

DR. MUHAMMAD OWAIS ISMAIL

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Ziauddin Medical College
MBBS, M.Phil, CHPE

Department of Pharmacology

PROFESSIONAL INTRODUCTION

Dr. Muhammad Owais Ismail is a Professor and Head of the Pharmacology Department at Ziauddin Medical College. He holds an M.Phil and CHPE, with an academic background focused on pharmacology and medical education. His research primarily investigates neurodegenerative mechanisms and drug development using human cell-based models.

RESEARCH INTERESTS

- Cellular Neurology and Anti-neurodegenerative drugs
- Diabetes
- Drug development
- Pharmacological interventions in human-derived neural systems
- Medical Education and Examination Vigilance

PROFESSIONAL ASSOCIATIONS

- Member, Pakistan Society of Pharmacology
- Head of Examination Vigilance Committee – ZMC
- Member, ZMC Research Committee
- Member, Post graduate curriculum committee (FHS-ZU)
- Member, ZU Clinical Research Committee

CURRENT RESEARCH FOCUS

My current research centers on the development and application of human cell-based models to investigate the molecular and cellular mechanisms underlying neurodegeneration, specifically in disorders like Alzheimer's disease, Parkinson's disease, and ALS. I focus on identifying and modulating anti-neurodegenerative pathways involving proteostasis, neuroinflammation, and mitochondrial resilience. By coupling high-content imaging, multi-omics, and chemical biology, my studies explore how pharmacological interventions can counteract cellular stress and glial dysregulation to provide human-relevant mechanistic insights into neuroprotection.

ADMINISTRATIVE & ACADEMIC ROLES

- Head of the Pharmacology Department-ZMC
- Head of Examination Vigilance Committee – ZMC
- Member, ZMC Curriculum Committee
- Member, ZMC Research Committee
- Member, ZMC Board of Studies
- Member, ZU Convocation Committee
- Member, ZU Admission Committee
- Member, ZU Inquiry Committee

PUBLICATIONS

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