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## Dr. Muhammad Hassan Siddiqi

M.Sc., M.Phil., Ph.D.

Assistant Professor (HEC Approved Supervisor)

Department of Zoology

Government College Women University

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### Objectives

To excel my knowledge and expertise in Zoology, Molecular Biology and Genetics and apply my skills and experience to make significant contributions through collaborative, transdisciplinary research and practice for the betterment of human kind.

### Qualification

- **Ph.D. (2015)**

Institute of Zoology (Formerly Department of Zoology) University of the Punjab, Quaid-i-Azam Campus, Lahore, Pakistan

- **M.Phil. (2009)**

Centre of Excellence in Molecular Biology (CEMB), University of the Punjab, Lahore, Pakistan

- **M.Sc. (2007)**

Institute of Zoology, University of the Punjab, Quaid-i-Azam Campus, Lahore, Pakistan

### Teaching and Research Experience

- **Assistant Professor** [February 8<sup>th</sup>, 2019 – To date]

Department of Zoology, Govt. College Women University, Sialkot.

Teaching BS, MSc, MS and PhD classes, Research Supervision to MPhil and PhD students

- **Assistant Professor IPFP** [December 26<sup>th</sup>, 2017 – December 25<sup>th</sup>, 2018]

Department of Zoology, Govt. College Women University, Sialkot.

Taught BS, MS and MSc classes, Research Supervision to M. Phil students

- **Assistant Professor** [September 16<sup>th</sup>, 2015 – September 15<sup>th</sup> 2016]

Centre for Applied Molecular Biology (CAMB), University of the Punjab, Quaid-i-Azam Campus, Lahore, Pakistan.

Taught M.Phil. and Ph.D. classes, Advance Molecular Biology and Biotechnology, Applications of Mammalian cell culture, Tissue Culture and Techniques and Recent Advances in Forensic Molecular Biology. Research supervision to M.Phil students and research guidance to PhD. students

- **Assistant Professor** [September 27<sup>th</sup>, 2016 – March 26<sup>th</sup>, 2017]

Centre for Applied Molecular Biology (CAMB), University of the Punjab, Quaid-i-Azam Campus, Lahore, Pakistan.

Taught M.Phil and Ph.D. classes, Advance Molecular Biology and Biotechnology, Applications of Mammalian cell culture, Tissue Culture and Techniques and Recent

Advances in Forensic Molecular Biology. Research supervision to M.Phil students and research guidance to PhD. students

- **Lecturer (on contract basis)** [July 15<sup>th</sup>, 2013- July 15<sup>th</sup>, 2015]

Institute of Zoology, University of the Punjab, Quaid-i-Azam Campus, Lahore, Pakistan.

Taught Cell and Molecular Biology, Advances in Molecular Biology, Parasitology and Vector Biology to BS. and M.Sc. classes. Research guidance to the undergraduate, graduate and postgraduate students in their research projects.

Establishment of Molecular Parasitology and Molecular Genetics section in Parasitology lab at Institute of Zoology, University of the Punjab, Lahore

- **Lecturer (On adhoc basis)** [January 12<sup>th</sup>, 2012 - July 13<sup>th</sup>, 2013]

Institute of Zoology, University of the Punjab, Quaid-i-Azam Campus, Lahore, Pakistan.

Taught Cell and Molecular Biology, Advances in Molecular Biology, Parasitology and Vector Biology to BS. and M.Sc. classes. Research guidance to the undergraduate, graduate and postgraduate students in their research projects. Establishment of molecular parasitology and molecular genetics section in parasitology lab at Institute of Zoology, university of the Punjab, Lahore

- **Research Scholar** [March 11<sup>th</sup>, 2010 - January 11<sup>th</sup>, 2012]

Institute of Zoology, University of the Punjab, Quaid-i-Azam Campus, Lahore, Pakistan.

Genomic DNA isolation, RNA isolation, cDNA synthesis, DNA amplification by PCR, Amplicon purification and sequencing.

- **Part-Time Teacher** [September 18<sup>th</sup> 2009- February 23<sup>rd</sup>, 2010]

Institute of Zoology, University of the Punjab, Lahore, Pakistan.

Taught Cell & Molecular Biology to BS. and Research guidance to the students.

- **Molecular Biologist** [2006-2007]

Laraib Molecular Diagnostic Labs, Islamabad.

## **Administrative Experience**

**Assistant Superintendent** [January 2010 – March 2017]

Boys Hostel No.7, University of the Punjab, Quaid-i-Azam Campus Lahore, Pakistan.

Active involvement as Assistant Superintendent Mess, Chairman Sports Committee and Member Disciplinary Committee of the hostel.

## **Areas of Expertise**

### **Molecular Biology (Techniques)**

- Genomic DNA isolation, RNA isolation
- Huh-7 cell line culturing transfection of core gene of HCV genotype 3a
- Expression analysis of different genes
- PCR/ Multiplex PCR/ RT-PCR
- Genotyping of PCR product
- Sequencing of PCR product
- PAGE and agarose gel electrophoresis
- Western Blotting
- Haplotyping and Haplogrouping of human mitochondrial DNA (mtDNA) by computer-assisted methods and online tools e.g. Geneous software, HaploGrep mtDNA profiler.
- Genetic association study investigating the correlation of thalassemia with specific genetic markers in patients from Punjab, Pakistan.

### Collaboration

- Collaboration with Karakoram International University, Gilgit-Baltistan, Pakistan.
- Centre of Excellence in Molecular Biology, University of the Punjab, Lahore, Pakistan.
- Sundas Foundation, Shadman, Lahore, Pakistan.

### Awards and Distinctions

- HEC approved supervisor.
- Received Travel Grant (~PKR 160,000/-) from American Society of Hematology to Participate in the Educational activity titled “2014 Highlights of ASH in Asia” held in Singapore (March 2014).
- Received Travel Grant (~PKR 160,000/-) to Participate in the Educational activity titled “2015 Highlights of ASH in Asia” held in Bangkok, Thailand (March 2015).
- Certified Microsoft Office Specialist
- Attended Online Teaching Level-1 course offered by National Academy of Higher Education, Islamabad from 20<sup>th</sup> March 2021 to 10 April 2021 and won 2<sup>nd</sup> position by attaining 94.7% marks.

### Research Projects

#### Completed (PI)

1. “Genetic characterization of mitochondrial DNA in Makrani Population from Pakistan” funded by University of the Punjab, Lahore (RS. 125,000/-) vide letter No. D/34/Est-1 dated 06-01-2014.

#### Completed (Co-PI)

2. “Optimization, Validation and Multiplexing of 11 ChrX MiniSTRs in Pakistani Population” funded by Pakistan Science Foundation (PSF), Islamabad (RS. 20,000,00/-) vide letter No. PSF/Res/P-CPU/Bio (651) dated 23-10-2017.

### Publications [15]

Total Impact factor	[28.6]
Papers published in international Journals	[14]
Papers published in Local (Pakistani) Journals	[01]

#### 2008

##### 1. Development of 19-plex YSTR system and polymorphism studies in Pakistani population.

Fraz Malik, Mahmood A Kayani, Muhammad Ansar, Obaid-ullah, Muhammad Shafeeq, Shahid Chohan, Yassir Abbas, Saqib Shahzad, Ali Raza, Rahat Rehman, Qurat-ul-ain, **Muhammad Hassan Siddiqi**, Allah-Rakha, Zia ur Rehman, Zahoor Ahmad.

Academic journal of Xi'an Jiaotong University, 20(4):267-273. [IF: 1.271]

#### 2010

##### 2. Forensic and genetic characterization of mtDNA from Pathans of Pakistan.

Allah Rakha, Kyoung-Jin Shin, Jung Ah Yoon, Na Young Kim, **Muhammad Hassan Siddique**, In Seok Yang, Woo Ick Yang, Hwan Young Lee

International Journal of Legal Medicine, 125:841-848. [IF 2.862]

#### 2011

##### 3. Anti-apoptotic effect of HCV Core gene of Genotype 3a in Huh-7 cell line.

Shah Jahan, Saba Khaliq, **Muhammad Hassan Siddiqi**, Bushra Ijaz, Waqar Ahmad, Usman Ali Ashfaq, Sajida Hassan.

Virology Journal, 8(1):522-527. [IF: 2.362]

**4. HCV entry receptor as potential targets for siRNA based inhibition of HCV.**

Shah Jahan, Bailla Samreen Saba Khaliq, Bushra Ijaz, Mahwish Khan, **Muhammad Hassan Siddiqi**, Waqar Ahmad, Sajida Hassan.

Genetic Vaccines and Therapy, 9(15): 1-10.

[IF: 1.26]

**2015**

**5. Genetic characterization of the Makrani people of Pakistan from mitochondrial DNA control region data.**

**Muhammad Hassan Siddiqi**, Tanveer Akhtar, Allah Rakha, Ghazanfar Abbas, Akram Ali, Naeem Haider, Azam Ali, Sikandar Hayat, Syeda Masooma, Jamil Ahmad, Muhammad A Tariq, Fazle Majid Khan.

Legal Medicine, 17: 134–139.

[IF: 1.442]

**6. High Frequency and Poor Prognosis of Late Childhood BCR-ABL-Positive and MLL-AF4-Positive ALL Define the Need for Advanced Molecular Diagnostics and Improved Therapeutic Strategies in Pediatric B-ALL in Pakistan.**

Zafar Iqbal, Tanveer Akhtar, Tashfin Awan, Noreen Sabir, Mahmood Rasool, Muhammad Absar, Afia M Akram, Aamer Aleem, Masood A Shammas, Ijaz H Shah, Muhammad Khalid, Abid Taj, Abid Jameel, Abdullah Alanazi, Ammara Tariq Gill, Tayybah Shaheen, Jamil Amjad Hashmi; Akhtar Hussain; Muhammad Farooq Sabar; Ahmad M Khalid; Mehmood Hussain Qazi, Sajjad Karim, **Muhammad Hassan Siddiqi**, Amir Mahmood, Mudassar Iqbal. Molecular Diagnosis & Therapy, 19(5):277-287.

[IF: 2.602]

**7. Mitochondrial DNA Control Region Sequences Study in Saraiki Population from Pakistan.**

Sikandar Hayat, Tanveer Akhtar, **Muhammad Hassan Siddiqi**, Allah Rakha, Naeem Haider, Muhammad Tayyab, Ghazanfar Abbas, Azam Ali, Syed Yassir Abbas Bokhari, Muhammad Akram Tariq Fazle Majid Khan.

Legal Medicine, 17: 140–144.

[IF: 1.442]

**2016**

**8. Role of MicroRNA in Endometrial Carcinoma.**

Zeeshan Javed, Mukhtar Ullah, Hafiz Ahsan Ashfaq, Afzaal Hussain Shah, Muhammad Shahzad, Muhammad Bilal, Aleena Sumrin, Hamid Bashir, **Muhammad Hassan Siddiqi**, and Haleema Sadia.

Advancements in Life Sciences, 4 (1): 08-13.

[HEC recognized "Y" Category]

**9. Human mitochondrial DNA characterization and its applications.**

Sikandar Hayat, Tanveer Akhtar and **Muhammad Hassan Siddiqi**.

European Journal of Pharmaceutical and Medical Research, 3(11): 206-214.

[IF: 4.987]

**2017**

**10. Forensic Applications of Y chromosomal properties.**

Khushbakht Khan, **Muhammad Hassan Siddiqi**, Maryum Abbas, Maha Almas and Muhammad Idrees.

Legal Medicine, 26: 86-91.

[W Category IF: 1.442]

**11. Haematological evaluation of sodium fluoride toxicity in *Oryctolagus cuniculus*.**

Maryam Abbas, **Muhammad Hassan Siddiqi**, Khushbukhat Khan, Kanwal Zahra and Arif-un-Nisa Naqvi.

Toxicology Reports, 4: 450–454.

[HEC recognized "X" Category]

**2020**

**12. Mitochondrial DNA control region variants analysis in Balti population of Gilgit Baltistan, Pakistan**

Khushbukhat Khan, **Muhammad Hassan Siddiqi**, Shakoor Ali, Arif-un-Nisa Naqvi, Shujaat Ali, Muhammad Farooq Sabar.

Meta Gene, 23: 100630

[HEC recognized "Y" Category]

**2021**

**13. Current pool of ultimate collection of mitochondrial DNA from remnants of Kalash.**

**Muhammad Hassan Siddiqi**, Allah Rakha, Khushbukhat Khan and Tanveer Akhtar.

Mitochondrial DNA B Resource, 6(8):2410-2414

[I.F: 0.55]

**2023**

**14. Harnessing MoS<sub>2</sub> nanomaterials for TNP sensing and anticancer efficacy.**

Ahsan Riaz, Salah ud Din, Allah Rakha, Naveed Akhtar Shad, Anam Munawar, **Muhammad Hassan Siddiqi**

Materials Chemistry and Physics, 312: 128619

[W Category IF: 4.778]

**2024**

**15. Zn<sub>3</sub>(VO<sub>4</sub>)<sub>2</sub>/Bi<sub>2</sub>WO<sub>6</sub> composite based versatile platform for cotinine sensing and latent fingerprints development by using multiple modalities**

Naveed A Shad, Allah Rakha, Muhammad, Abdul Qayyum, **Muhammad**

**Hassan Siddiqi**, Zeeshan Mahmood, Shahid Nazir, Muhammad Farhan Khan, Muhammad Munir Sajid, Rahat Abdul Rehman, Ahsan Riaz, Salah Ud Din, Anam Munawar, Yasir Javed.

Materials Science and Engineering: B, 301:117203

[W Category IF: 3.6]

**Sequences Published on GenBank Database**

1. GenBank: KM358171- KM358269

AUTHOR: **Siddiqi, M. H.**, Mitochondrial DNA control region in Makrani population from Pakistan. (<http://www.ncbi.nlm.nih.gov/nuccore/KM358171>)

2. GenBank: KM358270- KM358380

AUTHOR: **Siddiqi, M. H.**, Mitochondrial DNA control region sequence data of Kalashi population from Pakistan. (<http://www.ncbi.nlm.nih.gov/nuccore/KM358270>)

3. GenBank: MG011368- MG011415

AUTHORS: Khushbakht, K. **Siddiqi, M. H.**, Mitochondrial DNA Control Region Variants Analysis in Balti Population of Gilgit-Baltistan. (<https://www.ncbi.nlm.nih.gov/nuccore/MG011368/MG011368>)

**Workshops/Seminars organized**

1. “Biosafety Practices in Laboratory” held at Govt. College Women University Sialkot, on April 12<sup>th</sup>, 2018.

2. “World Fisheries Day” Held on December 8<sup>th</sup> 2021 at Govt. College Women University Sialkot.
3. One day Seminar on “Recent Trends in Fisheries and Aquaculture” Held on November 30<sup>th</sup> 2022 at Govt. College Women University Sialkot.

### **Conferences/Workshops/ Trainings Attended**

#### **International**

1. Participated in Educational activity titled “2014 Highlights of ASH in Asia” held in Singapore March 29<sup>th</sup> -30<sup>th</sup>, 2014.
2. Participated in Educational activity titled “2015 Highlights of ASH in Asia” held in Bangkok, Thailand February 28<sup>th</sup> - March 1<sup>st</sup>, 2015.
3. Participated and delivered invited lecture in “Symposium on Diagnostics for Life Sciences, ICSSP’17” ([www.icssp17.org.pk](http://www.icssp17.org.pk)) held in Lahore, Pakistan December 10<sup>th</sup> -14<sup>th</sup> 2017.
4. International Conference on Quality of Life, Education and Health 2019, University of Central Punjab, Lahore, Pakistan, April 13<sup>th</sup> 2019.
5. Participated in “Symposium on Diagnostics for Life Sciences, ICSSP’19” ([www.icssp19.org.pk](http://www.icssp19.org.pk)) held in University of the Punjab, Lahore, Pakistan December 8<sup>th</sup> - 12<sup>th</sup>, 2019.

#### **National**

1. Attended training course on “Honey bee farming and management training” at Institute of Zoology (Formerly Department of Zoology), University of the Punjab, Lahore in May 2<sup>nd</sup>-6<sup>th</sup>, 2005.
2. Participated in 30<sup>st</sup> Pakistan Congress of Zoology (International), GC University Faisalabad on March 2<sup>nd</sup> -4<sup>th</sup>, 2010.
3. Participated in 31<sup>st</sup> Pakistan Congress of Zoology (International), University of Azad Jammu & Kashmir, Muzaffarabad on April 19<sup>th</sup> -21<sup>st</sup>, 2011.
4. Participated in 32<sup>nd</sup> Pakistan Congress of Zoology (International), Government College University, Lahore on March 6<sup>th</sup> -8<sup>th</sup>, 2012.
5. Participated in educational activity titled “Research Ethics, Endnote and Turnitin” held in University of the Punjab, Lahore, Pakistan in October 2<sup>nd</sup> -3<sup>rd</sup>, 2012.
6. Participated in 33<sup>rd</sup> Pakistan Congress of Zoology (International), Pakistan Museum of Natural History, Islamabad & PMAS Arid Agriculture University, Rawalpindi on April 2<sup>nd</sup> - 4<sup>th</sup>, 2013.
7. Attended “International Symposium on Molecular Forensic: Emerging Trends” held in University of Health Sciences, Lahore, Pakistan on May 29<sup>th</sup>, 2014.
8. Participated in “International Symposium on Advances in Molecular Biology of Plants and Health sciences” organized by Centre of Excellence in Molecular Biology (CEMB), University of the Punjab, Lahore, Pakistan in December 29<sup>th</sup>-31<sup>st</sup> 2015.
9. Participated in “CAMB Annual Sports Gala 2016” as a member of football team, held in Centre for Applied Molecular Biology (CAMB), University of the Punjab, Lahore, Pakistan in March 2016.
10. Participated in “Two-day workshop on Patent & Research Paper Writing” organized by National Centre of Excellence in Physical Chemistry, University of Peshawar, Pakistan on May 30<sup>th</sup>-31<sup>st</sup> 2016.
11. Participated in the seminar and hands on training on “Advances in Nucleic Acid Technology” held in Centre for Applied Molecular Biology (CAMB), University of the Punjab, Lahore, Pakistan on September 1<sup>st</sup>, 2016.



12. Participated in “Awareness Seminar on Lungs and Bronchial Diseases” held in Centre for Applied Molecular Biology (CAMB), University of the Punjab, Lahore, Pakistan on November 17<sup>th</sup>, 2016.
13. Participated in 38<sup>th</sup> Pakistan Congress of Zoology (International), Pakistan Department of Zoology, University of the Punjab, Lahore on February 27<sup>th</sup> – March 1<sup>st</sup>, 2018.
14. One day training program on “Academic Programs and Teaching: Innovate to Lead” at GC Women University Sialkot, March 2<sup>nd</sup>, 2019.
15. One day training on “Digital Library” GC Women University Sialkot, April 26<sup>th</sup>, 2019.
16. Community Basic Life Support & Fire Safety Orientation Course” conducted by Punjab Emergency Services, at Govt. College Women University Sialkot, 15<sup>th</sup> May 2019 to 16<sup>th</sup> May 2019.
17. Three days training on ‘How to Conduct Online Classes’, Govt. College Women University Sialkot, 21<sup>st</sup>-23<sup>rd</sup> April 2020.
18. NBEAC online training: “Effective Distance Learning in COVID-19 Lock Down, May 4<sup>th</sup> 2020.
19. Attended “Five-day online Faculty Orientation Training Workshop”, conducted by Punjab Higher Education Commission (PHEC), from September 28<sup>th</sup>, 2020, to October 2<sup>nd</sup>, 2020.
20. Attended Online Teaching Level-1 course offered by National academy of Higher education, Islamabad from March 20<sup>th</sup> 2021 to April 10<sup>th</sup> 2021 and won 2<sup>nd</sup> position by attaining 94.7% marks.
21. Attended Seminar on “COVID’19 and Vaccination Campaign in Italy at Glance”, held on 22<sup>nd</sup> November 2021 at Govt. College Women University Sialkot.
22. Attended “World Fisheries Day” held on 8<sup>th</sup> December 2021 at Govt. College Women University Sialkot.
23. Attended Professional Development of faculty 2022 held at Govt. College Women University Sialkot, from June 20<sup>th</sup>, 2022, to July 1<sup>st</sup>, 2022, Funded by Higher Education Commission, Islamabad.
24. Attended Seminar on Emergence of Antibiotic resistance in World, held on 24<sup>th</sup> October 2022 at Govt. College Women University Sialkot.
25. Attended Seminar on “Thalassemia” held on 14<sup>th</sup> November 2022 at Govt. College Women University Sialkot.
26. Attended training on “Atomic Absorption Spectroscopy” held on 23<sup>rd</sup> November 2022 at Govt. College Women University Sialkot.
27. Attended Information Literacy sessions held on 24<sup>th</sup> November 2022 at Govt. College Women University Sialkot.
28. Attended Seminar on “Recent Trends in Fisheries and Aquaculture” held on 30<sup>th</sup> November 2022 at Govt. College Women University Sialkot.
29. Attended one day seminar on “Research and Publication Ethics in Science” Organized by Department of Botany Govt. College Women University Sialkot, on November 7<sup>th</sup>, 2023.
30. Participated in one-day seminar on “World Fisheries Day” Organized by Department of Zoology Govt. College Women University Sialkot, on November 28<sup>th</sup>, 2023.
31. Participated in one-day seminar on “World AIDS Day” Organized by Department of Zoology Govt. College Women University Sialkot, on December 5<sup>th</sup>, 2023.

32. Participated in Hands-on Workshop on Patent Writing/Drafting and Submission conducted by Punjab Higher Education Commission (PHEC) at Veterinary Academy, University of Veterinary & Animal Sciences (UVAS), Lahore on September 12<sup>th</sup> to September 13<sup>th</sup>, 2024.
33. Participated in Hands-on training on Handling of Laboratory Animals in Biomedical Research organized by Zoological Society in Collaboration with ORIC Govt. College Women University Sialkot on October 15<sup>th</sup>-16<sup>th</sup>, 2024.
34. Participated in Anti dengue campaign (Seminar/walk) on Collaborative and Comprehensive Approaches towards Dengue Management organized by Dengue Management Committee Govt. College Women University Sialkot on November 04<sup>th</sup>, 2024.
35. Participated in Seminar on Awareness seminar on Shrimp Farming organized by Department of Zoology Govt. College Women University Sialkot on December 04<sup>th</sup>, 2024.

### **Additional Professional Responsibilities**

- Member Ph.D. Admission Committee, Institute of Zoology (Formerly Department of Zoology), University of the Punjab, Quaid-i-Azam Campus, Lahore, Pakistan.
- Member Stock Checking Committee in Institute of Zoology, University of the Punjab, Quaid-i-Azam Campus, Lahore.
- Member BS/M.Sc. Admission Committee, Institute of Zoology, University of the Punjab, Quaid-i-Azam Campus, Lahore, Pakistan.
- Member Dengue Committee, University of the Punjab, Lahore.
- Examiner for BSc, M.Sc. Practical Examination.
- In charge Sports Gala 2015, Institute of Zoology, University of the Punjab, Quaid-i-Azam Campus, Lahore, Pakistan.
- Member Scholarship Committee, Centre for Applied Molecular Biology (CAMB) University of the Punjab, Lahore.
- Member Board of Studies in Forensic Science, University of Central Punjab, Lahore (March 11, 2017- to date).
- Member Tour Management Committee, Centre for Applied Molecular Biology (CAMB) University of the Punjab, Lahore.
- Chairman Sports/ Event Coordination Committee, Centre for Applied Molecular Biology (CAMB) University of the Punjab, Lahore.
- Nominated for Monitoring Examination Centres of B.A/B.Sc. etc. Annual and Supplementary Examination, 2016.
- Member "Journal Club Committee of CAMB", Centre for Applied Molecular Biology (CAMB) University of the Punjab, Lahore.
- Member/Secretary Plantation Committee, GC Women University.
- Focal Person for LMS, Department of Zoology, Govt. College Women University Sialkot, Pakistan.
- Member, Committee for Health Profiling of Students, Govt. College Women University Sialkot, Pakistan.
- Focal Person/member COVID-19 SOP's Implementation Committee, Govt. College Women University Sialkot.
- Coordinator MSc Degree Program (Session 2020-2022), Department of Zoology, Govt College Women University, Sialkot.



- Departmental focal person for admission and coordinator for MSc Zoology Session 2021-2023, Govt. College Women University Sialkot.
- Member Technical Committee for Equipment, Department of Zoology, Govt. College Women University Sialkot.
- Convener, Chemical Committee, Department of Zoology, Govt. College Women University Sialkot.
- Prepared draft for PC-1 for Natural History Museum, Govt. College Women University Sialkot.
- Member “Departmental Research Program Committee”, Department of Zoology, Govt. College Women University, Sialkot
- Convener/Focal Person "Dengue Management Committee", Govt. College Women University, Sialkot
- Focal person, “Flood Relief Fund Raising” Department of Zoology, Govt. College Women University Sialkot.
- Member Technical Committee for Equipment, Department of Zoology, Govt. College Women University, Sialkot.
- Departmental focal person for admission and coordinator for BS Zoology Session 2023-2027, Govt. College Women University Sialkot.
- Departmental focal person for Bike Scheme 2024, Govt. College Women University Sialkot.
- Departmental focal person of Scholarships Department of Zoology, Govt. College Women University Sialkot.
- Member of MS Biotechnology Synopsis Approval Committee 2023 at University of Management and Technology Sialkot

#### External Examiner, M. Phil. Viva Examination

1. University of Central Punjab (UCP), Lahore (2017).
2. COE in SSP, University of the Punjab, Lahore (2023 and 2024).

#### Thesis Supervised

##### Supervisor

##### Completed M. Phil. [19]

1. Maryam Abbas	2015-17	Maternal Genetic Characterization of Yashkun from Gilgit-Baltistan of Pakistan
2. Maha Almas	2015-17	NLR5-Dependent Activation of Inflammasome in Diabetic Cardiomyopathy
3. Khushbukhat Khan	2015-17	Mitochondrial DNA Control Region Variants Analysis in Balti Population of Gilgit-Baltistan
4. Rimsha Zulfiqar	2017-19	Identification of Biomarkers for Diabetic Nephropathy
5. Humaira Sarfraz	2018-20	Expression analysis of AIM-2 gene in diabetic kidney patients
6. Zainab Arshad	2018-20	Role of PYCARD in diabetic Nephropathy
7. Mehwish Rafiq	2018-20	Role of NLRP3 and IL-18 in diabetic kidney disease
8. Aqsa Anjum	2019-21	Risk Assessment of Recombinant Avian Influenza Hemagglutinin (HA) Protein in Albino Mice.
9. Ayesha Younas	2019-21	Association Analysis of <i>Kruppel like factor 1</i> (KLF1) Genetic Polymorphisms with Hydroxyurea Response in $\beta$ -Thalassemia Patients

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|--------------------|---------|---|
| 10. Wajiha Iqbal   | 2019-21 | Association Analysis of SAR1A Genetic Polymorphisms with Hydroxyurea Response in $\beta$ -Thalassemia Patients                            |
| 11. Amina Shafique | 2019-21 | <i>E.coli</i> Expression of 7 Recombinant DICAMBA (2-methoxy-3, 6- dichlorobenzoic acid) Protein and its Polyclonal Antibody Production.  |
| 12. Fatima         | 2020-22 | Expression Analysis of Caspase 1 Gene in Diabetic Nephropathy   |
| 13. Shawal Azhar   | 2020-22 | Association Analysis of Myeloblastosis (MYB) Genetic Polymorphism with HbF Level in $\beta$ -Thalassemia Patients                         |
| 14. Ammara Bibi    | 2020-22 | Association Analysis of Vascular Endothelial Growth Factor A (VEGFA) Genetic Polymorphism with HbF Level in $\beta$ -Thalassemia Patients |
| 15. Sehrish Naz    | 2020-22 | Expression Analysis of NLRC5 in Patients with Diabetes having Nephropathy   |
| 16. Rabia Afzal    | 2021-23 | Analysis of GATA Binding factor 1 (GATA-1) Genetic Polymorphism Association with HbF Level in $\beta$ -Thalassemia Patients               |
| 17. Tahara Ashraf  | 2021-23 | Analysis of Hemoglobin Subunit Beta Pseudogene 1 (HBBP1) Genetic Polymorphism Association with HbF Level in $\beta$ -Thalassemia Patients |
| 18. Iman Qaisar    | 2021-23 | Analysis of Hemoglobin Subunit Gamma 1 (HBG1) Genetic Polymorphism Association with HbF Level in $\beta$ -Thalassemia Patients            |
| 19. Husna Shahzadi | 2021-23 | Analysis of HBS1 Like Translational GTPase-Myeloblastosis (HPS1L-MYB) Genetic Polymorphism  |

**On-going M. Phil. [03]**

- |                  |         |   |
|------------------|---------|---|
| 1. Dua-I-Fatima  | 2022-24 | Association Analysis of Haemoglobin Subunit Gamma 2 (HBG2) Genetic Polymorphism with Variable Level of Fetal Haemoglobin in $\beta$ -Thalassemia Patients |
| 2. Wafa-I-Fatima | 2022-24 | Association Analysis of Haemoglobin Subunit Delta (HBD) Genetic Polymorphism with Fetal Haemoglobin in $\beta$ -Thalassemia Patients                      |
| 3. Fatima        | 2022-24 | Association Analysis of $\beta$ -Globin Gene (HBB) Genetic Polymorphism in Disease Severity of $\beta$ -Thalassemia Patients                              |

**Co-Supervisor****Completed M. Phil. [03]**

- |                    |         |  |
|--------------------|---------|--|
| 1. Maryam Jaffar   | 2015-17 | Genetic Characterization of Hunza People from Mitochondrial DNA Control Region Data.         |
| 2. Zainab Fazal    | 2015-17 | Genetic Characterization of Yousafzai Population from Mitochondrial DNA Control Region Data. |
| 3. Haseeb Ali Khan | 2015-17 | Genetic Characterization of Shinwari Population from Mitochondrial DNA Control Region Data.  |

**Ongoing PhD [02]**

- |                   |      |                   |
|-------------------|------|-------------------|
| 1. Farwa          | 2024 | Course Work Phase |
| 2. Tafseer Fatima | 2024 | Course Work Phase |

### **Languages**

- English
- Urdu

### **Countries visited**

- Singapore
- Thailand

### **References**

1. Prof. Dr. Tanveer Akhtar  
Ex-Dean Faculty of Life Sciences,  
University of Punjab, Quaid-e-Azam Campus,  
Lahore, Pakistan.  
Email: dr\_tavnveerakhtar@yahoo.com  
Phone: 0332-4983654
2. Prof. Dr. Muhammad Akhtar  
Ex-Dean Faculty of Life Sciences,  
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