



Palwasha Khan

Date of birth: 15/04/1997

Place of birth: Quetta, Pakistan

Nationality: Pakistani

Gender: Female

CONTACT

- Mohalla Kili Sheikhan Arbab Karam
Khan Road, Quetta
87300 Quetta, Pakistan **(Home)**
- palwashabarech474@gmail.com
- (+92) 03048269699
- 03048269699 **(Whatsapp)**

ABOUT ME

A motivated graduate with a Mphil in Microbiology, possessing strong laboratory and research skills in microbial analysis and molecular technique.

EDUCATION AND TRAINING

Mphil in Microbiology -1st Division University of Balochistan

11/10/2022 – 09/08/2025 Quetta, Pakistan

Relevant Coursework: Completed coursework in Microbiology, Vaccinology, Molecular Biology, Immunology, Virology, Cell Biology, and Microbiology techniques.

Website <http://www.uob.edu.pk>

Bachelor of Sciences in Microbiology -1st Division Sardar Bahadur Khan Women's University, Quetta

12/06/2016 – 09/08/2020 Quetta, Pakistan

Relevant Coursework: Completed coursework in Microbiology, Molecular Biology, Immunology, Genetics, Biochemistry, Virology, Bioinformatics, Cell Biology, and Microbiology laboratory techniques.

Website <https://www.sbkwu.edu.pk/>

WORK EXPERIENCE

Sardar Bahadur Khan Women's University, Quetta Quetta, Pakistan

University literature lecturer

03/02/2023 – 03/12/2023

- Lectured undergraduate courses in the Department of Microbiology, including Bacterial Genetics, Epidemiology, Public Health & Bioethics, Ecology and Ecosystems, and Parasitology & Helminthology.
- Conducted laboratory demonstrations and practical sessions ensuring biosafety and technical accuracy.
- Mentored students in scientific skills, data interpretation, and ethical research practices.
- Evaluated student performance and contributed to academic quality assurance processes

Association For Biorisk Management Quetta, Pakistan

Master Trainer

- Professional training in biosafety, biosecurity, laboratory risk management, emergency preparedness, genome data protection, and cyber-biosecurity.
- Prepared training materials and conducted interactive sessions to enhance regulatory compliance, incident reporting, and inspection readiness.
- Built capacity of laboratory personnel in risk assessment, safe procedures, and governance.
- Conducted biorisk management and cyberbiosecurity assessments, including gap analysis and recommendations.
- Promoted a safety culture, responsibility, and continuous improvement of laboratory systems.

Provisional Public Health Laboratory COVID-19 Quetta, Pakistan

Microbiologist

- Worked as a Lab Technologist in clinical chemistry, microbiology, and molecular diagnostics.
- Conducted routine testing and emergency response, specializing in pathogen identification and antimicrobial susceptibility testing.
- Led the design and setup of a high-throughput COVID-19 PCR lab, including equipment validation, workflow optimization, and SOP development in a BSL-2 environment.
- Proficient in instrumentation maintenance, quality assurance, and compliance with ISO and CAP standards.

She's Beyond Quetta, Pakistan

Secretary general

08/09/2024 – Current

Serving as General Secretary of She's Beyond, a youth-led initiative promoting women's empowerment and leadership.

PUBLICATIONS AND RESEARCH PROJECTS

Publications

- Overview of Biofermenter in Vaccine production and various processes image Palwasha Khan, Maina Akbar, Muhammad Naeem, Rehana Noor VSOHJ 2024, Vol. 3(Issue 2); 2025 01-05.
- Idrees, M., Samad, A., Jan, S. U., Naeem, M., Khan, A., & Khan, P. (2021). Poxviruses and Lumpy Skin Disease Virus Vaccine. Pak-Euro Journal of Medical and Life Sciences, 4(Special Is), S196-S204.
- Khan S, Khan M, Khan P, Ali A and Muzaffar HA, 2025. Biosecurity risks associated with emerging laboratory technologies. In: Farooqi SH, Kholik K and Zaman MA (eds), One Health Horizons: Integrating Biodiversity, Biosecurity, and Sustainable Practices. Unique Scientific Publishers, Faisalabad, Pakistan, pp: 170-175. <https://doi.org/10.47278/book.HH/2025.122>

Research Projects

- Isolation and PCR Based Identification of Salmonella typhimurium from Drinking water Quetta, Balochistan.
- In Process Control and Comparative Analysis of High Biomass Production of Pasteurella multocida Using Biofermenter for Vaccine Production

CERTIFICATIONS, INTERNSHIPS AND WORKSHOPS

Are given below:

- Cybersecurity – Google (2026)
- Cyberbiosecurity - International Federation of Biosafety Associations (2026)
- Biorisk Management – International Federation of Biosafety Associations (2025)
- Cyberbiosecurity Assessment Tool for Laboratories – Bangkok, Thailand (2025)
- Laboratory Biosafety & Biosecurity Equipment Operation, Maintenance & Troubleshooting (2025)
- Work Smarter with Microsoft Excel – Microsoft (2025)
- AI for Energy and Biomedical Applications – University of Michigan (2025)
- Introduction to the Biology of Cancer – Johns Hopkins University (2023)
- Infectious Disease Transmission Models for Decision-Makers – Johns Hopkins University (2023)

Internships

- One-month Internship in Structural Bioinformatics & Sequence Analysis – BioCode Innovators (2026)

Workshops and Conferences

- Primer Designing Workshop (2025)
- Bioinformatics Workshop – BioCode Innovators (2025)
- Cyberbiosecurity Training Workshop (2024)
- Safe & Secure Shipping of Infectious Substances – International Air Transport Association (2024)
- 17th APBA Annual Biorisk Conference & BRAP Convention – Philippines (2024)

LEADERSHIP & ACTIVITIES

Are given below:

- **Team Leadership:** Led teams in community service projects — as General Secretary of She's Beyond, promoted collaboration and women's empowerment.
- **Professional Development and Public Education:** Organized study circles focusing on women's rights to enhance awareness and knowledge.
- **Sustainable Environment Projects:** Initiated and implemented activities addressing plantation, water pollution management, and plastic control to promote environmental sustainability.
- **Campus Ambassador:** Remained an ambassador for advocating child rights in a two months project by Global UGRAD.

Technical Skills

- Molecular Biology: Genome extraction, PCR, gel electrophoresis, blotting, vector designing, gene cloning
- Clinical Microbiology: Bioassays, culturing, microbial identification
- Cell and tissue culturing
- Contamination control strategies
- Cleanroom Good Manufacturing Practices (GMP)
- Equipment maintenance
- SOP development
- Method validation
- Quality assurance and quality control (QA/QC)
- Risk management
- Documentation

- Environmental monitoring
- Biosafetyand chemical safety

LANGUAGE SKILLS

MOTHER TONGUE(S):Pashto

Other language(s):

English

Listening B2

Spoken production B2

Reading B2

Spoken interaction B2

Writing B2

Urdu

Listening A1

Spoken production A1

Reading A1

Spoken interaction A1

Writing A1

Levels:A1 and A2:Basicuser;B1 and B2: Independent user; C1 and C2: Proficient user