



Curriculum Vita

Muhammad Ali, PhD

Associate professor, Department of Biotechnology, Quaid-i-Azam University Islamabad

Member, Pakistan Academy of Sciences (PAS)

Co-chapter head, Pakistan Biological Safety Association (PBSA-ICT)

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Research Interest:

As group leader in infectious diseases and molecular pathology, I have developed BSL-II Laboratory for detection and characterization of emerging pathogens. In addition, I am interested in developing deeper understanding of medicinal biotechnology and molecular systematics in dealing with different aspects of infectious diseases; with specific focus on multi-disciplinary and/or interdisciplinary approaches.

Google Scholar profile: https://scholar.google.com/citations?user=rWvIH_gAAAAJ&hl=en

Position held:

- **April 03, 2024 – to-date:** Associate Professor (tenured), Department of Biotechnology, Quaid-i-Azam University Islamabad.
- **July 6, 2015 – April 03, 2024:** Assistant Professor, Department of Biotechnology, Quaid-i-Azam University Islamabad.
- **November 17, 2020 – to-date:** Group leader, Infectious Diseases and Molecular Pathology Laboratory (IDMPL), Quaid-i-Azam University Islamabad.
- **May 03, 2023 - to-date:** Deputy Director (Coordination), Directorate of Student Affairs, Quaid-i-Azam University Islamabad.

Education:

- **2012-2015: PhD in Molecular and Cell Biology/Biotechnology**, Laboratory of molecular virology and cellular pathology, Department of Sciences, *University Roma Tre*, Rome, Italy.
- **2009-2011: M. Phil in Molecular Biology**, National Centre of Excellence in Molecular Biology (CEMB), *University of the Punjab*, Lahore, Pakistan; Percentage: 78.66% (CGPA: 3.43/4) (1st Division)
- **2003-2008: BS (Hons) Biotechnology**, Department of Biotechnology, *University of Malakand*, Pakistan. Percentage: 76.57% (with distinction)

Brief profile/achievements

- **Competitive projects/grants won: 05 (National: 03, International: 02)**
- **Peer-reviewed articles published: >100**
- **Conference abstract book: 02**
- **Book chapter published: 01**
- **Google Scholar citations: >24,000**
- **Special issue published as editor: 01**
- **Patents: 01**
- **PhD students supervised: 01**
- **M. Phil students supervised: 25**

Selected Publications and patents

1. Ghafoor D, Zeb A, Ali SS, **Ali M**, Akbar F, Din Z, Rehman S, Suleman M, Khan W. Immunoinformatic based designing of potential immunogenic novel mRNA and peptide-based prophylactic vaccines against H5N1 and H7N9 avian influenza viruses. *Journal of Biomolecular Structure and Dynamics* 2024;42(7):3641-3658. **IF = 5.235**
2. Rahman S, Ullah S, Shinwari ZK, **Ali M**. Bats-associated beta-coronavirus detection and characterization: First report from Pakistan. *Infect Genet Evol.* 2023;108:105399. **IF = 4.393**
3. Hafeez A, Dangel WJ, Ostroff SM, Kiani AG, Glenn SD, Abbas J, Afzal MS, Afzal S, Ahmad S, Ahmed A, Ahmed H, Ali L, **Ali M**, Ali Z, Arsahd M, Ashraf T, Bhutta ZA, *et. al.*, The state of health in Pakistan and its provinces and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet Global Health.* 2023;11(2):e229-43. **IF = 38.927**
4. Rahman L, Mukhtar A, Ahmad S, Rahman L, **Ali M**, Saeed M, Shinwari ZK. Endophytic bacteria of *Fagonia indica* Burm. f revealed to harbour rich secondary antibacterial metabolites. *PLoS One.* 2022;17(12):e0277825. **IF = 3.752**
5. Waqar M, Wahid B, Idrees M, **Ali M**, Rehman Z. Seroprevalence of SARS-CoV-2 in Pakistan: an update on epidemiological trends. *Z Naturforsch C J Biosci.* 2021; 76(9-10):425-429. doi: 10.1515/znc-2020-0291. **IF = 1.885**
6. Waris A, Din M, Khalid A, **Ali M**. Evaluation of hematological parameters as an indicator of disease severity in Covid-19 patients: Pakistan's experience. *Journal of Clinical Laboratory Analysis* 2021;35:e23809. DOI: 10.1002/JCLA.23809. **IF = 3.124**
7. Tanveer F, Shehroz M, **Ali M**, Xie Y, Abbasi R, Shinwari ZK, Yasmin A. Genome sequence analysis and bioactivity profiling of marine-derived actinobacteria, *Brevibacterium luteolum*, and *Cellulosimicrobium funkei*. *Archives of Microbiology* 2021: 203:2491–2500 <https://doi.org/10.1007/s00203-021-02203-y>. **IF = 2.667**
8. Din M, Ali H, Khan M, Waris A, Ullah S, Kashif M, Rehman S, **Ali M**. Impact of COVID-19 on polio vaccination in Pakistan: a concise overview. *Rev Med Virol.* 2021, 31(4):e2190. **IF = 11.043**
9. Tanveer F, Khalil AT, **Ali M**, Shinwari ZK. Ethics, pandemic and environment; looking at the future of low middle income countries. *International journal for equity in health.* 2020;19(1):182. <https://doi.org/10.1186/s12939-020-01296-z> **IF = 4.666**
10. Percario ZA, **Ali M**, Mangino G, Affabris E. Nef, the shuttling molecular adaptor of HIV, influences the cytokine network. *Cytokine & Growth Factor Rev.* 2015, 26(2); 159–173. **IF = 17.66**

Patents

1. Synthesis of zinc oxide nanorods using *Momordica charantia* plant extracts. Patent No. 143473 on (Granted: May 24, 2021). Patent office, Government of Pakistan.

Conferences/Workshops/Trainings

- **Conferences/workshops/symposia organized as organizer/member of technical committee/focal person: 18**
- **Conferences/workshops/symposia/trainings attended: >50**
- **Number of countries visited for Conferences/workshops/symposia: 07** (including Italy, Jordan, Turkey, China, Malaysia, and Germany)
- **Number of invited talks/presentations in conferences/workshops: 08**
- **Oral/poster presentations: 11**

Fellowships and awards

- ✓ Highly-cited scientist award, Quaid-i-Azam University Islamabad (2022-23)
- ✓ Member, Pakistan Academy of Sciences, Islamabad (2020-onward)
- ✓ Interim Placement for Fresh PhDs grant- IPFP (2015-16) to work as assistant professor at the department of biotechnology, Quaid-i-Azam University Islamabad (funds provided by Higher Education Commission of Pakistan; HEC).

- ✓ International PhD fellowship (2012-2014) in Biomolecular and Cellular Biology from University Roma Tre, Rome, Italy.
- ✓ ImmunoTools Award 2012, for the project "HIV-Host interactions - Cell surface markers modulations by wild type and mutated HIV-1 Nef in primary human haematopoietic cells". ImmunoTools GmbH, Germany.

Member of board of studies

1. Member of board of studies of Biotechnology, Capital University of Science and Technology (2023-onward)
2. Member, Board of Studies, Department of Biotechnology, Quaid-i-Azam University Islamabad (2019-22)
3. Member, Graduate Research Committee, Department of Biotechnology and Genetic Engineering, Hazara University Mansehra (2021-23)
4. Member, Board of Studies, Department of Biotechnology, Mohi-ud-Din Islamic University, AJK (2022)
5. Member, Board of Studies, Department of Biotechnology, Capital University of Science and Technology (CUST), Islamabad (2023)

Membership in Scientific Societies

- ◆ Life member of Medical Microbiology & Infectious Diseases Society of Pakistan (MMIDSP)
- ◆ Life member of Pakistan Biological Safety Association (PBSA)