

Iftikhar Ahmad

Address: Waheed House, Zaryab Colony, Dalazak Road, Peshawar, Pakistan

Nationality: Pakistan

biochemchapa@yahoo.com  &  #: +923435534829

EDUCATIONAL QUALIFICATION:

PhD in Biochemistry (January 1, 2026).

King Abdulaziz University, Jeddah, Saudi Arabia. **CGPA: 4.92 / 5.00.**

MPhil. in Biochemistry (2019).

Islamia College University, Peshawar, Pakistan. **CGPA: 3.69 / 4.00**

M.Sc. in Biochemistry (2011).

Kohat University of Science and Technology (KUST), Kohat, Pakistan

SKILLS:

Cell Culture, Flow cytometry, qRT-PCR, Western Blotting, Genotoxicity (comet assay), Nano-formulation, 3-D Cell Culture, Fluorometry, Fluorescence Microscopy, Bioinformatics (Docking and MD simulation), Anti-microbial assay, HPLC, GC-MS, and LC-MS/MS.

TEACHING EXPERIENCE:

- i. Lecture at Fazaia Degree College, Peshawar, Pakistan. **(From 2015 to 2022).**
- ii. Lecturer at Army College System, Pakistan. **(From 2012 to 2015).**

SELECTED PUBLICATIONS:

- 1) **Ahmad, I.**, Ali, ME., Zughaibi, TA., Alhashmi, MH., Sohrab SS., Khedr A., MS, Kumer, A., Tabrez, S. Antiproliferative and apoptotic potential of Cassia Fistula. L. against breast cancer cells. (Submitted final revision as first author)
- 2) **Ahmad, I.**, Ahmad, S., Samad, M. A., Adam, A. M., Zughaibi, T. A., Alhosin, M., . . . Tabrez, S. (2025). Synergistic Inhibition of Colon Cancer Cell Proliferation via p53, Bax, and Bcl-2 Modulation by Curcumin and Plumbagin Combination. ACS Omega.
- 3) **Ahmad, I.**, Hoque, M., Alam, S. S. M., Zughaibi, T. A., & Tabrez, S. (2023). Curcumin and Plumbagin Synergistically Target the PI3K/Akt/mTOR Pathway: A Prospective Role in Cancer Treatment. International Journal of Molecular Sciences
- 4) Ahmad, S., **Ahmad, I.**, Anwar, Y., Mohammed, S., Maaqar, SM., Ali, HM., Suhail, M., Abujamel, T., Zughaibi, TA., Oves, M., Melaibari, AA., Ansari, MO., Tabrez, S. (2026). Green synthesis of alginate-encapsulated silver nanoparticles and its utilization as anticancer and antimicrobial therapeutics. Nanotechnology Reviews
- 5) Samad, MA., **Ahmad, I.**, Ahmad, S., Zughaibi, TA., Alhashmi, MH., Khedr, MS., Abbasi, A. Al., Wasi, S., Tabrez, S. (2025). Cynanchum acutum L. ethanolic fruit extract induces cell-cycle arrest and apoptosis in HepG2 human liver cancer cells via programmed cell death signaling pathways. Biocatalysis and Agricultural Biotechnology.
- 6) **Ahmad, I.**, Zughaibi, TA., Alhashmi, MH., Abujamel, T., Alhosin, M., Khan, MS., Kumer, A., Tabrez, S. (2005). Synergistic cytotoxicity of curcumin and plumbagin via ROS-mediated apoptosis and cell cycle arrest in cervical cancer cell lines. Result in Chemistry.
- 7) Nazam, N., **Ahmad, I.**, Jabir, N., Zughaibi, T., Agarwal, P., Alsaedi, A., Khan, M. S., Tabrez, S. (2025) Deciphering pharmacological targets of plumbagin in cisplatin resistance ovarian cancer model using in vitro and in silico approaches. Current pharmaceutical design.
- 8) Samad, MA., **Ahmad, I.**, Khan, MR., Suhail, M., Zughaibi, TA., Al-Abbasi, F., Alhosaini, K., Khan MS., Kumer, A., Tabrez, S. (2025). Breast Cancer: Molecular Pathogenesis and Targeted Therapy. MedComm.
- 9) Samad, MA., **Ahmad, I.**, Jabir, NR., Rehan, M., Zaidi, SK., Abbasi, FA., Tabrez, S. (2026) Role of long non-coding RNAs in therapeutic resistance and clinical applications in cancer. European Journal

of Medicinal Chemistry

- 10) **Ahmad, I.** and Tabrez, S., Exploring natural resources: Plumbagin as a potent anticancer agent." South African Journal of Botany.
- 11) **Ahmad, I.**, Ahmad, S., Ahmad, A., Zughabi, T. A., Alhosin, M., & Tabrez, S |. (2024). Curcumin, its derivatives, and their nanoformulations: Revolutionizing cancer treatment. Cell Biochemistry and Function.
- 12) Samad, MA., **Ahmad, I.**, Shakil, S., Zaidi, SK., Wasi, S., Abbasi, FA., Alhashmi, MH., Tabrez, S (2026) Circular RNAs: A Key Modulator of Established Cancer Hallmarks. Critical Reviews in Oncology / Hematology
- 13) **Ahmad, I.**, Suhail, M., Ahmad, A., Alhosin, M., & Tabrez, S. (2023). Interlinking of diabetes mellitus and cancer: An overview. Cell Biochemistry and Function
- 14) Samad, M., **Ahmad, I.**, Asghar, M. N., Suhail, M., Rehan, M.,Tabrez, S. MicroRNAs: From Bench to Bedside Applications as Breast Cancer Therapeutics. Seminar in oncology.
- 15) Samad, M. A., **Ahmad, I.**, Zughabi, T. A., Suhail, M., Zaidi, S. K., Al-Abbasi, F. A., & Tabrez, S. (2025). Nanotechnology-based drug delivery for breast cancer treatment: Current applications and future directions. European Journal of Medicinal Chemistry Reports.
- 16) Samad, M. A., **Ahmad, I.**, Hasan, A., Alhashmi, M. H., Ayub, A., Al-Abbasi, F. A., . . . Tabrez, S. (2025). STAT3 Signaling Pathway in Health and Disease. MedComm.
- 17) Samad, MA., **Ahmad, I.**, Suhail M., Al-Abbasi F., Tabrez, S.* (2025). Role of circular RNAs in regulating tumor microenvironment, epithelial mesenchymal transition, and resistance to cancer therapy. Critical Reviews in Oncology / Hematology.
- 18) Nazam, N., Jabir, N. R., **Ahmad, I.**, Alharthy, S. A., Khan, M. S., Ayub, R., & Tabrez, S. (2023). Phenolic Acids-Mediated Regulation of Molecular Targets in Ovarian Cancer: Current Understanding and Future Perspectives. Pharmaceuticals.

CONFERENCES ATTENDED:

- 1) Lung Cancer Updates Quaid-e-Azam University, Islamabad, 5th May 2017.
- 2) ASCO DIRECT Immuno-Oncology Quaid-e-Azam University, Islamabad, 19th October 2017.
- 3) Lung Cancer Academy Annual Course, Quaid-e-Azam University, Islamabad, 3rd January 2018.
- 4) Lung Cancer Academy Annual Course, Quaid-e-Azam University, Islamabad, 28th September 2018.
- 5) Principles and Techniques in Grossing of Oncology Surgical specimens, COMSATS University Islamabad, 21st January 2019.
- 6) KAIMRC-WR Stem Cell Course – Virtual Riyadh, 3rd February 2024.

WORKSHOPS ATTENDED:

- 1) Attended the virtual workshop entitled “Making Labs Effective with Remote Learning.”
- 2) Attended the online course entitled “Fundamentals of Clinical Research” organized by the Students’ Research Unit, College of Medicine, Al Imam Mohammad bin Saud Islamic University ty held on 18th – 26th July 2023.
- 3) Participated in the professional development activity entitled “Oncology Pharmacy Master class” conducted at Marriott Hotel, Riyadh, on 11th -12th October 2023 by Global Health Activities Academy.
- 4) Participated in the professional development activity entitled “2nd Saudi Oncology Haematology Pharmacy Symposium” conducted at Marriott Hotel, Riyadh, by Global Health Activities Academy, 11th December 2023.
- 5) Attended the workshop entitled “Course and test blueprinting workshop” organized by the Education Centre, Al-Maarefa University, on 30th January 2024.

AWARDS:

- 1) I got the Best Teacher Award at **Army College Cherat (APS&Cs)**, Pakistan.
- 2) First Position was clinched by the students under my supervision, where they participated in a science exhibition at **Army College Cherat (APS&Cs)**, Pakistan.
- 3) First Position was clinched by the students under my supervision, where they participated in a science exhibition at **Fazaia Degree College (PAF)**, Pakistan.
- 4) First Letter of Appreciation from the Principal of **Fazaia Degree College (PAF)**.

5) Second Letter of Appreciation from the Principal of **Fazaia Degree College (PAF)**.

MISCELLANEOUS EXPERIENCES AND POTENTIALS:

- 1) Successfully organized seminars to present and evaluate the progress of ongoing research projects.
- 2) Proven leadership skills with the ability to lead and collaborate effectively within diverse research teams.
- 3) Strong emotional resilience; able to manage stress calmly and professionally without affecting the work environment.
- 4) Demonstrated ability in creative thinking and scientific writing for research proposals, reports, and publications.
- 5) Skilled in estimating project costs and managing laboratory budgets.
- 6) Proficient in organizing and analyzing data into readable formats and statistical summaries for clear communication of research findings.
- 7) Served as an active member of the Discipline Committee, ensuring adherence to institutional rules and decorum.
- 8) Contributed to academic planning as a member of the Progress Section, involved in exam organization and timetable scheduling.
- 9) Over 8 years of experience as a Lab In-Charge, overseeing lab operations, equipment maintenance, and student supervision in various academic institutions

COMPUTER LITERACY:

MS Office, BioRender, Mendeley, EndNote, ChemDraw, GraphPad (many more).

LIST OF REFERENCES:

1	Professor Dr. Mahmoud Al-Hussein (PI)	Department of Biochemistry, King Abdulaziz University, Saudi Arabia malhaseen@kau.edu.sa +966597959354
2	Professor Dr. Shams Tabrez (Co-PI)	King Fahd Medical and Research Center King Abdulaziz University, Saudi Arabia stabrez@kau.edu.sa +966503970356
3	Professor Dr. Ehab Mostafa Mohammed (Academic Teacher)	Department of Biochemistry, King Abdulaziz University, Saudi Arabia emali@kau.edu.sa +966542723865