

## **AKBAR ALI (B. Pharm, PhD)**

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### **PERSONAL DATA**

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**Date of Birth:** 15<sup>th</sup> August 1978  
**Place of Birth:** Kabirwala Distt. Khanewal, Punjab, Pakistan  
**Nationality:** Pakistani  
**Marital status:** Married

### **EDUCATION**

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**2004-2012** PhD (Biochemistry/Molecular Biology) from School of Biological Sciences, University of the Punjab, Lahore.  
**Dissertation:** 'Spectrum of *FLT3* and *NPM1* Mutations in Acute Myeloid Leukemia in Pakistani Population'  
**1995-2000** B. Pharmacy from Bahauddin Zakariya University Multan

### **TEACHING EXPERIENCE**

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- **December 2013 to date** - Assistant Professor of Biochemistry and molecular biology, Department of Basic Health Sciences, Faculty of Pharmacy, Northern Border University, Rafha, Saudi Arabia.
- **September 2013 to November 2013** - Assistant Professor at IMBB Department, University of Lahore, Lahore, Pakistan.
- **June 2012 to August 2013** - Assistant Professor at Department of Biochemistry, University of Health Sciences, Lahore, Pakistan under HEC's interim placement of fresh PhD's program (IPFP).

### **PROFESSIONAL EXPERIENCE**

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- **April 2006 to Nov 2013** - Consultant Molecular Biologist at National Genetic Lab, Lahore.
- **September 2003 to January 2005** - Quality Control Manager at Rasco Pharma, Lahore.
- **April 2002 to August 2003** – Senior quality control analyst at Mediceena Pharma, Lahore.
- **April 2000 to March 2002** - Quality control analyst at Unexolabs, Lahore.

## RESEARCH EXPERIENCE

- **December 2013 till date** – I have completed different NBU funded research projects at college of Pharmacy, Northern Border University Rafha.
- **June 2012 to December 2013** – I have supervised different MPhil level research projects at Department of Biochemistry and department of Pharmacology, University of Health Sciences.
- **October 2009 to March 2010** - Part of PhD research work at Cancer Institute, **University College London**, UK under the supervision of Prof. Rosemary E. Gale, Professor of hematology.

## INTERNATIONAL EXPOSURE

- **October 2009 to March 2010** – Completed my PhD research work at **Cancer Institute, University College London, UK**, where I learnt several different DNA mutation detection techniques.
- **December 2013 to date** – Working as Assistant Professor of Biochemistry and Molecular Biology, at Department of Basic Health Sciences, Faculty of Pharmacy, Northern Border University, Rafha, Saudi Arabia.

## PROFESSIONAL AND RESEARCH SKILLS

- Nucleic acid isolation using manual and kit methods, agarose and polyacrylamide gel electrophoresis, gene cloning
- Amplification Techniques like PCR and RT-PCR, Real Time PCR using **Rotor Gene 6000** (Qiagen), **PikoReal 24** (Thermo) **MiniOpticon** (BIORAD) and **Quantica** (Techne) Systems.
- Mutation detection techniques like **WAVE** Denaturing High Performance Liquid Chromatography (dHPLC), Fragment Analysis using **Beckman coulter CEQ8000** Genetic Analyzer (**DNA sequencer**), Restriction Fragment Length Polymorphism (RFLP), Single Stranded Conformational Polymorphism (SSCP).
- DNA sequencing using **Beckman coulter CEQ8000** Genetic Analyzer (**DNA sequencer**)
- Analytical skills including spectrophotometry, **HPLC**, paper chromatography, TLC, atomic absorption spectroscopy, ELISA

## DISTINCTIONS AND HONORS

- Throughout **first division** in educational career
- Got HEC's scholarship for indigenous PhD in 2004
- Got HEC's funding for six months' foreign visit under IRSIP program during PhD in 2009

## RESEARCH INTERESTS

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- Molecular pathology, the changes in biochemical process in the body that invite infections and inflammation.

## RESEARCH PROJECTS

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### Completed research projects funded by Northern Border University (NBU)

1. Multidrug resistance among gram negative *E. coli* in chicken meat (Rafha-Saudi Arabia).
2. Spectrum of Diarrheagenic Escherichia coli in Drinking and Wastewater in Rafha City of Saudi Arabia", *J. Pharm. Res. Int.* **2021**; 33(54A), pp. 327-334.
3. Antimicrobial Resistance Pattern of Uropathogens Isolated from Rafha Central Hospital, Rafha, Kingdom of Saudi Arabia. *J. Pure Appl. Microbiol.* (**2018**), 12(2), p. 577-586
4. The ABCC8 R1273R (G/A) and PPAR $\gamma$ 2 Pro12Ala (C/G) genetic markers are not associated with type 2 diabetes; a study conducted in in Rafha city of the Northern Border region, Saudi Arabia. International Journal of Biology, Pharmacy and Allied Sciences IJBPAS, 2017, 6(6): 1101-1111.
5. Prevalence of Toxoplasma gondii in women population of Rafha City, Saudi Arabia. *Pakistan J. Zool* (**2017**), 49(3), 1039-1047.

## RESEARCH PAPERS

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1. **Akbar Ali** and Vijay R. Chidrawar. Multidrug resistance among gram negative *E. coli* in chicken meat (Rafha-Saudi Arabia). *Journal of Pharmaceutical Research International*, 2021; 33(58A), pp. 38-48. DOI: 10.9734/JPRI/2021/v33i58A34087
2. Ishraga Eltayeb M. A-Elbasit, **Akbar Ali** and Ali Mohammed Ahmed. Estimation of hemoglobin levels in pregnant and non-pregnant women in Rafha city, Saudi Arabia. *Journal of Pharmaceutical Research International*, 2021; 33(56A), pp. 252-258. DOI: 10.9734/JPRI/2021/v33i56A33908
3. **Ali, A.**, Soomro, S., Nadeem, M. S. and Ahmedani, E. I. Spectrum of Diarrheagenic Escherichia coli in Drinking and Wastewater in Rafha City of Saudi Arabia", *Journal of Pharmaceutical Research International*, 2021; 33(54A), pp. 327-334. doi: 10.9734/jpri/2021/v33i54A33753.
4. Nadeem MS, Murtaza BN, Al-Ghamdi MA, **Ali A**, Zamzami MA, Khan JA, Ahmad A, Rehman MU, Kazmi I. Autism - A Comprehensive Array of Prominent Signs and Symptoms. Current Pharmaceutical Design. 2021. **Impact Factor 2.4**
5. Elsamoual Ibrahim Ahmedani, Atif A Elagib, Khalil Mohamed, Jawahir Alghamdi, **Akbar Ali**, Meng Yee Lai, Yee Ling Lau, Khalid Hassan AlMohammed. Detection of *Toxoplasma gondii* by Loop-mediated Isothermal Amplification in Blood and Urine Samples from Women, Saudi Arabia. *Journal of Clinical and Diagnostic Research*. 2020 Sep, Vol-14(9): DC15-DC18. **IF; 0.14**

6. Chidrawar VR, **Ali A.** Experimental Studies to Define the Role of Calcium (Ca<sup>2+</sup>) and Voltage-Gated Calcium Channel Blockers (vCa-CCB) against Neurosteroid Induced Obesity. *Journal of Pharmaceutical Research International*. 2020; 32(7):60-71.
7. Muhammad Shahid Nadeem, **Akbar Ali**, Maryam A. Al-Ghamdi, Jalaluddin Azam Khan, Mazin A. Zamzami, Bibi Nazia Murtaza, Imran Kazmi. COVID-19: Prospective Challenges and Potential Vaccines. *Alternative Therapies in Health and Medicine*, 2020, 26(S2): 72 - 78
8. Samreen Soomro, Sibgatullah Sangi, **Akbar Ali**. In Vitro Biological Activity of Ethanolic Extract of Maramiyah (*Salvia Libanotica*) and Its Combination with Essential Oil. *Int. J. Pharm. Phytopharmacological Res. (eIJPPR)*, April 2019; 9 (2), p 32-37. **Impact factor 0.85**
9. Elsamoual Ibrahim Ahmedani, Atif A. Elagib, Khalil Mohamed, **Akbar Ali**, Hani Mowanes Alrawili. Prevalence of toxoplasmosis and associated risk factors in women in Northern Border Area, Saudi Arabia. *International Journal of Biology, Pharmacy and Allied Sciences IJBPAS*, July, 2018, 7(7): 1247-1262. **Impact factor 1.32**
10. **Akbar Ali**. Antimicrobial Resistance Pattern of Uropathogens Isolated from Rafha Central Hospital, Rafha, Kingdom of Saudi Arabia. *Journal of Pure and Applied Microbiology (JPAM)*, June 2018, Vol. 12(2), p. 577-586. **Impact factor 0.25**
11. Soliman Ghanem and **Akbar Ali**. The ABCC8 R1273R (G/A) and PPAR $\gamma$ 2 Pro12Ala (C/G) genetic markers are not associated with type 2 diabetes; a study conducted in in Rafha city of the Northern Border region, Saudi Arabia. *International Journal of Biology, Pharmacy and Allied Sciences IJBPAS*, June 2017, 6(6): 1101-1111. **Impact factor 1.32**
12. **Akbar Ali**, Khalil Mohamed and Fawzia Toulah. Prevalence of *Toxoplasma gondii* in women population of Rafha City, Saudi Arabia. ***Pakistan Journal of Zoology (2017)***, 49(3), 1039-1047. **Impact factor 0.8**
13. **Akbar Ali**, Rosemary E Gale and Abdul Rauf Shakoori. Detection of *FLT3/TKD* and *IDH1* Mutations in Pakistani Acute Myeloid Leukemia Patients by Denaturing HPLC. ***J. Cell. Biochem. (2016)***; 118(5):1174-1181; DOI: 10.1002/jcb.25761. **Impact factor 3.45**
14. Arham Shabbir, Muhammad Shahzad, **Akbar Ali**, Ziaur Rahman. Discovery of new benzothiazine derivative as modulator of pro- and anti-inflammatory cytokines in rheumatoid arthritis. ***Inflammation (2016)***, Dec;39(6):1918-1929; doi:10.1007/s10753-016-0427-y, ISSN: 0360-3997, **Impact factor 3.2.**
15. Glenda J. Dickson, Sophia Bustraan, Robert K. Hills, **Akbar Ali**, Anthony H. Goldstone, Alan K. Burnett, David C. Linch and Rosemary E. Gale. The value of molecular stratification for CEBPA<sup>DM</sup> and NPM1<sup>MUT</sup> FLT3<sup>WT</sup> genotypes in older patients. ***Brit J Hematol (2015)***, 172(4): 573-580. **Impact factor 5.7**

16. Sahar, S., Tanveer, A., **Ali, A.**, Bilal H. and Saleem, M.S. *Pfcr* gene in *Plasmodium falciparum* fields isolated from Muzaffargarh, Pakistan. *Iran. J. Arthropod Borne Dis* (2015). 9(2):204-214. **Impact factor 1.42.**
17. Arham Shabbir, Muhammad Shahzad M, **Akbar Ali** and Muhammad Zia-ur-Rehman. Anti-arthritis activity of N'-[(2,4-dihydroxyphenyl) methylidene]-2-(3,4-dimethyl-5, 5 dioxidopyrazolo [4,3-c] [1,2] benzothiazin-1(4H)-yl) acetohydrazide. *Eur J Pharmacol.* (2014); 738:263-72. **Impact Factor 3.17**
18. Dima El-sharkawi, **Akbar Ali**, Catherine M Evans, Robert K Hills, Alan K Burnett, David C Linch, and Rosemary E Gale. ASXL1 mutations are infrequent in young patients with primary acute myeloid leukaemia and their detection has a limited role in therapeutic risk stratification. *Leukemia & Lymphoma* (2014), 55 (6): 1326-1331. **Impact Factor 3.09**
19. **Akbar Ali**, Muhammad Kamran Siddique, Rosemary E. Gale and Abdul Rauf Shakoori. Frequency of *NPM1* Mutations in Pakistani Acute Myeloid Leukemia Patients. *Pakistan Journal of Zoology*, (2013) vol. 45(5), pp. 1429-1436, 2013. **Impact Factor 0.8**
20. **Akbar Ali**, Muhammad Kamran Siddique, and Abdul Rauf Shakoori. Frequency of *FLT3/ITD* mutations in Pakistani Acute Myeloid Leukemia Patients. *Pakistan Journal of Zoology* (2013), 45(2): 495-501. **Impact Factor 0.8**
21. Bradley N Smith, Catherine Evans, **Akbar Ali**, Phil J Ancliff, Bu'Hussain Hayee, Anthony W Segal, Georgina Hall, Zuhre Kaya, Abdul Rauf Shakoori, David C Linch, Rosemary E Gale. Phenotypic heterogeneity and evidence of a founder effect associated with *G6PC3* mutations in patients with severe congenital neutropenia. *British Journal of Haematology* (2012), 158 (1): 146-149. **Impact factor 5.71**
22. Abdul Rauf, Muhammad Shahid Nadeem, **Akbar Ali**, Muhammad Iqbal, Muhammad Mustafa, Muhammad Muzammal Latif, Muhammad Zahid Latif, Nisar Ahmed and Abdul Rauf Shakoori. Prevalence of hepatitis B and C in internally displaced persons of war against terrorism in Swat, Pakistan. *European Journal of Public Health* (2011) 21 (5): 638-642. **Impact factor 2.46**

#### TEACHING AND COURSE COORDINATION RESPONSIBILITIES AT NBU

- To teach basic/clinical biochemistry, Biostatistics, Clinical nutrition, Pharmacogenomics and Molecular Biology to Pharm D students.
- To guide students in writing their research synopsis and thesis
- To guide students in their experimental work
- To establish Molecular Biology Lab at the department
- To help other faculty members in the molecular part of their research projects

## WORKSHOPS/CONFERENCES/SYMPOSIUM ATTENDED

- 4<sup>th</sup> National Hands-on Training Workshop on Bioinformatics (BASICS) held at Molecular Care, University of Faisal Abad on August 05-06, 2017
- 2<sup>nd</sup> interdisciplinary Statistical Data Analysis Workshop held at Swat Institute of Nuclear Medicine, Oncology and Radiotherapy (SINOR), Swat on August 21-23, 2017.
- Workshop on 'Emotional Intelligence' held at University of Health Sciences on April 13, 2013.
- 29<sup>th</sup> Pakistan Congress of Zoology held at Sindh University Jamshoro on February 24-26, 2009.
- International Symposium on the role of glycoproteins in human health and diseases held at the School of Biological Sciences, University of the Punjab, Lahore on May 27-29, 2008.
- 27<sup>th</sup> Pakistan Congress of Zoology held at Bahauddin Zakariya University, Multan on February 27-March 1, 2007.
- 9<sup>th</sup> National conference of Pakistan Society of Hematology held Sheikh Zayed Medical Complex, Lahore Pakistan on March 09-11, 2007.
- International Symposium on Nanotechnology of Enzymes held at the School of Biological Sciences, University of the Punjab, Lahore on September 20-21, 2006.
- 26<sup>th</sup> Pakistan Congress of Zoology held at University of the Punjab, Lahore, on April 4-6, 2006.
- 25<sup>th</sup> Pakistan Congress of Zoology held at Sindh Agriculture University Tandojam on March 1-3, 2005.

## REFERENCES

### **Professor Dr. Abdul Rauf Shakoori (PhD Supervisor)**

Professor Emeritus and Director School of Biological Sciences, School of Biological Sciences, University of the Punjab, Phone Office: +92 42 9230966, Email: [arshaksbs@yahoo.com](mailto:arshaksbs@yahoo.com)

### **Professor Rosemary E Gale, PhD (Supervisor at UCL)**

Department of Haematology, UCL Cancer Institute, Paul O'Gorman Building, 72 Huntley Street, London WC1E 6DD, U.K. Tel: (+44)-020-7679-6232, Fax: (+44)-020-7679-6222, E-mail: [rosemary.gale@ucl.ac.uk](mailto:rosemary.gale@ucl.ac.uk)

### **Dr. Dima El Sharkawi, MB BS, MA, PhD, MRCP, FRCPath**

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