

PERSONAL INFORMATION



Hammad Riaz



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Sex M | Date of birth 17/06/2001 | Nationality Pakistani

RESEARCH EXPERIENCE

September-February 2023

Research Intern

Biomedical engineering lab

Arduino-based microcontroller switch to convert mat heater for isothermal amplification of DNA/RNA.

- Portable nucleic acid amplification device
- An Arduino controlling temperature via a temperature sensor in mat heater
- Used for Molecular detection of pathogenic nucleic acids from patient samples

Bachelor's Thesis

Biomedical engineering lab

Study on the Stability and Shelf-life of Agarose Gel for Electrophoresis

- Ready to use gel Agarose gel for electrophoresis
- Shelf-life enhanced up to 3 months for electrophoresis
- Without any difficulty in bands visibility
- For Industrial Purposes

September-February 2022

Researcher

Microbiology Laboratory

Aspergillus niger-resistant Zanthoxylum armatum-synthesized AgNPs coated Douglas wood

- Furniture wood coated with silver nanoparticles biologically synthesized by *Zanthoxylum-armatum*
- To check resistivity of wood against *Aspergillus niger*
- To improve mechanical properties and durability of wood
- To prevents the growth of *Aspergillus niger*

April-August 2021

Internee

National Engineering and Scientific Commission (NESCOM), Medical Complex, Islamabad

- Work as internee in the Department of Pathology and Microbiology
- Expertise in Blood sampling, Medical laboratory testing □
- Gram straining techniques, culturing and enumerating bacteria
- Expertise in biochemical tests, catalase, oxidase, Indole.

EDUCATION AND TRAINING

February 2019-January 2023

BS Biology

CGPA: 3.66

International Islamic University Islamabad

Thesis: *Study on the Stability and Shelf-life of Agarose Gel for Electrophoresis*

July 2019-September 2019

English Language Course

Grade: B+

International Islamic University Islamabad

Feb 2025-Jan2027

MS Molecular Genetics

COMSATS University, Islamabad

Aug 2022-Aug 2024

Secondary School Teacher
Real Science School, Abbottabad

Aug 2024- March 2025

Future Vision Model School Tarnol, Islamabad
Biology, Chemistry, Science Teacher

PERSONAL SKILLS

Mother tongue(s)	Urdu				
Other language(s)	ENGLISH				
	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
	C2	C2	C2	C2	C2

ADDITIONAL INFORMATION

Communication skills	☐	Excellent in English Reading, Writing and Speaking
Management Skills	☐	Successfully led and managed projects as a Project Manager at Bio-Beacon Society IIUI.
	☐	Demonstrated proficiency in project planning, execution, and completion.
	☐	Served as a Human Resource Manager at Pakistan Ideological Civilization, overseeing recruitment, training, and employee relations.
	☐	Developed and implemented HR policies and procedures to enhance organizational efficiency.
Leadership	☐	Led teams effectively, providing direction and motivation for goal achievement.
	☐	Fostered a collaborative and inclusive work environment to maximize team productivity
Communication skills	☐	As an Ambassador at UET Tribune, honed strong communication skills in representing and promoting organizational objectives.
	☐	Facilitated effective communication between team members, stakeholders, and external partners.
Problem solving	☐	Demonstrated adept problem-solving skills in resolving issues and challenges encountered during project implementation.
	☐	Implemented solutions to enhance operational efficiency and overcome obstacles.
Computer skills	☐	Proficient in using Microsoft Word, Excel, PowerPoint, and Outlook for document creation, data analysis, presentations, and email communication
	☐	Skilled in utilizing EndnoteX9 for reference management and citation within academic and professional documents
Research Skills	☐	Good command of analytical and Research work in Biosciences laboratory
	☐	Molecular field: DNA/RNA extraction, blood sampling, PCR machine, Gel electrophoresis, Laser-cutting edge machine
	☐	Microbiology: gram staining, sterilization, culturing and enumerating bacteria
Scientific writing	☐	Authored peer-reviewed research articles published in reputable journals, showcasing the ability to communicate complex scientific concepts effectively.
	☐	Demonstrated the ability to adhere to publication standards and contribute to the dissemination of scientific knowledge.

Publications	• Riaz, H., Uzair, M., Arshad, M., Hamza, A., Bukhari, N., Azam, F., & Bashir, S. (2023). Navigated Transcranial Magnetic Stimulation (nTMS) based Preoperative Planning for Brain Tumor Treatment. CNS & Neurological Disorders Drug Targets. (IF 3.271) • Khan, H., Uzair, M., & Riaz, H. Bakhtawar, Khan and Muhammad Imran Shabbir. Update on Recent Advancement in Autism Spectrum Disorder Treatment Strategies. IJCMCR. 2023; 26 (4): 003, 14. (IF 2.4) • Gene Editing Approaches for Amyotrophic Lateral Sclerosis: Harnessing CRISPR/Cas-9 in Mouse Models at 2nd International Symposium on “Innovation & Technology Shaping the Future of Neuroscience” (ITSFN’23), organized by Biologia360® (2-3 August 2023).
Conference Abstract	• nTMS-based Preoperative Planning in Brain Tumor Patients at 1st International Symposium on “Innovation & Technology Shaping the Future of Neuroscience” (ITSFN’22), organized by Biologia360® (2-3 August 2022). • First International Symposium on “Innovation & Technology Shaping the Future of Neuroscience” (ITSFN’23), organized by Biologia360® (2-3 August 2022)
Conference and Seminars	• 2nd International Symposium on “Innovation & Technology Shaping the Future of Neuroscience” (ITSFN’23), organized by Biologia360® (2-3 August 2023) • Hands-on Training Workshop on Microbiology (2 –days) by Biologia360® (20-21 November 2021) • Bio-entrepreneurship Conference, Department of Biological Sciences, IIUI (March 30th, 2020)
References	• Dr. Muhammad Arshad, Associate Professor, Department of Biological Sciences, International Islamic University Islamabad <i>E-mail: m.arshad@iiu.edu.pk</i> • Dr. Imran Shabbir, Assistant Professor, Department of Biological Sciences, International Islamic University Islamabad <i>E-mail: Imran.shabbir@iiu.edu.pk</i>