

MUHAMMAD AKRAM

*Research Officer
DNA Core Facility
Centre for Applied Molecular Biology
University of the Punjab, Lahore.
E.Mail: akram.camb@pu.edu.pk, m.akram.pu@gmail.com
Cell No. +923004974799*



POSTAL ADDRESS

Office: Centre for Applied Molecular Biology, 87-West Canal Bank, Thokar Niaz Baig, Lahore- 53700, Pakistan

EDUCATION

PhD Molecular Biology – Continue
National Centre of Excellence in Molecular Biology
University of the Punjab Lahore

M.Phil in Molecular Biology and Forensic Science
University of the Punjab Lahore

M.Sc. Chemistry (Specialization Organic Chemistry)
University of the Punjab Lahore

AREAS OF INTEREST

- Gene cloning and expression studies, Fermentation, Protein purification, their characterization and activity studies *in-vitro* and *in-vivo*.
- Molecular Genetics

SCIENTIFIC AND RESEARCH EXPERIENCE

I have joined Centre for Applied Molecular Biology as Research Officer in 2008. Group wise scientific and research activities are

➤ *DNA Core Facility (2014 to date)*

Working as team member in Asthma Genetics Research Group on “**genetic association of asthma in Pakistani Population**”

➤ *Biopharmaceutical Lab (2008-2014)*

As a team member worked on different commercial projects like project

- Production of recombinant interferon, consensus interferon, insulin, rhG-CSF and Interleukin-6
- PEGylation of human recombinant proteins and purification of mono PEGylated proteins at lab scale.
- Characterization of Purified recombinant proteins

WORKSHOPS, TRAININGS AND CONFERENCES

- Organized a one day seminar on “Biosafety Training for Young Researchers” jointly conducted by American Society of Microbiology International Student Chapter, University of the Punjab and Centre for Applied Molecular Biology (CAMB), University of the Punjab on November 29, 2018.
- Participated in an international conference on “ Trends and Prospects in Molecular Biosciences ” organized by Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore, Pakistan on October 23-24, 2017.
- Participated in a conference on “ Emerging trends in Bioinformatics and Biosciences” organized by Department of Bioinformatics, Hazara University, Mansehra, KP, Pakistan on July 20-22, 2017.
- Participated in a seminar on “Advances in PCR Technology” jointly organized by CAMB and Chemical House Lahore Pakistan on April 5, 2017.
- Organized an “Awareness seminar on Lungs and Bronchial Diseases” conducted by Centre for Applied Molecular Biology (CAMB), University of the Punjab in collaboration with Pakistan Chest Society and Gull’s Association on November 17, 2016.
- Participated in a conference on “DNA Day & NAYS Emerging Ideas Conference” organized by National Academy of Young Scientists (NAYS) and Centre of Excellence in Molecular Biology with sponsorship of The Emerging Nations Science Foundation (ENSF) on 25th April 2013.

PUBLICATIONS

- M.U. Ghani, M.F. Sabar, M. Shahid, **M. Akram**, B. Anwar, M.B. Anwar “**SNP variants of IL-27 gene as genomic predictors against effectiveness of Vitamin-D therapy in COPD patients**” CHEST Journal, (2021) Volume 160, Issue 4, Supplementary Page A1453, DOI: <https://doi.org/10.1016/j.chest.2021.07.1329> Impact Factor 8.308
- Muhammad Usman Ghani, Muhammad Farooq Sabar, **Muhammad Akram** “**Smart Approach for Cost Effective Genotyping of Single Nucleotide Polymorphism**” Kuwait Journal of Science (2021). <https://doi.org/10.48129/kjs.v48i2.8957>.
- Nadeem Ahmed, Bakht Afroze, Rabia Abbas, Mohsin Ahmed Khan, **Muhammad Akram**, Saad Tahir, Shehman Bakht, Ayesha Munir, Ahmad Ali Shahid, “**Method for efficient soluble expression and**

purification of recombinant human interleukin-15” Protein Expression and Purification (2020).
<https://doi.org/10.1016/j.pep.2020.105746>

- **M. Akram “Association of TGF-β1 gene polymorphism with asthma in Pakistani population”** CHEST Journal, June 2020 Volume 157, Issue 6, Supplement, Page A212, DOI: <https://doi.org/10.1016/j.chest.2020.05.238> Impact Factor 8.308
- Fakiha Aslam, Nadeem Ahmed, Mohsin Ahmad Khan, Farhana Azam, **Muhammad Akram**, Saad Tahir, and Ahmad Usman Zafar “ **Evaluating the ion exchange chromatography for matrix-assisted PEGylation and purification of consensus interferon**” Biotechnol Appl Biochem (2019).
<https://doi.org/10.1002/bab.1832>
- Muhammad U. Ghani, Muhammad F. Sabar, Iqbal Bano, Mariam Shahid, **Muhammad Akram** “**RAD 50 gene is associated with asthma susceptibility in Pakistani children**” (Accepted for poster presentation World Allergy Congress to be held in Lyon, France on December 12-14, 2019. Impact Factor 3.684)
- Muhammad U. Ghani, Muhammad F. Sabar, Iqbal Bano, Mariam Shahid, **Muhammad Akram**, Ifrah Khalid, Alishba Maryam, Muhammad U. Khan. “**Evaluation of ADAM33 gene’s single nucleotide polymorphism variants against asthma and the unique pattern of inheritance in Northern and Central Punjab, Pakistan**” Saudi Med J 2019; Vol. 40 (8). DOI: 10.15537/smj.2019.8.24411
- M.U. Ghani, M.F. Sabar, I. Bano Dr., M. Shahid, **M. Akram**, I. Khalid, A. Maryam, M.U. Khan “**Inheritance pattern of rs2280089, rs2280090, rs2280091 snp variants in Punjabi population and association with asthma disease**” (CHEST Journal, April 2019 Volume 155, Issue 4, Supplement, Page 168A Impact Factor 7.6)
- Rukhsana Perveen, Ahmad Ali Shahid, Muhammad Shafique, Muhammad Shehzad, **Muhammad Akram**, “**Kashmiris phylogenetic depictions through uniparental and biparental genetic markers**” , International Journal of Legal Medicine (2019) 134:1311-1312, <https://doi.org/10.1007/s00414-019-02082-5>,.
- Muhammad Farooq Sabar, **Muhammad Akram**, Farheena Iqbal Awan, Muhammad Usman Ghani, Mariam Shahid, Zafar Iqbal, Samra Kousar, Muhammad Idrees: **Awareness of Asthma Genetics in Pakistan: A Review with Some Recommendations** Adv. life sci., vol. 6, no. 1, pp. 1-10, November 2018
- Muhammad Farooq Sabar, Mariam Shahid , Iqbal Bano, Muhammad Usman Ghani, **Muhammad Akram**, Farheena Iqbal, Samra Kousar, Zafar Iqbal, Saba Altaf & Tayyab Husnain , “**rs12603332 is associated with male asthma patients specifically in urban areas of Lahore, Pakistan**”, Journal of Asthma (2017), 54:9, 887-892 <http://dx.doi.org/10.1080/02770903.2016.1277539>
- Muhammad Usman Ghani, Muhammad Farooq Sabar, Mariam Shahid, Farheena Iqbal Awan, **Muhammad Akram**, “**A report on asthma genetics studies in Pakistani population**”, Advancements in Life Sciences (2017), Feb;4(2):33-38. ISSN 2310-5380.

- Muhammad Farooq Sabar, Muhammad Usman Ghani, Mariam Shahid, Aleena Sumrin, Amjad Ali, **Muhammad Akram**, Muhammad Akram Tariq & Iqbal Bano: “**Genetic variants of ADAM33 are associated with asthma susceptibility in the Punjabi population of Pakistan**”, Journal of Asthma (2016), DOI: 10.3109/02770903.2015.1124441

ABSTRACT PUBLICATIONS

- Muhammad Farooq Sabar, Muhammad Usman Ghani, Farheena Iqbal Awan, Mariam Shahid **Muhammad Akram** and Iqbal Bano “**Role of Genomic Variants in Predisposition of Asthma in Pakistani Patients**” 3rd International Conference on Biotechnology 8-9 February 2017(USA Journal of R&D)
- Muhammad Usman Ghani, Muhammad Farooq Sabar, Iqbal Bano, Mariam Shahid, **Muhammad Akram** and Nadeem Sheikh “**ADAM33 gene variants rs2280089, rs2280090, rs2280091 are not associated with asthma in local Patients**” 2nd International Biennial CardioRespiratory Conference-2017” 03-05 March, 2017.
- Muhammad Farooq Sabar, Muhammad Usman Ghani, Farheena Iqbal Awan, Mariam Shahid, **Muhammad Akram** and Iqbal Bano “**Significance of Vitamin-D Receptor Gene Polymorphism as a Biomarker for Asthma in Punjabi Population of Pakistan**” ICAFS2017&7th ICBB
- Muhammad Farooq Sabar, Muhammad Usman Ghani, Mariam Shahid, Aleena Sumrin, Amjad Ali, Farheena Iqbal, **Muhammad Akram**, Muhammad Akram Tariq, Muhammad Iqbal “**Genetic association of ADAM33’s SNP variants with Asthma in the Population of Lahore Region, Pakistan**” (Asian J Agri Biol, Special Issue-2015)
- Ahmed, N., H. Bashir, A. U. Zafar, M. A. Khan, S. Tahir, F. Khan, M. I. Khan, **M. Akram** and T. Husnain. “**Optimization of conditions for high-level expression and purification of human recombinant consensus interferon (rh-cIFN) and its characterization.**” Biotechnol Appl Biochem (2015) Sep;62(5):699-708. doi: 10.1002/bab.1320. Epub 2015 Jan 30.