

Dr. Faiza Rao

PhD Natural Science in
Biology
(Genetics)

Phone:

+923057801996

E-Mail:

rao.faiza@yahoo.com

Publons:

<https://publons.com/researcher/1740305/faiza-rao/>

Skill Highlights

- Cell culture (got training to culture NT2, GC1, GC2, DU145, HESc cells)
- CoCs and denuded oocyte collection
- Flow cytometry (analysis of apoptosis, reactive oxygen species ROS)
- Gel Electrophoresis
- ISH (In Situ Hybridization)
- Western blot (trained to detect specific proteins in sample homogenate)
- Transfection (siRNA constructs trained for detecting lncRNA in major Lab project for male infertility)
- Model Handling (Mouse, *C. elegans*)

Looking for a new and challenging Academic position in teaching, Research & Development, one which will make best use of my existing skills and experience and also further my personal and professional development.

Experience

04/2019 to Present

Postdoctoral Researcher

Xiamen University China
School of Medicine

Research Work

Decidual cell's role in Oxidative stress in females. Sperm Morphology analysis and semen analysis. Ovariectomy in mice and ISH expert.

2018 to 2019

Chairperson Zoology

Punjab group of colleges
Zoology department

Duties

Subject coordination, Organizing labs, Examination control, Conferences and workshops.

Subjects

Developmental Biology, Reproductive Biology, Mammalogy, Biological techniques, Animal behavior & Genetics.

2016 to 2017

Assistant Professor – (IPFP)

The Women University Multan
Department of Zoology

Duties

Organizing Seminars, Research work (HEC Project), Teaching, Lab coordination

Subjects:

Animal Behavior, Developmental biology, Reproductive biology

2012 to 2016

Research Assistant

University of Science and Technology of China
School of Life Sciences

Duties

ISH technique, Sperm Morphology analysis, semen analysis, Western Blot, PCR, Mice handling & *C. elegans*.

Reviewer in Journal & Conferences

- Reproduction
- International Journal of Biology
- International Journal of Environmental Research and Public Health
- Andrology
- Molecules
- Medical Sciences
- Annals of Chronic Diseases
- 2nd International Conference on Public Health and Medical Sciences
- 2nd International Conference on Food Science & Nutrition Engineering

International Advisory Board Member

- The IRES – 195th International Conferences on Medical and Health Science (ICMHS).

Technical Program Committee Member

- The 2nd International Conference on Biomedical and Biological Engineering BBE 2017 (26-28th May 2017 Guilin, China)

Education

2012 to 2016

PhD

PhD in Natural Sciences in Biology (Genetics)

University of Science and Technology of China (89th QS Ranking)

Dissertation: Punicalagin role in oxidative stress induced testicular damage

Research Areas:

- Oxidative Stress
- Infertility (Male)

Publications: 2 (First Author) (HEC W category Journal)

Achievements:

- Chinese Government Scholarship

Research Work:

1. Worked on "Molecular mechanism of male infertility" in Laboratory for Reproductive Biology in University of Science & Technology of China.
2. Worked to identify mechanisms of male infertility influencing factors such as age, environment pollutants during Gametogenesis in International Peace Maternity & Child Health Hospital School of Medicine, Shanghai Jiao tong University, Guangyuan Road, Xuhui District, Shanghai, China.
3. Worked in „Aberrantly high concentration of NGF inhibits cumulus cells glycolysis in a bidirectional communication dependent manner" in Laboratory for Reproductive Biology in University of Science & Technology of China.
4. Worked in sequential expression and identifying Long Non-coding RNA in specific stages of mouse spermatogenesis in Laboratory for Reproductive Biology and Laboratory of Transcription Regulation in Science and Brain Aging in University of science and technology of China.

2009 to 2012

Master

Zoology

Bahauddin Zakariya University, Multan

Thesis: Inventory of butterflies (Lepidoptera) of Multan district

Research Area: Butterflies

Worked on "Inventory of butterflies of Multan District", in Supervision of Dr. Aleem Ahmad Khan (Professor) in „Institute of Pure & Applied Biology"" in Bahauddin Zakariya University, Multan.

2005 to 2008

BSc

ZOOLOGY

Bahauddin Zakariya University, Multan

Subject: Zoology, Botany, Chemistry

Professional Trainings

- Evidence based use of Nutraceuticals in Male & Female Infertility, American Center for Reproductive Medicine (pass) 2020.
- ART training in Human Assisted Reproduction (Manual Semen Analysis), American Center for Reproductive Medicine 73% marks 2020.
- Male Infertility: A broad perspective of diagnosis and treatment. Arab School of Urology, UAE Ministry of Health & Prevention. 1.5 CPD credit hours 2020.
- ART training in Human Assisted Reproduction (Sperm Morphology) American Center for Reproductive Medicine 70% marks 2020.

Awards and Research Grants

- Post-doctorate High Talent Category A Fellowship, Xiamen University.
- Chinese Government Scholarship awarded for PhD in Genetics (2012-2016).
- 2012 Pakistan Global Graduate competition for Alltech's Young Scientist Award, participation certificate.
- Selected by Higher Education Commission, Pakistan for Interim Placement of Fresh PhDs Program as Assistant Professor.
- Received Start up Research Grant from Higher Education Commission, Pakistan of PKR490855 /- with project No: 21-1256/SRGP/R&D/HEC/2016.

Memberships

1. Member of International Society of Genetic Genealogy.
2. Member of Pakistan Science Club.
3. Member, Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEEES).
4. Life-Time membership of Global Research & Development Services (GRDS)
5. Full Membership of Organization for Women in Science for the Developing World (OWSD) and Pakistan Chapter.
6. Committee member of the 2nd International Conference on Biomedical and Biological Engineering BBE May 26-28,2017 / Guilin, China.

Research Supervision

1. Supervised **17** Research BS Zoology students (University of Central Punjab) and successfully submitted their reports in HEC library.

Publications

- **Rao F**, Tian H, Li W, Hung H, Sun F. ‘Potential role of punicalagin against oxidative stress induced testicular damage’. Asian J Androl. 2016; 18, 627-632 (PMID:26763544) **(IF: 3.28)**
- **Rao F**, Zhai Y, Sun F. ‘Punicalagin Mollifies lead acetate induced oxidative imbalance in male reproductive system’. Int. J. Mol. Sci.2016; 17(8):1269. doi:10.3390/ijms17081269. (PMID: 27529221) **(IF: 5.92)**
- Zhai Y, Yao G, **Rao F**, Wang Y, Song X, Sun F. ‘Excessive nerve growth factor impairs bidirectional communication between the oocyte and cumulus cells resulting in reduced oocyte competence’. Reprod Biol Endocrinol. 2018; 16(1):28. (PMID: 29580253) **(IF: 5.0)**
- Iftikhar, R., Zahoor, A.F., Mansha, A., Rasul, A., & **Rao, F**. Synthetic molecules as chemotherapeutics targeting the activity of YAP in cancer cells. Chemical Biology & Drug Design. 2020; (PMID: 34587361) **(IF: 2.81)**
- Sana Rao, Hanzi Wang, Rao Kashif & **Faiza Rao**. Robust Optical Flow Estimation to enhance Behavioral Research on Ants. Digital Signal Processing. **(IF: 3.3)**

Seminars, Conferences & Workshop

1. 1st Nature Immunology-Cellular & Molecular Immunology Joint Conference: Inflammation, Stress and Immune Homeostasis, June 17-19, 2015 Hefei, China.
2. 3rd International Conference on Biotechnology Challenges and Opportunities in Pakistan on February 8-9, 2017 at University of South Asia, Lahore.
3. Career Development Workshop for Women in Science, organized by Career Counseling Center, 21-22 February, 2017 at The Women University, Multan.
4. **Organized Seminar** on Polycystic Ovarian Syndrome (PCOs) in The Women University Multan. March 14th 2017.
5. 37th Pakistan Congress of Zoology (International), Organized by Government College University, Faisalabad. February 28-March 2, 2017 **(POSTER Presentation)**.

-
6. Actively participated in 4th National Hands-on Training Workshop on Bioinformatics, Faisalabad. 5-6 August 2017.
 7. First International Conference on Maternal and Fetal Medicine held in Xiamen, Fujian Province on December 6-9, 2019 China.
 8. 3rd Joint Annual Meeting of Reproductive Science Committee of Chinese Society of Zoology and the 17th Annual Meeting of Reproductive Biology branch of Chinese Society of Physiology and 3rd Academic Symposium of the Professional Committee on Reproductive Sciences (Round II) held in Xiamen University on 19-21st September China.
 9. **International Invited Speaker** in International conference of Chemical and Life Sciences ICCLS-2020 (3-4th September 2020, The Women University Multan, Pakistan).
 10. **Guest Speaker** at Center to Advance Level Research & Development 1st November 2020.
 11. Performance-based learning in molecular biology provides a better understanding of students (**ORAL PRESENTATION**). Fatima Jinnah Women University, Rawalpindi (2020) International Conference.
 12. Effect of Environment Induced Stress in Mice Laboratory Experiments (**ORAL PRESENTATION**). Lahore Garrison University, Lahore (2020) International Conference.
 13. Training for Healthcare Equipment, Personal Protective Equipment (PPE). Ministry of National Health Services, Health Science Academy, We Care 2021.
 14. Neonatal management & COVID-19. 26th January 2021, Department of CME & CPD Hashmanis Group of Hospitals.
 15. Organized and presented in RBS 2021 International Conference. Center to Advance Level Research & Development, Multan. 26th September 2021.