

Dr. Deeba Amraiz

Assistant Professor (TTS)

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<https://scholar.google.com/citations?user=pF0Voi0AAAAJ&hl=en>



Profile

Dr. Deeba Amraiz is an Assistant Professor with a PhD in Virology and Immunology at the Department of Biological Sciences, National University of Medical Sciences (NUMS), Pakistan. Her academic and research expertise is centered on virology, immunology, microbiology, and molecular biology with a strong emphasis on translational research for vaccine and antiviral development against emerging and re-emerging viral infections. She has contributed to curriculum development and taught students across BS Microbiology, MS Microbiology and Immunology, and PhD programs in Biological Sciences, while also supervising research projects at all levels. She also contributes to research mentoring, committee work, and public health initiatives, with a commitment to advancing scientific knowledge and addressing infectious disease challenges in Pakistan.

Research Interests

Molecular virology, Immunology, Emerging and re-emerging viruses including flaviviruses, influenza viruses and polyomaviruses, Vaccines and novel therapeutics

Selected Publications

- ✓ Alia Uzma, Adiba, Ammara Kausar, Muhammad Waseem Aslam, Liaqat Ali, Mahwish Ali, Asma Saleem Qazi, Abdul Haq, Deeba Amraiz*, Emad Rashad Sindi, Taha Alqahtani, Magdi E A Zaki, Molalign Assefa. (2026). In Silico and in vitro antiviral activity of FDA approved drugs from ZINC database against RNA-dependent RNA polymerase of dengue virus. *Virology Journal*. 19;23(1):76. doi: 10.1186/s12985-026-03110-8
- ✓ Ammara Kausar, Asraf Hussain Hashmi, Liaqat Ali, Muhammad Tariq Navid, Munazza Fatima, Syed Muhammad Asad Raza Kazmi, Syed Ali Raza Kazmi, Deeba Amraiz*. (2026). Prevalence and molecular characterization of BK polyomavirus genotypes based on VP1 gene from renal transplant patients in Pakistan. *Infection, Genetics and Evolution*. 139:105920. doi: 10.1016/j.meegid..105920
- ✓ Liaqat Ali, Nida Kanwal, Iffat Saleem, Haidar Ali, Deeba Amraiz, Madiha Akram, Imran Shahid, Jing Yang. (2025). Molecular and Structural Insights into Dengue Virus Non-Structural Proteins from Pakistani Clinical Isolates for the Identification of Novel Antiviral Targets. *Virus Research*. 361. 199637. <https://doi.org/10.1016/j.virusres.2025.199637>

- ✓ Munazza Fatima, Dilshad A. Khan, Deeba Amraiz, Munir A. Lodhi, Eijaz Ghani, Saifullah K. Niazi, Sakhawat Ali. (2022). Characterization of rotavirus strains isolated from children with acute gastroenteritis in Rawalpindi, Pakistan. *Journal of Medical Virology*. <https://doi.org/10.1002/jmv.27711>
- ✓ Deeba Amraiz, Najam-us-Sahar Sadaf Zaidi and Munazza Fatima. (2016). Development of robust in vitro RNA-dependent RNA polymerase assay as a possible platform for antiviral drug testing against dengue. *Enzyme and Microbial Technology*, 92: 26-30

Grants/Awards/Achievements

- ✓ Research grant under HEC NRPU (2023-2025). Title: Development of multitarget pan-serotype inhibitors of dengue infection. Role: PI, Approved funds: PKR 5.03 Million. (Completed)
- ✓ Research Grant under Start-up Research Grant Program of Higher Education Commission (2018-19). Title: Development of plant-based novel intervention strategies against dengue virus and its primary vector *Aedes aegypti*. Role: PI, Approved funds: 0.5 Million PKRs. (Completed)
- ✓ Indigenous PhD Scholarship under S & T Scheme, National University of Sciences and Technology, Islamabad (October 2010 – October 2011)
- ✓ Higher Education Commission 5000 Indigenous fellowship Scheme, Batch-VII at National University of Sciences and Technology, Islamabad (2011-2015)
- ✓ Higher Education Commission Overseas Scholarship at Purdue University Indiana, USA under International Research Support Initiative Program (2013 – 2014)