Dr. Ayesha Ishtiaq

Assistant Professor

ayesha.ishtiaq@numspak.edu.pk

LinkedIn: https://www.linkedin.com/in/ayesha-ishtiaq-phd-2a1bb1b3/

Google scholar: https://scholar.google.com/citations?user=KpbLxJIAAAAJ&hl=en&oi=ao

ORCID ID: https://orcid.org/0000-0003-1244-3223

Profile

Dr. Ayesha Ishtiaq is an Assistant Professor of Molecular Biology and Genetics at the National University of Medical Sciences (NUMS), Pakistan. Her academic and research expertise lies in biochemistry and molecular biology, with a particular focus on microRNA-mediated regulation of cardiovascular and neurobiological pathways. She is actively engaged in teaching and has contributed to research in areas including molecular diagnostics, toxicology, and translational biomedical research. Her research supports the development of miRNA-based diagnostic and therapeutic strategies aligned with global health priorities and Sustainable Development Goal-3 (Good Health and Well-being).

Research Interest

Noncoding RNAs diagnostics and therapeutics, Translational Medicine, Signaling Therapeutics

Selected Publications

Tetra aniline-based polymers ameliorate BPA-induced cardiotoxicity in Sprague Dawley rats, in silico and in vivo analysis. **Ishtiaq, A.,** Mushtaq, I., Rehman, H., Mushtaq, I., Mushtaq, I., Abbasi, S. W., ... & Murtaza, I. (2024). Life Sciences, 123104. https://doi.org/10.1016/j.lfs.2024.123104.

A cohort study investigating the role of Bisphenol A in the molecular pathogenesis of breast cancer**. Ishtiaq, A.,** Nasrullah, M. A., Khan, J. S., Malik, S., Tareen, U., Anees, M., ... & Murtaza, I. (2023). Journal of Cancer Research and Clinical Oncology, 1-11. https://doi.org/10.1007/s00432-023-05247-3

Investigating the Therapeutic Potential of miRNA-137-3p/383-5p/PGC-1α Signalling Nexus Against Cardiac Hypertrophy. Hussain, K., Khurram, S., Yousaf, M., **Ishtiaq, A.,** Mushtaq, I., Ali, T.,

& Murtaza, I. (2025).. Journal of Cardiovascular Translational Research, 1-13. https://doi.org/10.1007/s12265-025-10636-9

Cardioprotective effect of tetra (aniline) containing terpolymers through miR-15a-5p and MFN-2 regulation against hypertrophic responses. Mushtaq, I., Mushtaq, I., Akhlaq, A., Usman, S., **Ishtiaq, A.,** Khan, M., ... & Murtaza, I. (2023). Archives of Biochemistry and Biophysics, 747, 109763. https://doi.org/10.1016/j.abb.2023.109763

Melatonin abated Bisphenol A–induced neurotoxicity via p53/PUMA/Drp-1 signaling. **Ishtiaq, A.,** Ali, T., Bakhtiar, A., Bibi, R., Bibi, K., Mushtaq, I., ... & Murtaza, I. (2021). Environmental Science and Pollution Research, 28(14), 17789-17801. https://doi.org/10.1007/s11356-020-12129-5

Grants/Awards/Achievements

Member of Global STEM Alliance at New York Academy of Sciences, USA.

Merit scholarship at Quaid-i-Azam University Islamabad.

Early Scientist travel grant award from International Society of Endocrinology for I8th International Congress of Endocrinology, held on 1st-4th Dec, 2018 at Cape Town, South Africa.

Member Pakistan Young Academy

Member European Respiratory Society