

Curriculum Vitae



Dr. Rana Muhammad Kamran Shabbir

Career objective:

I am confident of making an original contribution to the field of science. I have a commitment to the fulfilling craft of independent research that involves willingly making personal sacrifices of time, leisure, and immediate reward. In return, I shall get intellectual satisfaction and the gratification of becoming a contributor to knowledge through research and the greater personal rewards of learning and discovery.

Personal Information:

Date of Birth February 03, 1993
Languages English, Urdu
Nationality Pakistani
Contact Information: +92-323-5500968; +92-301-7916151
Permanent address: House No. 38, St. No. 01
Tibba Karim Abad Tehsil & District, Muzaffargarh
Province, Punjab, Pakistan.

Academic qualification:

Degree	Year	CGPA	University
Ph.D. Zoology	2021	3.6	Quaid-I-Azam University, Islamabad, Pakistan
M.Phil. Zoology	2016	3.6	Quaid-I-Azam University, Islamabad, Pakistan
M.Sc. Zoology	2014	3.79	University of Sargodha, Sargodha, Pakistan

Dissertation Titles with sub-specialty:

Ph.D. Zoology (Human Genetics)

Identification of disease-causing genes in families with skeletal and ophthalmological disorders

M. Phil. Zoology (Human Genetics)

Determinants of Consanguinity and Fertility in the population of Muzaffargarh district

M. Sc. Zoology (Parasitology)

Epidemiological studies of tick infestation in ruminants of district Sargodha Punjab, Pakistan

Major Subjects in Ph.D.

Advances in Cell Biology, Human Genetics-II and Advance in Molecular Biology.

Major Subjects in M.Phil.

Human Stem Cell Biology, Protein and polypeptide Hormones, Andrology and Human genetics-I.

Major Subjects in M.Sc.

Principle of Genetics, Biochemistry, Developmental Biology, Biostatistics, Biological Techniques and Bioinformatics, Cell and Molecular biology & Research Planning and Scientific writing.

Professional Research Experiences:

Visiting International Research Student at the Department of Medical Genetics, The University of British Columbia Vancouver campus, Canada.
(From November 2019 to May 2020).

Research Assistant at Human genetics program, Quaid-I-Azam University, Islamabad, Pakistan. Higher Education Commission (HEC) funded Project.
(From July 2016 to June 2018)

Laboratory Techniques:

- Expert in DNA extraction by using standard phenol chloroform method and Genomic DNA extraction by Kit method.
- Expert in RNA extraction by Trizol reagent & Promega RNA extraction Kit.
- Proficient in Polymerase chain reaction (PCR), SDS Page Gel and Gel electrophoresis.
- Skilled in primer designing using Primer Premier 5.
- Proficient in scientific software's like Primer Premier 5, Primer designing, Graph Pad Prism, Statistics, Turnitin, Bio Edit, and Bio Render etc.
- I am skilled in lab equipment's like PCR machine, Spectrophotometer, Refrigerated centrifuge, Shaker incubator, RT-PCR, Electroporation, etc.
- Expert in data analysis of SNP genotyping, Whole Exome Sequences and Whole genome sequences.
- Project Design & Supervise the interneees, Bachelor and Master students.

Teaching Experiences:

Assistant Professor at Department of Zoology, Division of Science and Technology, University of Education, Lahore, Multan Campus (20th December – To date).

Assistant Professor at Department of Life Sciences, School of Science, University of Management & Technology, Johar Town, Lahore (30th August- 20th December 2021).

Lecturer at Department of Life Sciences, School of Science, University of Management & Technology, Johar Town, Lahore (23rd February 2021 – 29th August 2021).

Awards and Honours:

Silver Medalist Obtained 2nd Position in M.Sc.

Distinction Award by Fauji Foundation Academy.

Oral Presentation award at 6th International Conference on Biological and Computational Sciences (C-BICS 2018).

Professional Trainings:

1. Citation Management by using Mendeley Software, (UMT) 2021
2. Scientific Paper and Patent writing, (ICESCO) 2020
3. Next Generation Sequencing (NGS) Data Analysis, (PASTIC) 2018
4. Latest Bioinformatics Tools & Technologies, (VU) 2018
5. Research Tools & Techniques “SPSS” (PASTIC) 2018
6. Recombinant DNA Technology, (PU) 2017

Symposium and Online Courses:

1. “International Symposium on Global Biodiversity & Health Big Data July 18, 2019”.
2. Fraser Health Information Privacy & Confidentiality.
3. Provincial Code Red - Fire Safety Training (Acute & Long-Term Care Facilities)
4. Respectful Workplace – Fostering a culture of Respect.

Conference Proceedings:

1. **1st** International Conference: Advances in Drug Discovery and Development at NARC, Islamabad. January 3-5, 2018.
2. **6th** International Conference on Biological and Computational Sciences (C-BICS 2018) Capital University of Science and Technology, Islamabad, Pakistan, December 13, 2018.

Major projects accomplished during PhD Research:

1. Skeletal disorder

- i. Identification of novel gene in Pakistani family with osteochondrodysplasia (**First author**).
- ii. Identification of novel gene in family with unusual skeletal malformations (**First author**).
- iii. *GHR* variant implicated in Laron syndrome (**First author**).
- iv. *PRG4* associated with CACP syndrome (**First author**).

2. Neurological disorders

- i. *CRADD* and *USP44* mutations in intellectual disability (ID) (**First author**).
- ii. *ASPM* novel variant in microcephalic Pakistani family (**Article submitted**)

3. Ocular disorders

- i. Clinical and molecular study of a Pakistani family afflicted with Knobloch syndrome (**Article under process**).
- ii. Novel *RDH5* variant in retinitis punctata albescens (**Second author**)

Project No. 1 was a major part of my PhD Thesis.

Publications:

1. Badar, A., Malik, M. W., Hasnain, S. Z., Shah, S. I. A., **Shabbir, R. M. K.**, Haider, W., & Ahmed, H. (2023). Assessment of risk factors associated with outbreak of hepatitis A in Shakrial, Rawalpindi, Pakistan. *Journal of infection in developing countries*, 17(1), 111–117. <https://doi.org/10.3855/jidc.14939>
2. Hussain, N., Shabbir, R. M. K., Ahmed, H., Afzal, M. S., Ullah, S., Ali, A., Irum, S., Naqvi, S. K., Yin, J., & Cao, J. (2023). Prevalence of different tick species on livestock and associated equines and canine from different agro-ecological zones of Pakistan. *Frontiers in veterinary science*, 9, 1089999. <https://doi.org/10.3389/fvets.2022.1089999>
3. Koprulu, M., Naeem, M., Nalbant, G., **Shabbir, R. M. K.**, Mahmood, T., Huma, Z., Malik, S., & Tolun, A. (2022). KERATIN 17-related recessive atypical pachyonychia congenita with variable hair and tooth anomalies. *European journal of human genetics : EJHG*, 30(11), 1292–1296. <https://doi.org/10.1038/s41431-022-01128-4>
4. Naqvi, S. F., **Shabbir, R. M. K.**, Tolun, A., Basit, S., & Malik, S. (2022). A Two-Base Pair Deletion in IQ Repeats in ASPM Underlies Microcephaly in a Pakistani Family. *Genetic testing and molecular biomarkers*, 26(1), 37–42. <https://doi.org/10.1089/gtmb.2021.0231>
5. Jabbar, A., Shah, F. A., Ashraf, A., Hassan, G., Rehman, E., Bangash, S. A., **Shabbir, R. M. K.**, Naeem, N., & Ullah, I. (2022). Evaluation of in vitro antibacterial activity and phytochemical screening of nigella sativa leaves extracts against human pathogenic bacteria. *International Journal of Health Sciences*, 6(S9), 4434–4445. <https://doi.org/10.53730/ijhs.v6nS9.13781>
6. Tahir, A., Naz, S., Afzal, M. S., **Shabbir, R. M. K.**, Ali, S., Shah, N., & Ahmed, H. (2022). Community based assessment on Knowledge, Attitude and Practices (KAP), Risk Factors and One Health Perspective of Brucellosis in rural and urban settings of Pakistan: A Cross-Sectional Study. *Journal of the Hellenic Veterinary Medical Society*, 73(3), 4339–4356.

7. Majeed, Z., Manzoor, S., & **Shabbir, R. M. K.** (2022). Deteriorating Health Conditions by Effects of Water Quality in Pakistan. *Human Nature Journal of Social Sciences*, 3(4), 134-146.
8. Koprulu, M., **Shabbir, R. M. K.**, Zaman, Q., Nalbant, G., Malik, S., & Tolun, A. (2021). CRADD and USP44 mutations in intellectual disability, mild lissencephaly, brain atrophy, developmental delay, strabismus, behavioural problems and skeletal anomalies. *European Journal of Medical Genetics*, 64(4), 104181.
9. Bölükbaşı, E. Y., **Shabbir, R. M. K.**, Malik, S., & Tolun, A. (2021). Homozygous deletion of MYADML2 in cranial asymmetry, reduced bone maturation, multiple dislocations, lumbar lordosis, and prominent clavicles. *Journal of Human Genetics*, 66(2), 171-179.
10. Abbasi, A., Shahzad, K., **Shabbir, R. M. K.**, Afzal, M. S., Zahid, H., Zahid, T., Ahmed, H., & Cao, J. (2021). Demographic Attributes of Knowledge, Attitude, Practices, and One Health Perspective Regarding Diarrhea in Pakistan. *Frontiers in public health*, 9, 731272. <https://doi.org/10.3389/fpubh.2021.731272>
11. Khan, A., Ahmed, H., Amjad, S., Afzal, M. S., Haider, W., Simsek, S., Khawaja, M. R., Khan, D. H., Naz, S., Durrance-Bagale, A., **Shabbir, R. M. K.**, Arfeen, R. Z. U., Ali, S., & Cao, J. (2021). Community Based Assessment of Behavior and Awareness of Risk Factors of Cystic Echinococcosis in Major Cities of Pakistan: A One Health Perspective. *Frontiers in public health*, 9, 648900. <https://doi.org/10.3389/fpubh.2021.648900>
12. Afzal, M. S., Khan, A., Qureshi, U. U. R., Saleem, S., Saqib, M. A. N., **Shabbir, R. M. K.**, & Ahmed, H. (2021). Community-based assessment of knowledge, attitude, practices and risk factors regarding COVID-19 among Pakistanis residents during a recent outbreak: a cross-sectional survey. *Journal of Community Health*, 46(3), 476-486.
13. Khan, A., Tahir, A., Sohail Afzal, M., **Shabbir, R. M. K.**, Saleem, S., & Ahmed, H. (2021). HIV is an emerging health challenge in Pakistan: risk factors and management strategies. *Tropical Doctor*, 51(1), 135-136.

14. Khan, R., **Shabbir, R. M. K.**, Raza, I., Abdullah, U., Naeem, M. A., Ahmed, A., ... & Xia, K. (2020). A founder RDH5 splice site mutation leads to retinitis punctata albescens in two inbred Pakistani kindreds. *Ophthalmic genetics*, 41(1), 7-12.
15. **Shabbir, R. M. K.**, Saleem, S., Khan, A., Afzal, M. S., Qureshi, U. M., & Ahmed, H. (2020). Hot spots, Risk Factors and Management of Polio virus in Pakistan. *Journal of Medical Virology*.
16. Khan, A., Tariq, M., Simsek, S., Afzal, M. S., Harandi, M. F., Shahzad, A. L. I., ... & **Shabbir, R. M. K.**, Ahmed, H. (2020). Neglected Tropical Diseases in Pakistan: A Story of Neglect. *Iranian Journal of Parasitology*, 15(4), 618.
17. **Shabbir, R. M. K.**, Nalbant, G., Ahmad, N., Malik, S., & Tolun, A. (2018). Homozygous CHST11 mutation in chondrodysplasia, brachydactyly, overriding digits, clinodactyly and synpolydactyly. *Journal of Medical Genetics*, 55(7), 489-496.
18. Mustafa, I., **Shabbir, R. M. K.**, Subhani, M., Ahmad, I., Raza, A., Jamil, S., & Ahmed, H. (2014). Seasonal Activity of Tick Infestation in Goats and Buffalo of Punjab Province (District Sargodha), Pakistan. *Kafkas Universitesi Veteriner Fakultesi Dergisi*, 20(5), 655-662.