

Ayesha Aiman

To work in a research-oriented institute with a performance-driven environment where I can demonstrate and apply my knowledge and skills and put my best efforts into the organization as well as achieve individual goals.

EXPERIENCE

Ph.D. /PMRF Research Scholar — Jamia Millia Islamia
August 2021 - PRESENT

EDUCATION

Ph.D. BIOSCIENCES — Jamia Millia Islamia, Delhi
August 2021 - PRESENT

M.Sc. BIOCHEMISTRY — Jamia Millia Islamia, Delhi
2018 - 2020
Aggregate - 9.05 CGPA

B.Sc. BIOSCIENCES — Jamia Millia Islamia, Delhi
2015-2018
Percentage - 80.37%

INTERMEDIATE — M.A.F ACADEMY, NOIDA
2011-2013
Percentage - 80.6%

MATRICULATION — M.A.F ACADEMY, NOIDA
2009-2011
Aggregate - 9.2 CGPA

ACHIEVEMENTS

PMRF 2022, ICAR-JRF 2021, GATE 2021, among toppers in B.Sc. and M.Sc.

Excellent performance in the World Microbiome Quiz (2020)

SEMINAR & CONFERENCES

- INFORMATIVE SESSION by Prof. Dr. Joachim Spatz at IIT, Delhi
- “Genetic disorders of dietary excess: Getting to the heart of the matter” 2019 by Dr. Helen Hobbs at JNU, Delhi
- NATIONAL CONFERENCE (NCRABS), 2020, JMI, Delhi
- SPARC INDO-US IMMUNOLOGY WORKSHOP, 2020
- INDO-SINGAPORE WORKSHOP on “Cardiovascular Diseases: An Insight to New Advances and their Translational Application” 24th – 29th SEPTEMBER, 2021
- “Understand & Explore The World of Fluorescence”, Theory and skill development, 25th – 27th May 2022, IIT Delhi
- Poster presentation in National seminar on Biophysics, Biophysika 2023, JMI Delhi
- Poster presentation in NCIACS-2023, JMI Delhi
- Poster presentation in ICSBDD-2023, GBU, Greater Noida
- Poster presentation in IISC-2023, Bangalore
- Poster presentation in INCD-2024, Punjab University, Chandigarh
- Poster presentation at National Conference on Recent Advancements in Biophysics and Structural Biology, Biophysika 2024, JMI Delhi
- International Interdisciplinary Science Congress, 2024, JMI Delhi
- National conference on Interdisciplinary approach in Chemical Sciences, 2024, JMI Delhi
- Advanced and challenges in medical technology translation, 2024, Thiruvananthapuram, India

LABORATORY SKILLS

Bacterial cell culture, cloning, protein expression and purification, chromatographic techniques, Gel electrophoresis, PCR, SDS PAGE, Animal cell culture, Western blotting, Advanced spectroscopy techniques such as fluorescence, UV-visible, CD, DSC, ITC, etc. Immunodiffusion techniques

TECHNICAL SKILLS

MS-OFFICE, C++ programming beginner, Origin, sigma plot, computational biology

CONTACT

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PUBLICATIONS & RESEARCH WORK

- ❖ Iram, F., Aiman, A., Vijh, D., Shahid, M., Choudhir, G., Khan, T., ... & Islam, A. (2025). Unraveling the catalase dynamics: Biophysical and computational insights into co-solutes driven stabilization under extreme pH conditions. *International Journal of Biological Macromolecules*, 140467. DOI:10.1016/j.ijbiomac.2025.140467
- ❖ Shriwash, N., Aiman, A., Singh, P., Basir, S. F., Shamsi, A., Shahid, M., ... & Islam, A. (2024). Understanding the role of potential biomarkers in attenuating multiple sclerosis progression via multiomics and network-based approach. *PloS one*, 19(12), e0314428. DOI: 10.1371/journal.pone.0314428
- ❖ Bhardwaj, P., Aiman, A., Iram, F., Saifi, I., Basir, S. F., Hassan, I., ... & Manzoor, N. (2024). Natural Compound Toxicity: An Egregiously Overlooked Topic. In *Advances in Antifungal Drug Development: Natural Products with Antifungal Potential* (pp. 653–673). Singapore: Springer Nature Singapore. DOI:10.1007/978-981-97-5165-5_25
- ❖ Bashir, S., Aiman, A., Shahid, M., Chaudhary, A. A., Sami, N., Basir, S. F., ... & Islam, A. (2024). Amyloid-Induced Neurodegeneration: A Comprehensive Review through Aggregomics Perception of Proteins in Health and Pathology. *Ageing Research Reviews*, 102276. DOI:10.1016/j.arr.2024.102276
- ❖ Bashir, S., Aiman, A., Chaudhary, A. A., Khan, N., Ahanger, I. A., Sami, N., ... & Islam, A. (2024). Probing protein aggregation through spectroscopic insights and multimodal approaches: A comprehensive review for counteracting neurodegenerative disorders. *Heliyon*. DOI:10.1016/j.heliyon.2024.e27949
- ❖ Khan, T., Waseem, R., Zehra, Z., Aiman, A., Bhardwaj, P., Ansari, J., ... & Islam, A. (2022). Mitochondrial Dysfunction: Pathophysiology and Mitochondria-Targeted Drug Delivery Approaches. *Pharmaceutics*, 14(12), 2657. DOI:10.3390/pharmaceutics14122657
- ❖ Ali, N., Aiman, A., Shamsi, A., Hassan, I., Shahid, M., Gaur, N. A., & Islam, A. (2022). Identification of Thermostable Xylose Reductase from *Thermothelomyces thermophilus*: A Biochemical Characterization Approach to Meet Biofuel Challenges. *ACS omega*, 7(48), 44241–44250. DOI: 10.1021/acsomega.2c05690
- ❖ Aiman, A., Basir, S. F., & Islam, A. (2022). Interferons Horizon Therapeutics. In (Ed.), *Interferon - Immune Metabolism* [Working Title]. IntechOpen. DOI:10.5772/intechopen.104718
- ❖ Wani, S. A., Aiman, A., & Basir, S. F. (2021), "Role of

Vascular Inflammation in the induction of hypertension and therapeutic role of plant-derived terpenes", *World Journal of Pharmacy and Pharmaceutical Sciences*, Volume 10, Issue 9, 1910-1935. Impact factor-7.632

[DOI:10.20959/wjpps20219-19992](https://doi.org/10.20959/wjpps20219-19992)

- ❖ "Isolation and Clone verification of recombinant IRF-1 and IRF-2 plasmids in *E. Coli*" under the supervision of **Prof. P.C. Rath** at **JNU, New Delhi**.

TEACHING ASSISTANTSHIP

- Department of Biosciences, Institute of Management Studies (IMS), Ghaziabad.
- Meerabai Institute of Polytechnic, Maharani Bagh, **Delhi**.
- Acharya Narendra Dev College, University of Delhi, **New Delhi**.
- Chaudhary Charan Singh University, Ramgarhi, **Meerut**.