



ZIAUDDIN UNIVERSITY

MD

NEPHROLOGY

April 28, 2025

Introduction: MD Nephrology Program

The Doctor of Medicine (MD) in Nephrology program at Ziauddin University is designed to produce highly skilled, academically competent, and ethically grounded nephrologists capable of meeting the growing healthcare needs related to kidney diseases in Pakistan and beyond. With the increasing prevalence of chronic kidney disease (CKD), hypertension, diabetes, and end-stage renal disease (ESRD), there is a critical need for specialized professionals trained in the prevention, diagnosis, and management of renal disorders.

This advanced postgraduate program provides comprehensive clinical training and academic instruction in all aspects of nephrology, including hemodialysis, peritoneal dialysis, renal transplantation, glomerular diseases, and electrolyte and acid-base disorders. The curriculum is aligned with national and international standards, integrating evidence-based practice, clinical research, and multidisciplinary approaches to patient care.

The MD Nephrology program emphasizes hands-on clinical exposure, critical thinking, and continuous professional development. Under the mentorship of experienced faculty and within the framework of Ziauddin University's robust academic environment, trainees will gain the competencies required to become leaders in nephrology—whether in clinical practice, teaching, or research.

Through this program, Ziauddin University aims to contribute to the national healthcare system by preparing nephrology specialists who can respond effectively to the renal healthcare challenges of the region and promote kidney health at all levels.

MISSION

To provide, the latest in medical treatment and care at affordable rates for every citizen of Pakistan.

میشن

پاکستان کے تمام شہریوں کو بہترین اور سب سے مستحکم طبی سہولیات فراہم کرنا۔

VISION

To make Dr. Ziauddin Hospital an affordable and modern medical healthcare destination for all.

وژن

ڈاکٹر ذیابڈین ہسپتال کو ایک قابل اعتماد اور جدید طبی سہولیات سہارا بنانا۔

CORE VALUES

بنیادی اقدار

PATIENTS FIRST

Patient comes first in all activities we perform, irrespective of which area of the hospital we work for, our team always remembers the caring associated with patients and their families.

مریض کو شوقیت

ہم پہلے مریضوں کے لیے کام کرتے ہیں، جسے ہم ہسپتال کے کسی بھی شعبے میں بھی کام کرتے ہیں، ہمارے عملے ہمیشہ مریضوں اور ان کے گھرانوں کی دیکھ بھال دیتے ہیں۔

SAFETY

Being a healthcare provider is leading us to believe in maintaining the highest possible standards related to safety as patients and families have placed their lives and health in our hands.

حفاظت

صحت اور زندگی کی دیکھ بھال دینا ہمیں ایسی ہیئت پر آمادگی رکھنے پر مجبور کرتا ہے کہ مریضوں اور ان کے گھرانوں کی زندگی اور صحت کو ہمیشہ کی دیکھ بھال دینے کے لیے ہم ہمیشہ کی دیکھ بھال دیتے ہیں۔

SERVICE EXCELLENCE

As employees we strive to achieve the highest standards of service with respect to the medical, physical, emotional and social needs of our patients and their families.

بہترین سروس

بہترین سروس دینا ہمیں ایسی ہیئت پر آمادگی رکھنے پر مجبور کرتا ہے کہ مریضوں اور ان کے گھرانوں کی طبی اور سماجی ضروریات کو ہمیشہ کی دیکھ بھال دینے کے لیے ہم ہمیشہ کی دیکھ بھال دیتے ہیں۔

QUALITY

We are committed to continual quality improvement based on the strongest clinical evidence in a technically and culturally competent manner with good communication and shared decision making.

معیاری

ہم اپنے کام اور سروس کے معیار کو بہتر بنانے کے لیے ہمیشہ کی دیکھ بھال دیتے ہیں، جسے ہم ہسپتال کے کسی بھی شعبے میں بھی کام کرتے ہیں، ہمارے عملے ہمیشہ مریضوں اور ان کے گھرانوں کی دیکھ بھال دیتے ہیں۔

ETHICAL AND FAIR TREATMENT

We promote a system of justice in which every employee is treated with care and consideration. All matters are dealt in an unbiased and evidence-based manner to ensure all staff get the credit they deserve.

بااخلاق و منصفانہ رویہ

ہم ایک منصفانہ نظام کو فروغ دیتے ہیں جس میں ہر ایک کو اپنی جگہ پر کام کرنے کی سہولت ملے گی اور اس کی ضروریات کو ہمیشہ کی دیکھ بھال دینے کے لیے ہم ہمیشہ کی دیکھ بھال دیتے ہیں۔

ACCOUNTABILITY

We as a team are responsible for our overall actions and services while focusing on how each person can better contribute to the overall success of our organization.

جواب دہی

بہترین سروس دینا ہمیں ایسی ہیئت پر آمادگی رکھنے پر مجبور کرتا ہے کہ مریضوں اور ان کے گھرانوں کی طبی اور سماجی ضروریات کو ہمیشہ کی دیکھ بھال دینے کے لیے ہم ہمیشہ کی دیکھ بھال دیتے ہیں۔

TEAM WORK

Working together is the essence to achieve our mission and goals. These collaborated efforts in turn create solutions and benefit patients. Employee's collective efforts value team success over individual success.

ٹیم ورک

ہم ایک منصفانہ نظام کو فروغ دیتے ہیں جس میں ہر ایک کو اپنی جگہ پر کام کرنے کی سہولت ملے گی اور اس کی ضروریات کو ہمیشہ کی دیکھ بھال دینے کے لیے ہم ہمیشہ کی دیکھ بھال دیتے ہیں۔



Proposed Curriculum: MD Nephrology (5-Year Program)

Program Overview

- **Degree:** Doctor of Medicine (MD) in Nephrology
- **Duration:** 5 Years (Full-time Clinical Residency)
- **Eligibility:** MBBS + 1 year House job
- **Affiliation:** Dr. Ziauddin Hospital (Clifton, North, Kemari)

Program Objectives

- Train nephrologists in clinical and academic excellence.
- Provide expertise in dialysis, transplantation, and nephrology research.
- Foster ethical practice, leadership, and teaching capabilities.

Year-wise Curriculum Structure

Year 1: Foundation in Internal Medicine

Clinical Rotations

- General Medicine Wards – 6 months
- ICU/HDU – 1 month
- Cardiology – 1 month
- Hem-Oncology – 1 month
- Pulmonology – 1 month
- Rheumatology – 1 month
- Gastroenterology – 1 month

Academic Training

- Medical Ethics & Professionalism
- Clinical Communication Skills
- Emergency Care: ACLS & BLS certification
- Weekly case discussions
- Research topic and synopsis submission.

Year 2: Basic Nephrology Training

Clinical Rotations

- Nephrology (Wards & OPD) – 6 months
- Dialysis Unit (HD & PD) – 3 months
- Pathology (Biopsy review, urinalysis) – 2 months

- Radiology (Renal imaging) – 1 month

Skills Acquisition

- Fluid & electrolyte management
- AV fistula care and catheter placement (observation)
- Interpretation of renal imaging and biopsy

Year 3: Core Clinical Nephrology

Clinical Rotations

- Nephrology Wards & OPD – 5 months
- Transplant Nephrology (local/partner institution) – 3 months
- Pediatric Nephrology – 2 months
- Interventional Nephrology – 2 months

Academic Requirements

- Monthly case presentations
- Journal club presentation
- Participate in mortality & morbidity (M&M) meetings

Year 4: Research and Advanced Clinical Training

Responsibilities

- Supervision of junior residents
- Teaching and academic leadership
- Quality audits (e.g., infection control in dialysis unit)

Research

- Finalize dissertation data collection and analysis
- Submit manuscript to peer-reviewed journal

Clinical Rotations

- Advanced transplant nephrology (optional external rotation)
- Community nephrology (rural outreach) – 1 month

Year 5: Senior Residency and Consolidation

Responsibilities

- Independent patient management (ward, OPD, dialysis)

- Teaching undergraduates and postgraduates
- Final dissertation submission
- Board exam preparation (OSCEs, long/short cases, viva)

Evaluation & Examination

Assessment Overview

- Logbook Review – Biannually
- Formative Internal Exams – Annually
- Research Progress Review – Quarterly
- Final Board Examination – End of Year 5

Final Examination Format

- **Theory (4 Papers)**
 1. Renal Physiology & Pathophysiology
 2. Clinical Nephrology
 3. Dialysis & Transplantation
 4. Recent Advances & Research
- **Clinical:** OSCE + Long and Short Cases
- **Viva:** Biopsy, Imaging, Clinical Scenarios, Research Project

Academic Resources

- *Comprehensive clinical nephrology*
- *Oxford Handbook of Nephrology*
- *Handbook of Kidney Transplantation. Gabriel.M.Danowich*
- *ISN Academy Modules*
- *Pakistan Society of Nephrology Guidelines*

Faculty & Supervision

- Program Director: CPSP-certified Consultant Nephrologist
- Academic Committee: Includes experts in Radiology, Pathology, Medicine
- External Examiner: PMDC/CPSP-approved nephrologist

Additional Program Features

- Community nephrology initiatives
- Rural dialysis and screening camps
- Interdisciplinary grand rounds

- Emphasis on ethical practice, communication, and palliative care