FCPS Pakistan

Dr Maqbool H. Jafary  
MBBS Punjab; FRCP London

Dr Ayesha Kamal  
MBBS AKU;  
Diplomate American Boards of Psychiatry, Neurology and Vascular Neurology; Fellow of the American Heart Association

Dr Waqar H. Kazmi  
MBBS Karachi; MCPS Pakistan; MS (Clinical Care Research) Tufts

Dr Zulfiqar A. Khowaja  
MBBS Sindh; MCPS Pakistan

Dr Rustam Khan  
MBBS Karachi; FCPS Pakistan

Dr Shehla Kamal  
MBBS Karachi;  
Diplomate American Board of Internal Medicine

Dr Shahid Mustafa

MBBS Karachi;  
Diplomate American Board of Internal Medicine

Dr Asad Pathan  
MBBS Karachi; FACC, FSCAI  
Diplomate American Boards of Internal Medicine, Cardiovascular Diseases and Interventional  
Cardiology

Dr Nisar Ahmad Rao  
MBBS Karachi; FCPS Pakistan

Dr Azam Shafquat  
MBBS AKU  
Diplomate American Boards of Internal Medicine, Cardiology and Cardiac Electrophysiology

Dr Mansoor A. Shah  
MBBS Karachi; MRCP UK

Dr Nabeela Soomro  
MBBS Karachi; FCPS Pakistan

Dr Azmina Valimohamed  
MBBS AKU;  
Diplomate American Boards of Internal Medicine, Oncology and Haematology