Dr. Zehra Agha

PhD Human Molecular Genetics, Biosciences Department,
COMSATS University
Islamabad, Pakistan

Professional Qualification

- **PhD Biosciences (Human Molecular Genetics)** **2008– 2014** **(1ST Div)**
  COMSATS Institute of Information Technology, Pakistan
- **M.Phil (AnimalSciences, Reproductive Physiology)** **2006-2008** **(1STDiv)**
  Quaid-i- Azam University Islamabad, Pakistan
- **M.Sc. (Biology)** **2004-2006** **(1ST Div)**
  University of Arid Agriculture, Rawalpindi, Pakistan
- **B.Sc. (Pre-Medical)** **2001-2003** **(1STDiv)**
  Govt. Post. Graduate college for Women 6th Road, Rawalpindi, Pakistan.
- **F.Sc (Pre-Medical)** **1999–2001** **(1STDiv)**
  Govt. Post. Graduate college for Women 6th Road Rawalpindi, Pakistan
- **S.S.C. (Science)** **1999** **(1STDiv)**

Objective

To prove worthwhile in any challenging scenario, mainly by the virtue of my research and knowledge

Dissertations

- PhD Dissertation title: **Genetic Analysis of Mental Retardation in Pakistan.**
- MPhil Dissertation title**:** Effect of melatonin administration on plasma concentration of prolactin and cortisol in male rhesus monkey.

Experience & Participations

- **Assistant Professor** in Department of Biosciences, COMSATS Institute of Information Technology Islamabad campus. 10 August 2015- current.
- **Assistant Professor** in Department of Bioinformatics and Biotechnology, **International Islamic University Islamabad from 10 June 2014-10 June 2015.**
- Guest Researcher at **Human Molecular Genetics Department** at ST Radboud University and Hospital Nijmegen, **The Netherlands**.
- Demonstrator at Molecular Biology research Lab at CIIT.
- T**eaching Assistant** at COMSATS institute of information technology Islamabad in 2008-2010.

Publications

- **Agha, Z.,** Iqbal, Z., Azam, M., Hoefsloot, LH., van Bokhoven, H., Qamar, R. (2013). A novel homozygous 10 nucleotide deletion in BBS10 causes Bardet–Biedl syndrome in a Pakistani family. **Gene.** 519:171-181.
- **Agha Z**, Iqbal Z, Azam M, Zweier C, Siddique M, de Leeuw N, Qamar R, van Bokhoven H. (2014). A complex microcephaly syndrome in a Pakistani family associated with a novel missense mutation in *RBBP8* and a heterozygous deletion in the *NRXN1* gene. **Gene.** doi.org10.1016/J.gene.2014.01.027.
- **Agha, Z**., Iqbal, Z., Azam, A., Ayub, H., Vissers, L., Gilissen, C., Benish, S.H., Riaz, M., Veltman, J., Pfundt, R., van Bokhoven, H. and Qamar, R. (2014) Exome sequencing identifies three novel candidate genes implicated in intellectual disability. **PLOSONE.** DOI: 10.1371/journal.pone.0112687.
- **Agha, Z.,** Iqbal, Z., Yntema, HG., Kleefstra, T., Zweier, C., Leeuw, N., Qamar, R., van Bokhoven H., Willemsen, MH. A de novo microdeletion in *NRXN1* responsible for Microcephaly syndrome in Dutch patient**. Genetic Research** Published October 6, 2015.
- Effect of single oral dose of melatonin on plasma concentration of prolactin and cortisol in male rhesus monkey. **Zehra Agha**, Asif Mir, SarwatJahan* (2010) **Pakistan Journal of Physiology.**
- S Riazuddin, M Hussain, A Razzaq, Z Iqbal, M Shahzad, D L Polla, Y Song, E van Beusekom, A A Khan, L Tomas-Roca, M Rashid, M Y Zahoor, W M Wissink-Lindhout, M A R Basra, M Ansar, **Z Agha**, K van Heeswijk, F Rasheed, M Van de Vorst, J A Veltman, C Gilissen, J Akram, T Kleefstra, M Z Assir, UK10K, D Grozeva, K Carss, F L Raymond, T D O'Connor, S A Riazuddin, S N Khan, Z M Ahmed, A P M de Brouwer, H van Bokhoven and S Riazuddin. Exome sequencing of Pakistani consanguineous families identifies 30 novel candidate genes for recessive intellectual disability. **Molecular Psychiatry** advance online publication 26 July 2016; doi: 10.1038/mp.2016.10

  Harripaul R, Vasli N, Mikhailov A, Rafiq MA, Mittal K, Windpassinger C, Sheikh TI, Noor A, Mahmood H, Downey S, Johnson M, Leuten K, Bell L, Ilyas M, Khan FS, Khan V, Moradi M, Ayaz M, Naeem F, Heidari A, Ahmed I, Ghadami S, **Agha Z**, Zeinali S, Qamar R, Mozhdehipanah H, John P, Mir A, Ansar M, French L, Ayub M, Vincent JB. 2017. Mapping Autosomal Recessive Intellectual Disability: Combined Microarray and Exome Sequencing Identifies 26 Novel Candidate Genes in 192 Consanguineous Families. **Molecular Psychiatry**. DOI: 10.1038/mp.2017.60
- M.Maria, S. Ijaz Maqsood, A.zam, I. Muslim, S. Bashir, S. Benish , H. Ayub, **Z. Agha**, M .Niazi, M. Ishaq, N. Khalida, R. Qamar, M. Azam. Association of *SDH* promoter region polymorphisms with diabetes induced retinopathy complications. Under review with **Journal of Diabetes.**
- **Agha,Z.,** Azam, M., Benish, S.H. and Qamar, R**.** Association of polymorphisms in *ACE* and *eNOS* genes with psoriasis in Pakistan. (Under submission process).

Awards and Accomplishments

- Award of Startup research grant from HEC 2015."Screening of candidate genes of different pathways in Autistic patients from Pakistani population"
- Research productivity award 2013, 2014, 2015 from CIIT.
- Award of indigenous scholarship for PhD Phase 2 Batch 1. 2012.
- Award of International Research Support Program for Radboud UMC from HEC Pakistan 2011.
- First position in Poster competition held at COMSATS institute of information technology Islamabad in April 2010.
- Award of CIIT grant 0.2 million 2010" Genetic analysis of BBS in Pakistani families"

References

1: Prof .Dr. RaheelQamar

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Email: raheelqamar@gmail.com

2: Prof. Dr. Hans van Bokhoven

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3: Dr. Zafar Iqbal

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