

Education

- **Post-Doctorate: Fulbright Visiting Scholar Program** (2021-2022), Department of Microbiology and Molecular Genetics, University of California Davis, United States.
- **Doctor of Philosophy/M.Phil leading to PhD: Biotechnology** (February 2015), National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad, Pakistan.
- **Master of Science: Zoology** (2007), Department of Zoology & Fisheries, University of Agriculture, Faisalabad.
- **Bachelor of Science: Zoology, Botany, Chemistry** (2005), University of Punjab, Lahore, Pakistan.

Personal Statement

I am working as Assistant Professor and Head of the Department of Biotechnology at Women University Mardan, Pakistan Since 2017. My work centers on environmental bioremediation, clean and green energy, and bioactive compounds such as probiotics and antibiotic-producing bacteria. In 2022–2023, I completed a **Fulbright Postdoctoral Fellowship at UC Davis, USA**, which strengthened my expertise in environmental biotechnology and reinforced the value of global collaboration.

At WUM, I have served both as Head of Department and Director ORIC, promoting research growth, innovation, and industry-academia partnerships. I have organized national and international conferences focused on the UN SDGs, fostering dialogue among researchers, policymakers, and industry. My collaborations with **NARC, NIBGE, UC Davis, and Chinese universities** have advanced joint projects, student exchanges, and technology transfer.

Looking forward, my goal is to develop biotechnological solutions for pollution control, sustainable energy, and human health, while mentoring young scientists, promoting women in STEM, and advancing collaborative science for a greener planet. ***I am open to collaborate on broader forum to contribute to Green and Clean Planet!***

Publications

Book Chapters:

- Aribah, Nadia Sharif, Muhammad Faheem Siddiqui, Hina Jabeen, Sanjay Gairola and Zainul Abideen. 2026. Recent Developments in Strigolactone–Heavy-metal Research in Plants, In: Strigolactone in Plants. First Edition, CABI United States America
- Rasool, A., Jabeen, H., Israr, M., Shah, M., & Akbar, F. (2022). Transcriptome, Proteome and Metabolome Profiling for Abiotic Stress Tolerance in Maize and Barley. In *Omics Approach to Manage Abiotic Stress in Cereals* (pp. 495-512). Singapore: Springer Nature Singapore.
- Rasool, A., Akbar, F., Rehman, A., and Jabeen, H. (2020). Genetic Engineering of Rice for Resistance to Insect Pests. In "Rice Research for Quality Improvement: Genomics and Genetic Engineering: Volume 2: Nutrient Biofortification and Herbicide and Biotic Stress Resistance in Rice" (A. Roychoudhury, Ed.), pp. 129-148. Springer Singapore, Singapore.

Research/Review Articles

- Majeed, T., Shah, T.A., **Jabeen, H.** Mutwakel Dabiellil & Fatmah M. Alqahtani. (2026). **Heterologous expression and characterization of a thermostable *MprT* metalloprotease from thermophilic *Bacillus subtilis* BSP in dual host systems.** International Microbiology. <https://doi.org/10.1007/s10123-026-00850-z>
- Suleman, M., Khan, S.U., Jabeen, H., Madkhali, O. A., Bakkari, M.A., Alsalhi, A., Yassine, H. M., & Crovella, S. (2025). Immunoinformatic Based Designing of Immune Boosting and Nonallogenic Multi-epitope subunit Vaccine Against the Enterovirus D68. Current Gene Therapy, 25
- Muhammad, S., Nizami, M., Khan, M. T., Arbab, N., Mehmood, K., Jabeen, H., ... Fahad, S. (2024). **Driving Forces Behind Depleting Forest Resources and Environmental Degradation in Northern Temperate of Pakistan.** *Kurdish Studies*, 12(5), 1730–1737. <https://doi.org/10.53555/ks.v12i5.3534>.

- Shahzad, T., Rasheed, S. B., Hasan, Z., Yousaf, M., Rasool, A. ., Rehman, T. U., Javed, A., & **Jabeen, H.** (2024). **Assessment of Water Quality Degradation Due to Waste Dumping and its Impacts on Ichthyodiversity of River Swat.** *Pakistan Journal of Biochemistry and Biotechnology*, 5(2), 11-20. <https://doi.org/10.52700/pjbb.v5i2.251>
- **Jabeen, H.**, & Rasool, A. (2021). **Microbial remediation of triphenylmethane dyes contaminated wastewater: A review: Microbiobial remediation of TPMs.** *Pakistan Journal of Biochemistry and Biotechnology*, 2(1), 65-74.
- **Jabeen, H.**, & Rasool, A., Sadiq. R., (2021). **Production of quality compost from Pennywort plant wastes.** *Pakistan Journal of Biochemistry and Biotechnology*, 2 (2), 248-260.
- Ahmad, F., Ashraf, N., Yin-Da Chuan., **Jabeen, H.**, Anwar, Sr., A.Q., Wahla., Iqbal, S. Application of a novel bacteria BDAM for the bioremediation of bispyribac sodium in wheat vegetated soil. *Journal of Hazardous Materials*, July 2019, 374: 58-65 (IF: 10.588)
- Firdous, S., Iqbal, S., Anwar, S. and **Jabeen, H.** (2017), Identification and analysis of 5-enolpyruvylshikimate-3-phosphate synthase (EPSPS) gene from glyphosate-resistant *Ochrobactrum intermedium* Sq20. *Pest. Manag. Sci.* 2018 May;74(5):1184-1196 (IF: 4.845).
- **Jabeen, H.**, Iqbal, S., Ahmad, F., Afzal, M., Firdous, S., 2016. Enhanced remediation of chlorpyrifos by ryegrass (*Lolium multiflorum*) and a chlorpyrifos degrading bacterial endophyte *Mesorhizobium* sp. HN3. *International Journal of Phytoremediation*, 18 (2): 126-133 (IF: 3.212)
- **Jabeen, H.**, Iqbal, S., Anwar, S., Parales, R.E., 2015b. Optimization of profenofos degradation by a novel bacterial consortium PBAC using response surface methodology. *International Biodeterioration and Biodegradation*, 100: 89-97 (IF: 4.907)
- **Jabeen, H.**, Iqbal, S., Anwar, S. 2015a. Biodegradation of chlorpyrifos and 3, 5, 6-trichloro-2-pyridinol by a novel rhizobial strain *Mesorhizobium* sp. HN3. *Water and Environment Journal*, 29 (1): 151-160 (IF: 1.977)
- Shah, M., Kausar, S., Mian, J. A., **Jabeen, H.**, Ullah, N., Rasool, A., Akbar, F., Israr, M., Mehmood, S. A., Ahmad, S., Khan, M. A. A., Muhammad, S., Khan, W., Bibi, S., Sayaf, A. M., Usman, K., & Ahmed, D. (2022). Bioaccumulation of heavy metals in the tissues of *Schizothorax plagiostomus* at River Swat. *Brazilian Journal of Biology*. vol. 82, e243633.
- Ullah, I.; Afridi, S. G.; Khan, A. U.; Israr, M.; Ali, A.; Shams, S.; **Jabeen, H.**; Rasool, A.; Akbar, F.; Rahat, M. A.; Haris, M.; Khan, A.; Siraj, M.; Shah, M. PCR-RFLP Based genetic diversity of *Plasmodium vivax* genotypes in district Mardan, Pakistan. (2022). *Brazilian Journal of Biology* (IF: 1.36). Vol. 82 e241110
- Ullah, N., Said, A., Israr, M., Rasool, A., Akbar, F., Ahmad, S., Mehmood, S. A., **Jabeen, H.**, Islam, M., Muhammad, S., Noureenh, S., Habiba, U., Ahmed, D., Shah, M., Khan, M. A. A., & Siraj, M. (2022). Effect of different protein based feed on the growth of mahseer. *Brazilian Journal of Biology*. Vol. 82, e243670
- Luqman, L., Saeed, K., Muhammad, K., Ahmad, M. S., Akbar, F., Rasool, A., Israr, M., **Jabeen, H.**, Mehmood, S. A., Ahmed, S., Alam, A., Ullah, S., Saeed, N., Usman, K., Hussain, I., Abd El Halim, H. M., Khan, W., & Shah, M. (2022). Biodiversity of orb-web spiders (family: araneidae) of buner valley, Pakistan. *Brazilian Journal of Biology*. Vol. 82 e238339-e238339.
- Rahat, M. A., Israr, M., Hassan, I., Islam, M., Ali, A., Khan, M. I., Iqbal, M. S., **Jabeen, H.**, Rasool, A., Akbar, F., Khan, M. A. A., Ullah, N., Ali, R., Nasar, M., & Shah, M. (2022). Episode of Hepatitis C viral infection in the people of Swat, Pakistan. *Brazilian Journal of Biology*. Vol. 82 e243283
- Ullah, N., Ullah, I., Israr, M., Rasool, A., Akbar, F., Ahmad, M. S., Ahmad, S., Mehmood, S. A., **Jabeen, H.**, Saeed, K., Khan, W., Siraj, M., & Shah, M. (2022). Comparative brain analysis of wild and hatchery-reared Mahseer (*Tor putitora*). *Brazilian Journal of Biology*. Vol. 82 e231509.

TRAININGS/WORKSHOPS/Conferences: ORGANIZED

- International Conference on, **“The Future Reimagined: Innovation through Science, Social Science and Global Collaboration, (FutureCON-2026),** February 10-12th, 2026.
- **9th International Conference on “Sustainable Development Goals for a better Future.”** February 19-20th, 2025.
- Workshop on Response Surface Methodologies and Statistical Treatment of Research Data, December 18th, 2024.

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- One day seminar on ***Psycho-social Issues among students & coping strategies***
- ***6th International Conference; Scientific Outlook of Sustainable Development Goals (IC-SOSDG-2024)***, February, 2024.
- Chair Organizing Committee “Bootcamp of selected students for Women initiatives in Social Enterprise” (September 27th – October 1st)
- Chair Organizing Committee One day outreach session on “Women initiatives in Social Enterprise” in collaboration with UNDP and School of Leadership Foundation (September 7th, 2023)
- Chair Organizing Committee A seminar on “YOUTH-LED CHANGE-MAKING through Social Entrepreneurship” and “Change Making Competition”
- Chair Organizing Committee Awareness session on “Nationwide Awareness Road Show on Halal Industry” in Main Hall, Women University Mardan
- Chair Organizing Committee An Informational Session on “Fulbright Degree Program” by United States Education Foundation Pakistan (USEFP)
- Chair Organizing Committee A session on “Content Writing” by CATD
- Chair Organizing Committee Certificate distribution ceremony for Change-Making Competition
- Chair Organizing Committee Faculty training on “Youth Led Change making”
- Chair Organizing Committee Workshop on “Women Can Do” with Shaur Foundation Islamabad
- Chair Organizing Committee Workshop on “Role of Youth Key to Social Cohesion - Ulasi Taroon Workshops” SheCan- A project of USAID in collaboration with Centre for Social Education and Development
- Chair Organizing Committee KP Impact Challenge: 6-Days Entrepreneurship Training
- Chair Organizing Committee Collaboration with “Center for Awareness, Training and Development” (CATD)
- Chair Organizing Committee Pre-Summit Training Sessions For Executing Women Employability Summit (Wes) by CATD
- Chair Organizing Committee Celebration of Change making Week 2019 in collaboration with YES Network
- Chair Organizing Committee Women Employability Summit (WES) 20th -21st February, 2019

TRAININGS/WORKSHOPS: ATTENDED/PARTICIPATED

- International Conference on, “Biosciences Innovation” held on May 20th-22nd, 2025 at University of Swat.
- 8th International Conference on sustaining Livelihood: Climate Smart Agriculture for food security” to be held on July 3rd- 4th, 2024 at University of Poonch, Rawalakot.
- Invited in “ANSO-PAS MAAP Conference 2023 on “Pathogen transmission beyond borders: Understanding the complexities of cross-species infectious diseases” October 16-18th, 2023 in Pakistan Academy of Sciences Islamabad.
- Invited talk in 2nd International Conference on, Emerging Trends in Science and Technology, held on October 2-4, 2023 at Fatima Jinnah Women University Rawalpindi.
- One day congress on “2022 West Coast Bacterial Physiologists” California, USA on December 17th, 2022.
- Fulbright Enrichment Seminar at Cleveland, Ohio, USA. (December 7th-10th, 2022).
- “Roth Symposium: For the love of Salmonella” held on November 4th, 2022 at University of California Davis.
- Tiny Earth Partner Instructor (TEPI) Virtual Training organized from University of Wisconsin Madison, USA, June 16th -22nd, 2022.
- 3rd International Conference “Empowering the Nations through Sciences” (24th -25th April, 2019).
- 7th Annual Post-Doc Research Symposium held at University of California, Davis, USA (March 18th, 2022).
- A three days training workshop on “Capacity Building of Women In Leadership Roles in Academia” held at Shaheed Benazeer Bhutto Women University Peshawar, KPK, Pakistan on June 11th -13th , 2019. A U.S. Mission in Pakistan in Partnership with Pakistan-U.S. Alumni Network (PUAN)

- Pak-UK Educational Gateway organized by HEC and British Council at Marriott Hotel, Islamabad on 25-26th November, 2018
- 7th One Day Workshop on the “Significance of Bioinformatics in Life Sciences” Organized by the Department of Bioinformatics and Biosciences, Capital University of Science and Technology (CUST) Islamabad on May 07, 2016.
- 4th National Training Workshop on “Electron and Confocal Microscopy”, National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad, 4-14 December, 2012.
- Five days workshop on “LCMS, GCMS and AAS”, National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad, 25-29 April, 2011
- One day seminar on “Trends in Environmental Biotechnology”, National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad, 18th April, 2011.
- One day research workshop on “Survey Design & Sampling Techniques”, COMSATS Institute of Information & Technology, Lahore, Pakistan, 6th March, 2010.

Academic Review Portfolio: Editorial, Peer Review & Grant Evaluation

- **Peer Reviewer for High-Impact Journals**, including but not limited to:
 - *Journal of Hazardous Materials, Elsevier, Netherlands.*
 - *Pakistan Journal of Biotechnology and Biochemistry, Women University Multan*
 - *World Journal of Biology and Biotechnology, Lasbela University of Agriculture, Water and Marine Sciences (LUAWMS).*
 - *Jammu Kashmir Journal of Agriculture, Faculty of Agriculture, University of Poonch Rawalakot*
 - *Humanity Publications (Global Drug Design/other biological journals)*
- **Book Reviewer for *Bentham Science Publishers***, evaluating scientific content, structure, and relevance.
- **Member review Committee**, International *Conference on Environmental Sciences*, hosted by *IJSmart Publishing Company in collaboration with GC University Faisalabad (2025).*
- **Project Reviewer** for the **Fulbright Scholars Program**, assessing academic excellence, research potential, and leadership qualities. (reviewed about 30 applications)
- **Thesis Reviewer / External Examiner** for multiple universities.
- **Member, Advanced Studies and Research Board, (ASRB) WUM (to review research synopsis/proposals)**
- **Coordinator Ethical Research Board, WUM** to review ethical aspects, conflicts etc of research projects
- **Academic/Curriculum Review Services:**
 - Member Board of Studies, Department of Microbiology, Abdul Wali Khan University, Mardan
 - Member Board of Studies, “Department of Botany” and “Department of Human Nutrition and Dietetics” Women University Mardan.

Positions, Scientific Appointments, and Honors

- **Positions and Scientific Appointments**

2023-Present	Assistant Professor Biotechnology, Women University Mardan
2023-Present	Head Department of Biotechnology, Women University Mardan,
2017-2023	Assistant Professor/Chairperson, Microbiology, Women University Mardan
2017- 2024	Additional Director ORIC, Women University Mardan
2015-2016	Assistant Professor, International Islamic University, Islamabad (IIUI), Pakistan
2025 – Present	Patron, Society for Waste Management, WUM
2025 – Present	General Secretary, Society for International Collaborations Development, WUM
2024 – Present	Member, Pakistan Biological Safety Society (PBSA)
2023 – Present	Member, Fulbright Association, United States
2023 – Present	Member, Pak-USA Alumni Network (PUAN)
2025 – Present	Member, Advanced Studies and Research Board, (ASRB) WUM

Hina Jabeen (Ph.D.)

2017-2022	Member, Syndicate and Senate, WUM
2017-2021	Member, Scholarship Committee WUM
2023-Present	Member, Biotechnology, Curriculum Committee HED

➤ **Honors**

2022-2023	Fulbright Scholar Program for Post-Doctorate fellowship at UC Davis, USA
2011-2012	Pre-doctoral Fellowship at "Department of Microbiology, UC Davis, USA
2008-2015	Indigenous PhD Scholarship for M.Phil leading to PhD
2005-2007	M.Sc. Zoology, Merit Scholarship, University of Agriculture Faisalabad

Projects:

1. Submitted and short-listed: Establishment of Microbial fuel Cells System for the treatment of wastewater and generation of clean energy." Submitted to International Technology Transfer Program launched by **Directorate of Science and Technology** (2025)
2. Co-PI for **NRPU funded by HEC**, entitled "Molecular Evolution of Aedes Mosquitoes: Resistance Development and Its Impact on Dengue Vector Control" (2025-2027).
3. Co-PI for **SRGP funded by HEC** "Local sugar mill waste water treatment by small-scale constructed Wetland system." (Completed 2021-2023)

References:

1. **Dr. Rebecca E. Parales**, Professor of Microbiology and Molecular Genetics, College of Biological Science, University of California Davis, USA, Email: reparales@ucdavis.edu
2. **Dr. Samina Iqbal**, Deputy Chief Scientist, National Institute for Biotechnology and Genetic Engineering, (NIBGE) Faisalabad, Pakistan. Email: siqbal@nibge.org
3. **Prof. Dr. Razia Sultana**, Vice Chancellor, Women University Mardan. Email: vc@wumardan.edu.pk
4. **Prof. Dr. Ghazala Yasmeen**, Ex-Vice Chancellor, Women University Mardan, Email: vc@wus.edu.pk