

RASHID HUSSAIN

Phone: (+92) 343-718-1709 | Email: rashidbiotechnologist@gmail.com | LinkedIn: <https://www.linkedin.com/in/rashidhussainphd/>

PROFESSIONAL SUMMARY

Results-driven research professional with 5+ years of experience in higher education, research administration, and academic leadership. Proven expertise in research coordination, grant support, faculty development, and capacity-building workshops. Demonstrated ability to manage research databases, support proposal development, and facilitate university-industry linkages. Strong background in molecular genetics, bioinformatics, and research compliance with hands-on experience in ORIC operations. Skilled in event management, stakeholder engagement, and cross-functional coordination. Seeking to leverage research administration expertise and ORIC experience to drive innovation, entrepreneurship, and research commercialization.

EDUCATION

MS in Molecular Genetics

2020 – 2022

COMSATS University Islamabad, Pakistan | CGPA: 3.67/4.00

Thesis: "Association of Telomere Length in Metabolic Syndrome" — combined wet-lab molecular assays with statistical and meta-analytic modeling of large case-control datasets.

BS (Hons) Biotechnology

2015 – 2019

Institute of Molecular Biology and Biotechnology (IMBB), Bahauddin Zakariya University, Multan, Pakistan | CGPA: 3.06/4.00

B.Ed (1.5 Years)

2023

Allama Iqbal Open University, Islamabad, Pakistan

PROFESSIONAL EXPERIENCE

ADDITIONAL DUTY — OFFICE OF RESEARCH, INNOVATION & COMMERCIALIZATION (ORIC)

Shifa Tameer-e-Millat University (STMU), Islamabad, Pakistan

February 2025 – December 2025

- Supported research administration operations, including pre-award and post-award grant management for faculty research projects.
- Assisted in identifying and disseminating national and international funding opportunities to faculty members across departments.
- Coordinated grant proposal development, budget preparation, and compliance documentation for sponsored research applications.
- Facilitated university-industry collaboration by maintaining a database of industrial partners and research donors.
- Supported the organization of capacity-building workshops, seminars, and training programs for faculty research development.
- Contributed to ORIC event management, including research exhibitions and academic conferences.
- Supported intellectual property awareness initiatives and technology transfer activities within the university.
- Collaborated with departmental ORIC liaison members to promote research culture and entrepreneurship among students and faculty.
- Managed ORIC communication materials including newsletters, social media content, and website updates.

INSTRUCTOR — DEPARTMENT OF BIOSCIENCES

Shifa Tameer-e-Millat University (STMU), Islamabad, Pakistan

June 2022 – Present

- Teach and supervise undergraduate students in microbiology, molecular biology, and biotechnology courses, ensuring alignment with research competencies.
- Mentor undergraduate research projects, guiding experimental design, data analysis, and molecular biology techniques.
- Design and implement laboratory standard operating procedures (SOPs), improving biosafety compliance and workflow efficiency.
- Serve on multiple university committees, including the Research and Internship Student Committee, Admission Interview Board Panel, and Social Media & Website Committee.
- Coordinate interdepartmental courses as Adjunct Faculty, facilitating cross-disciplinary research collaboration.
- Design curriculum and prospectus materials for the Biosciences Department, aligning academic programs with industry research needs.
- Serve as DBS Admission In-Charge for Spring 2026 intake, managing recruitment and student placement processes.
- Organize departmental seminars, workshops, and training events, including the "Rare Genetic Diseases in Pakistan" seminar and the Cell Culture Techniques workshop.

RESEARCH ASSISTANT — BIOCHEMISTRY LABORATORY

Shifa College of Medicine, Islamabad, Pakistan

February 2021 – January 2022

- Conducted research on "Association of Telomere Length in Metabolic Syndrome" under the supervision of senior faculty.
- Performed molecular biology techniques including DNA/RNA extraction, gel electrophoresis, lipid profiling, and RT-PCR.
- Conducted systematic review and meta-analysis, contributing to a peer-reviewed publication in Clinica Chimica Acta.
- Maintained laboratory records, research databases, and compliance documentation.
- Assisted in budget tracking for research consumables and equipment maintenance.

TEACHER — SCIENCE DEPARTMENT

AIMS College, Lodhran, Pakistan

April 2019 – February 2020

Delivered biology instruction to secondary-level students with a focus on practical laboratory skills. Developed assessment strategies addressing individual student strengths and weaknesses.

TEACHER — BIOLOGY

Evening Coaching Jinnah Academy, Multan, Pakistan

August 2018 – December 2018

Taught biology to matriculation-level students, developing foundational scientific knowledge.

ORIC EVENTS & WORKSHOPS ORGANIZED

- **Digital Health Summit 4.0 | Park Road Campus, STMU, Islamabad**
Flagship ORIC event featuring industry showcase of AI-driven healthcare products, expert research presentations, keynotes on Generative AI & Medical Ethics, and panel discussions with networking opportunities. Coordinated speaker invitations, industry partner liaison, and event logistics.
- **One-Day Hands-On Workshop on "The Construction of Survey Questionnaire (Reliability and Validity)" | Park Road Campus, STMU, Islamabad**
Organized a capacity-building workshop focused on research methodology and statistical instrument validation. Managed participant registration, resource materials, and facilitator coordination.

- **One-Day Hands-On Workshop on Digital Skills: Generative AI & Prompt Engineering | Shifa College of Pharmaceutical Sciences, STMU, Islamabad**
Designed to equip participants with practical expertise in Generative AI and Prompt Engineering. Coordinated lab setup, participant enrollment, and hands-on session facilitation.
 - **One-Day Hands-On Workshop on Digital Skills | Park Road Campus, STMU, Islamabad**
Conducted a practical training session on digital competencies for faculty and students. Managed venue arrangements, technical support, and post-event feedback collection.
 - **Hands-On Workshop on "Designing Effective Test Papers: From Learning Outcomes to Quality Assessment" — Day 2 | Park Road Campus, STMU, Islamabad**
Faculty development workshop on assessment design and Bloom's taxonomy application. Supported session coordination, material distribution, and participant engagement.
 - **Seminar on "How Is Research Productivity Measured? Common Indicators and Limitations" | Park Road Campus, STMU, Islamabad**
Insightful seminar on research metrics, bibliometrics, and impact factor evaluation. Coordinated speaker invitation, venue logistics, and faculty attendance.
 - **Seminar on "Exponentially Growing Technologies and The Future of Our Planet" | Park Road Campus, STMU, Islamabad**
Inspiring seminar exploring emerging technologies and their planetary impact. Managed event promotion, audience engagement, and post-event reporting.
 - **Awareness Seminar on Islamic Banking & Shariah Compliance | Park Road Campus, STMU, Islamabad**
Hosted in collaboration with The Bank of Punjab. Facilitated industry-academia linkage on Shariah-compliant financial practices. Coordinated partner engagement and participant outreach.
 - **Training Session on "ISO 9001:2015 Quality Management Systems" | Park Road Campus, STMU, Islamabad**
Professional development training on quality assurance standards and institutional compliance. Organized resource persons, training materials, and certification coordination.
 - **Seminar on "HEC Funding Schemes and Proposal Evaluation Process" | Park Road Campus, STMU, Islamabad**
Critical faculty development session on HEC NRPU and other national research funding mechanisms. Coordinated HEC representative engagement, proposal review guidance, and Q&A facilitation. Directly supported faculty in understanding grant eligibility, evaluation criteria, and submission timelines.
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RESEARCH & PUBLICATIONS

PEER-REVIEWED JOURNAL ARTICLES

1. Rafiq, M., Liaquat, A., Javed, A., Shah, S. U., **Hussain, R.**, Akram, Z., & Khan, M. J. (2023). Association of leukocyte telomere attrition in coronary artery disease in Pakistani population: A case-control study with meta-analysis. *Clinica Chimica Acta*, 547. <https://doi.org/10.1016/j.cca.2023.117498>
2. Ahmed, S. I., Jamil, S., Ismatullah, H., **Hussain, R.**, Bibi, S., Khandaker, M. U., ... & Emran, T. B. (2023). A comprehensive perspective of traditional Arabic or Islamic medicinal plants as an adjuvant therapy against COVID-19. *Saudi Journal of Biological Sciences*, 30(3), 103628. <https://doi.org/10.1016/j.sjbs.2023.103628>

BOOK CHAPTERS

3. Naseer, F., Javed, S., **Hussain, R.**, Ain, Q., Syed, F., & Sadia, M. (2024). Standardization and quality control in microbiome analysis. In *The Gut Microbiome in Precision Medicine* (pp. 257-264). Academic Press. <https://doi.org/10.1016/B978-0-443-40483-2.00024-8>

4. **Hussain, R.,** Bibi, S., Akash, S., Yousafi, Q., Khan, M. S., & Chopra, H. (2025). The potential of ketogenic dietary therapy in the COVID-19 pandemic. In *Traditional Medicines and Natural Products as Preventive and Therapeutic Agents Against COVID-19* (pp. 79-104). Academic Press. <https://doi.org/10.1016/B978-0-443-18757-5.00014-1>
5. **Hussain, R.,** Bibi, S., Asad Ali, M., Akash, S., Mukerjee, N., Saleem, A., & Alexiou, A. (2024). Narcotics and Brain Health. In *Plant-Based Foods and Their Implications in Brain Health*. CRC Press. <https://doi.org/10.1201/9781003300502-17>
6. **Hussain, R.,** Bibi, S., Saleem, A., Bhattacharya, A., Syed, J., Mukerjee, N., & Alexiou, A. (2024). Neurobiology: An Overview. In *Plant-Based Foods and Their Implications in Brain Health*. CRC Press. <https://doi.org/10.1201/9781003300502-1>
7. Bibi, S., Javed, S., Alam Gill, F., Akash, S., Chopra, H., Saleem, A., & **Hussain, R.** (2024). Melatonin and the Brain. In *Plant-Based Foods and Their Implications in Brain Health*. CRC Press. <https://doi.org/10.1201/9781003300502-16>
8. Shah, M. F., Bibi, S., **Hussain, R.,** Jahan, F., Maitra, S., Alexiou, A., & Mehmood, A. (2024). Traditional herbal medicines against the SARS-CoV-2 induced inflammatory storm. In J.-T. Chen (Ed.), *Traditional Medicines and Natural Products as Preventive and Therapeutic Agents Against COVID-19*. CRC Press. <https://doi.org/10.1201/9781003452621-16>
9. Chopra, H., Bibi, S., **Hussain, R.,** Tamboli, Q. Y., & Zakde, K. R. (2024). Graphene-Based Nanocomposites for Drug Delivery Applications. In *Graphene-Based Nanomaterials* (pp. 153-167). CRC Press. <https://doi.org/10.1201/9781003300540-15>

PROFESSIONAL DEVELOPMENT & CERTIFICATIONS

- Next-Generation Sequencing (NGS) Data Analysis — Gene Janch Center, Swat, Pakistan (July 2025)
- Biological Weapons Convention (BWC) Training — UNODA (March 2025)
- CyberBiosecurity Training — GCUF & Health Security Partners, USA (November 2024)
- Risk Assessment (WHO Approach) — STMU & UVAS Lahore, PBSA & HSP USA (December 2023)
- Responsible Conduct in Genomic Sciences — PBSA, FIC & CHROME Biorisk (November–December 2023)
- Emerging Respiratory Viruses including COVID-19 — World Health Organization (2021)
- Python Programming Workshop — ORIC, STMU (February 2026)
- Integrative Bioinformatics: Python & Network Pharmacology — STMU (November 2025)
- Safe Laboratory Practices & Procedures — DBS, STMU (December 2025)
- Gentle Practices in Animal Handling — Shifa College of Pharmaceutical Sciences (February 2024)
- Interdepartmental Faculty Development Series — Shifa Tameer-e-Millat University (February 2023)

TECHNICAL SKILLS

Research & Data Management:

Data Collection & Analysis | Research Database Management | Systematic Review & Meta-Analysis | Grant Proposal Development | Budget Development Support | Progress Reporting | Research Compliance Monitoring

Bioinformatics & Computational:

Python | NCBI | UCSC Genome Browser | Ensembl | UniProt | PDB | Galaxy | BLAST | Primer Designing | SPSS | Jamovi | Comparative Meta-Analysis

Laboratory Techniques:

DNA/RNA Extraction | cDNA Synthesis | PCR & Agarose Gel Electrophoresis | RT-PCR | Restriction Fragment Length Polymorphism (RFLP) | Bacterial Cell Culturing | Cloning | Plant Tissue Culturing | Lipid Profiling

Administrative & Communication:

Content Writing | Curriculum Design | Event Planning | Social Media Management | Website Content Management | Stakeholder Communication | Workshop Organization

ACADEMIC LEADERSHIP & EVENT MANAGEMENT

- Supervised departmental seminar on "Rare Genetic Diseases in Pakistan" (February 2026)
- Organized Blood Donation Camp in collaboration with Medicos Aid Society and Jamila Sultana Foundation (November 2025)
- Led student participation in World AMR Awareness Week Hike organized by the National Institute of Health (November 2025)
- Organized technical session on "Food Safety & Public Health" in collaboration with NIH — Institute of Nutrition & Health (October 2025)
- Organized Training Workshop on Cell Culture Techniques at DBS, STMU (September 2025)
- Organized Fall 2025 Orientation Ceremony for Department of Biosciences (September 2025)
- Organized Student Training Workshop on First Aid Techniques with Rescue 1122 (May 2024)
- Participated in 13th International Public Health Conference, Health Services Academy, Islamabad (December 2023)
- Participated in International Symposium on Emerging Frontiers in Bioinformatics (February 2026)
- Participated in 23rd Annual Conference on Medical Microbiology & Infectious Diseases Society of Pakistan (February 2026)

PROFESSIONAL MEMBERSHIPS

- Lifetime Member, Pakistan Biological Safety Association (PBSA) — Since December 2023
- Member, Zakariyan Federation of Biotechnology, BZU Multan — Since April 2016

PROFESSIONAL EXPERIENCE

1. **Prof. Dr. Mustafeez Mujtaba Babar**

Director, ORIC, RIPHAH International University Islamabad, Pakistan

Email: mustafeez.mujtaba@riphah.edu.pk | **Cell:** +92-334-0724000

2. **Dr. Muhammad Jawad Khan**

Tenured Professor, Department of Biosciences, COMSATS University Islamabad, Pakistan

Email: jawadkhan@comsats.edu.pk | **Cell:** +92-333-5296369

3. **Dr. Afrose Liaquat**

Ex-Associate Professor, Shifa College of Medicine, Shifa Tameer-e-Millat University, Islamabad, Pakistan

Email: dr.afroseliaquat@gmail.com