

CURRICULUM VITAE

IRAM ANJUM, PhD

Associate Professor
 Head of Biotechnology Department
 Kinnaird College for Women
 93-Jail Road, Lahore, Pakistan.
 Phone: +923224059694
 Email: iram.anjum@kinnaird.edu.pk
 ORCID ID: <https://orcid.org/0000-0002-9015-3179>

EDUCATIONAL QUALIFICATIONS

PhD (Biotechnology) **2011**
 Quaid-i-Azam University, Islamabad, Pakistan.

Research conducted at: National Institute for Biotechnology and Genetic Engineering,
 Faisalabad, Pakistan.

&
 Wilhelm Johannsen Centre for Functional Genome Research,
 Department of Cellular and Molecular Medicine,
 University of Copenhagen, Denmark.

Dissertation Title: Molecular Genetic Analysis of Autosomal Recessive Primary
 Microcephaly and Eye Disorders in Pakistani Kindreds
 (<http://eprints.hec.gov.pk/9656/1/1885S.htm>)

MSc (Zoology) **2003**
 Bahauddin Zakariya University, Multan, Pakistan.

Thesis Title: Checklist of the Birds of Pakistan

BSc (Biological Sciences) **2000**
 Kinnaird College for Women, Lahore, Pakistan.

FACULTY APPOINTMENTS

Associate Professor **Oct, 2020-Current**
 Department of Biotechnology
 Kinnaird College for Women, Lahore, Pakistan
 (<http://www.kinnaird.edu.pk/personnel/dr-iram-anjum/>)

Head of Department **May, 2017-Current**
 Department of Biotechnology
 Kinnaird College for Women, Lahore, Pakistan

Assistant Professor **Nov, 2011-Oct2020**
 Department of Biotechnology
 Kinnaird College for Women, Lahore, Pakistan.

Lecturer

Department of Biotechnology
Kinnaird College for Women, Lahore, Pakistan.

Sept,2010-Oct, 2011

Ordinary and Advanced Levels Biology Instructor

Bloomfield Hall School System,
Multan, Pakistan.

Aug,2003-Dec, 2003

RESEARCH EXPERIENCE**Visiting Research Associate**

Wilhelm Johannsen Centre for Functional Genome Research,
Department of Cellular and Molecular Medicine,
University of Copenhagen, Denmark.

Feb, 2008-Dec, 2008

Senior Research Associate

Human Molecular Genetics Laboratory, Health Biotechnology Division,
National Institute for Biotechnology and Genetic Engineering,
Faisalabad, Pakistan.

May, 2006-Jun,2010

Junior Research Associate

Department of Animal Sciences
Quaid-i-Azam University, Islamabad, Pakistan.

Feb, 2004- May, 2006

Research Fellow

Department of Applied & Pure Sciences
Bahauddin Zakariya University, Multan, Pakistan.

Jun, 2002-Jun, 2003

PROGRAMS LAUNCHED (AS HEAD BIOTECHNOLOGY)

- **MPhil Biotechnology** Aug, 2018
with approval and issuance of NOC from Higher Education Commission
Pakistan
- **BS Genetics** Aug, 2018
First Genetics undergraduate program in Punjab and 4th in Pakistan

RESEARCH SUPERVISION

Supervised research projects and finalized research reports of **45 undergraduate** research students in various areas of Health Biotechnology and Human Molecular Genetics. **9 MPhil** students have worked in my genetic disorders research group and completed their dissertation. Currently supervising **2 undergraduate** and **2 MPhil** students. Also co-supervising **3 PhD** students:

- **Aysha Saeed**
Synopsis: Homozygosity Mapping of Families Affected with Primary Microcephaly and Disease Modelling in Drosophila Melanogaster
- **Komal Aslam**
Synopsis: Genetic Analysis of Autosomal Recessive Primary Microcephaly and its Genotype Phenotype Correlation in Pakistani Population.
- **Roeha Akhtar**
Synopsis: Under preparation

PUBLICATIONS

- Baig SM, Din MA, Hassan H, Baig JM, Azhar A, Aslam M, Farooq M, Hussain MS, Rasool M, **Anjum I**, Nawaz S, Qureshi JA, Zaman T. (2008). "Prevention of β -thalassaemia in a large Pakistani family through cascade testing." *Community Genetics* 11(1):68-70. (DOI:10.1159/000111)
- Hansen L, Mikkelsen A, Nürnberg P, Nürnberg G, **Anjum I**, Eiberg H, Rosenberg T. (2009). "Comprehensive mutational screening in a cohort of families with hereditary congenital cataracts detects mutation in 74%." *Investigative Ophthalmology and Visual Science* 50 (7):3291-3303. (DOI: <https://doi.org/10.1167/iovs.08-3149>)
- Muhammad F, Baig SM, Hansen L, Hussain MS, **Anjum I**, Aslam M, Qureshi JA, Toilat M, Kirst E, Wajid M, Nürnberg P, Eiberg H, Tommerup N, Kjaer KW. (2009). "Compound heterozygous ASPM mutations in Pakistani MCPH families." *American Journal of Medical Genetics A*; 149 A (5):926-930. (DOI:10.1002/ajmg.a.32749)
- **Anjum I**, Eiberg H, Baig SM, Tommerup N, Hansen L. (2010). "A mutation in the *FOXE3* gene causes congenital primary aphakia in an autosomal recessive consanguineous Pakistani family." *Molecular Vision* 16: 549-555. (PMCID: PMC2846847)
- Hussain MS, Bakhtiar SM, Farooq M, **Anjum I**, Janzen E, Toliat MR, Eiberg H, Kjaer KW, Tommerup N, Noegel AA, Nurnberg P, Baig SM, Hansen L. (2012)"Genetic heterogeneity in Pakistani microcephaly families." *Clinical Genetics* Vol 6: 999-104. (DOI: 10.1111/cge.12955)
- **Anjum I**, Ajmal S. (2017) "Consanguinity and Lipid Profile Variations in Various Clans of Pakistani." *International Journal of Advanced Research* 5(5): 101-114. (DOI:10.21474/IJAR01/4084)
- Aqueel R, Anjum I. (2019). "Beta Thalassemia: A Not So Rare Genetic Disorder in Pakistan". *Journal of Natural and Applied Sciences Pakistan* 1 (1):1-7.
- William B, Riaz I, Mubashir S, Aslam K, Saeed A, Anjum I. (2019). "Dyslipidemia as a Risk Factor for Developing Hypertension and Cardiovascular Disease in Females of Reproductive Age". *Journal of Natural and Applied Sciences Pakistan* 1(2): 139-147.
- Anjum S, **Anjum I**, Hano C, Sidra K. (2019). Advances in Nanomaterials as Novel Elicitors of Pharmacologically Active Plant Specialized Metabolites: Current Status and Future Outlooks. *RSC Advances*. 9: 40404-40423. (DOI: <https://doi.org/10.1039/C9RA08457F>)
- Saleem K, Khurseed Z, Anjum S, Hano C, **Anjum I**. (2019). Theranostic Applications of Nanomaterials in Leishmaniasis: A Focus on Recent Advances and Challenges. *Nanomaterials*. 9: 1749-1766. (DOI: <https://doi.org/10.3390/nano9121749>)
- Shafiq M, Anjum S, Hano C, **Anjum I**. (2020). An Overview of the Applications of Nanomaterials and Nanodevices in Food Industry. *Foods*. (DOI: 10.3390/foods9020148)
- Rasool S, Baig JM, Moawia A, Ahmad I, Iqbal M, Waseem SS, Asif M, Abdullah U, Makhdoom EH, Kaygusuz E, Zakaria M, Ramzan S, Haque S, Mir A, **Anjum I**, Fiaz M, Ali Z, Tariq M, Saba N, Hussain W, Budde B, Irshad S, Noegel AA, Höning S, Baig SM, Nürnberg P, Hussain MS. (2020). "An update of pathogenic variants in WDR62, CDK5RAP2, ASPM, CENPJ, STIL and CEP135 underlying autosomal recessive primary microcephaly in 32 consanguineous families from Pakistan." *Molecular Genetics & Genomic Medicine*. e1408.(DOI: <https://doi.org/10.1002/mgg3.1408>)
- Aslam K, Jabeen S, Jafri SS, Saeed A, **Anjum I**. (2020). "The Molecular Genetics of Selective Tooth Agenesis". *Journal of the Pakistan Medical Association*. (DOI: <https://doi.org/10.5455/JPMA.42628>)
- Shah SH, **Anjum I**, Majeed T. (2021). "Prevalence of Skin Complications Due to the Use of Skin Whitening Creams among Women of Lahore, Pakistan." *Journal of Pakistan Association of Dermatologists*; 31(1):33-41.
- Makhdoom, EUH, Waseem, SS, Iqbal M, Abdullah U, Hussain G, Asif M, Budde B, Höhne W, Tinschert S, Saadi SM, Yousaf H, Ali Z, Fatima A, Kaygusuz E, Khan A, Jameel M, Khan S, Tariq M, **Anjum I**, Altmüller J, Thiele H, Höning S, Baig SM, Nürnberg P and Muhammad Sajid Hussain MS. (2021). Modifier Genes in Microcephaly: A Report on WDR62, CEP63, RAD50 and PCNT Variants Exacerbating Disease Caused by Biallelic Mutations of ASPM and CENPJ. *Genes*; (12):731. (DOI: <https://doi.org/10.3390/genes12050731>)

PUBLISHED ABSTRACTS

- Aslam K, Saeed A, Khan AK, Saeed HI, Nathaniel S, **Anjum I.** “The Genetic Landscape of Two Primary Microcephalic Families So Far”. Kinnaird’s 1st International Conference on Science, Technology and Innovation, 2-4 April, 2019. Kinnaird College for Women, Lahore. (Oral Presentation)
- Saeed A, **Anjum I.** “Molecular Characterization of a Multigenerational Kindred Affected with Autosomal Recessive Primary Microcephaly”. Kinnaird’s 1st International Conference on Science, Technology and Innovation, 2-4 April, 2019. Kinnaird College for Women, Lahore. (Oral Presentation)
- Khan AK, Aslam K, Saeed A, **Anjum I.** “Exclusion Mapping of Three Microcephalic Families with the *ASPM* Gene.” Kinnaird’s 1st International Conference on Science, Technology and Innovation, 2-4 April, 2019. Kinnaird College for Women, Lahore. (Poster Presentation)
- Fawad A, Saleem G, Hashmi S, Saeed A, **Anjum I.** “Prevalence of CYP19A1 Polymorphism rs2414096 in Females Affected with Polycystic Ovarian Syndrome in Pakistan”. Kinnaird’s 1st International Conference on Science, Technology and Innovation, 2-4 April, 2019. Kinnaird College for Women, Lahore. (Poster Presentation).
- Saeed A, Aslam K, Sabir S, Khan HM, Jamil I, Khan AK, Saeed HI, **Anjum I.** “ASPM Not the Underlying Causative Gene for 20 Families Affected with Autosomal Recessive Primary Microcephaly”. 30-31 March, 2019. *Emerging Scientist 2019*, 30-31 March, 2019. Asian Council of Science Editors, Faisalabad, Pakistan. (Poster Presentation)
- **Anjum I,** Zulfiqar H, Nawaz A. “Effect of Zinc, Iron, Calcium and Magnesium on the Severity of Premenstrual Syndrome in Healthy Females”. *International Conference of Biochemistry, Biotechnology and Biomaterials*, 22-24 February, 2016. University of Agriculture, Faisalabad, Pakistan.
- Zahid H, **Anjum I.** “Elevated Risk of Developing Heart Diseases among Welders”. *International Conference of Biochemistry, Biotechnology and Biomaterials*, 22-24 February, 2016. University of Agriculture, Faisalabad, Pakistan.
- **Anjum I,** Gul S, Hamid W. “Assessment of Major Health Risk Factors in Workers from Plastic and Leather Industry”. 6th Annual Public Health Conference 2015, 11-12 December, 2015. Health Services Academy, Islamabad, Pakistan.
- Hussain MS, Baig SM, Farooq M, **Inayat IA,** Kirst E, Aslam M, Wajid M, Toilat MR, Qureshi J A, Nurnberg P. Genetic analysis of autosomal recessive primary microcephaly in Pakistani kindreds. *EJHG* 16(S2):328. *European Society of Human Genetics (ESHG) Conference*. 31 May–June 3, 2008. Barcelona Spain.
- Rehman S, **Anjum I,** Ahmad I, Tariq M, Ali A, Qureshi JA, Baig SM. “Molecular genetics of autosomal recessive primary microcephaly (MCPH) in the Pakistani families. “*International conference on Medical and Community Genetics*, 15-17 February, 2008. Chandigarh, India.
- **Anjum I,** Azhar A, Awan FR, Qureshi JA, Baig SM. “Spectrum and regional specificity of β -thalassaemia mutations in various regions of Punjab, Pakistan.” *Genomic Disorders 2007*, 21–23 March, 2007, p:67. Wellcome Trust Conference Center, Genome Campus, Hinxton, Cambridge, UK.
- Hussain MS, Farooq M, Rasool M, **Anjum I,** Nawaz S, Qureshi JA, Baig SM. “Locus heterogeneity study of autosomal recessive primary microcephaly in Pakistani kindreds.” *Genomic Disorders 2007*, 21– 23 March, 2007, p:77. Wellcome Trust Conference Center, Genome Campus, Hinxton, Cambridge, UK.

TEACHING EXPERIENCE

Developed syllabus and overall course structures of the following undergraduate/postgraduate courses including weekly laboratory practicum and administered all grades as well as projects/presentations in accordance with each course.

- Latest Trends in Health Biotechnology (BIOT601)–postgraduate course
- Medical Genetics (BCH 514)–postgraduate course

- Genetic Diseases in Pakistan (BIOT204)-undergraduate course
- Essentials of Genetics (BIOT212)-undergraduate course
- Principles of Genetics (GEN202)-undergraduate course
- Classical Genetics (BIOT214)-undergraduate course
- Animal Physiology (BIOT303)-undergraduate course
- Animal Biotechnology (BIOT314)-undergraduate course
- Scientific & Review Writing (BIOT404)-undergraduate course
- Seminar(BIOT412)-undergraduate course
- Animal Form and Function (ZOOL202)-undergraduate course
- Comparative Animal Physiology (ZOOL301)-undergraduate course

OTHER RESPONSIBILITIES/ACTIVITIES

- **Executive Board Member**
Lahore Diocesan Board of Education (LDBE)
- **Board Member**
Pakistan Fellowship of Evangelical Students (PFES)
- **Member Institutional Scholarship Award Committee**
Kinnaird College for Women, Lahore
- **Member TTS Committee**
Kinnaird College for Women, Lahore
- **Member Building Committee**
Kinnaird College for Women, Lahore
- **Member Lab Management Committee**
Kinnaird College for Women, Lahore
- **Member Ethical Review Committee**
Kinnaird College for Women, Lahore.
- **Member Faculty Discipline Committee**
Kinnaird College for Women, Lahore
- **Member Postgraduate Research Fund Committee**
Kinnaird College for Women, Lahore.
- **Member Selection Board (Biotechnology)**
Kinnaird College for Women, Lahore
- **Member Editorial Board**
Journal of Natural and Applied Sciences Pakistan,
Kinnaird College for Women, Lahore
- **Advisor Christian Fellowship Society (since May 2016-August2018)**
Kinnaird College for Women, Lahore, Pakistan
- **HEC Approved PhD Supervisor (2012)**
Higher Education Commission, Pakistan
- **Research Project Reviewer for Medical Biotechnology**
Higher Education Commission, Pakistan
- **External Examiner (M.Sc., M.Phil. and PhD)**
University of Lahore, Pakistan.
- **External Examiner (M.Sc., M.Phil. and PhD)**
Government College University, Lahore, Pakistan
- **Certified Social Action Project Facilitator**
British Council Active Citizenship Program
British Council, Pakistan.

DISTINCTIONS & AWARDS

- **Recognition Award for winning HEC NRPU-2016**
Kinnaird College for Women, Lahore.

Apr, 2019

- **National Research Program for Universities 2016 (NRPU)** Apr,2017
Grant ID: 5884
Grant worth: 2.3million
Higher Education Commission, Pakistan.
- **Indigenous PhD Scholarship Award (Batch-II)** Feb, 2005
Higher Education Commission, Pakistan

MEMBERSHIPS

- **Molecular Care** (*Platinum member*) A project of Molecular Biology Lab, Department of Biochemistry, University of Agriculture, Faisalabad.
- **National Academy of Young Scientists.** (*Full time member*)

CONFERENCES, SYMPOSIA & WORKSHOPS (Organized)

- **Biosafety Training for Lab Attendants and Sweepers**
Kinnaird College for Women, Lahore.
August 24, 2019.
- **One Day Introductory STATA Workshop**
Kinnaird College for Women, Lahore.
April 12, 2019.
- **Kinnaird's 1st International Conference on Science, Technology and Innovation**
Kinnaird College for Women, Lahore.
April 2-4, 2019.
- **One Day Workshop entitled "Biosafety Training for Young Researchers"**
In collaboration with Fogarty International Center, NIH USA & PBSA
October 27, 2018.
- **Workshop entitled "Protein Modeling and Computer Aided Drug Designing"**
Kinnaird College for Women, Lahore.
September 29, 2018.
- **Seminar entitled "Role of Biotechnology in Animal Breeding"**
Kinnaird College for Women, Lahore.
May 04, 2018
- **Seminar entitled "Advancements in Stem Cell and Tissue Engineering Research"**
Kinnaird College for Women, Lahore.
April 11, 2018.
- **Seminar entitled "Next Generation Sequencing"**
Kinnaird College for Women, Lahore.
January 26, 2018.
- **Series of Workshops During the Seventeen Day Visit of Dr. Kevin Keen**
Kinnaird College for Women, Lahore.
March 14-31, 2012.

WORKSHOPS/TRAININGS/COURSES/CONFERENCES/SYMPOSIA (Management)

- **Developing Future Leaders**
Raising Executive Development Centre
Lahore University of Management Sciences, Lahore.
June 22-24, June 29-July 1, 2020.
- **Educational Leadership and Management (Diploma Course)**
Pakistan Institute of Management, Lahore.
July-September, 2019.
- **Women in Leadership**
Forman Christian College University, Lahore.
November (13,18,20), 2019.

- **Leaders in Science and Innovation Policy**
A Summer School for Policy Makers, Academic Leaders & Faculty
School of Science and Engineering,
Lahore University of Management Sciences, Lahore.
July 28-30, 2018.
- **02-Day Workshop on Strategic Management for HODs of Public Sector HEIs of Pakistan**
Learning & Innovation Division, Higher Education Commission, Lahore, Pakistan.
November 14-15, 2017.

WORKSHOPS/TRAININGS/COURSES/CONFERENCES (Biblical Studies)

- **Responsibility towards our Church**
IFES South Asia Webinar 5
20th November, 2020.
- **Responsibility towards our Society**
IFES South Asia Webinar 4
30th October, 2020.
- **Responsibility to our Universities**
IFES South Asia Webinar 3
18th September, 2020.
- **Responsibility to our Students**
IFES South Asia Webinar 2
14th August, 2020.
- **Responsibility to our Subject**
IFES South Asia Webinar 1
31st July, 2020.
- **Witness Workshop**
St. Andrew's Church, Lahore.
November, 2018.
- **Campus Mission 2007**
BEXCO Convention Centre, Busan, South Korea.
30th June-5th July, 2007.
- **The Discipleship Certificate**
The Open Theological Seminary Trust, Lahore.
January, 2004.
Coursework Completed:
 - Life of Christ-1
 - Life of Christ-2
 - Life of Christ-3
 - Life of Christ-4
 - Light of Bible
 - Abundant Life
 - Life of Paul-1
 - Life of Paul-2
 - Talking with God
 - Creator and the Creator
 - Christian Family Life
- **Tutor's Training Workshop (Level-I)**
Pakistan Committee for Theological Education by Extension
The Open Theological Seminary Trust, Lahore.
20th-21st June, 2003.

WORKSHOPS/TRAININGS/COURSES/CONFERENCES/SYMPOSIA

(Academic/Scientific/Social)

- **ProQuest Training on “How to Manage Your References using RefWorks”**
Online via ProQuest in collaboration with Higher Education Commission, Pakistan.
October 26, 2020.
- **ProQuest Training on “How to Utilize Proquest Journals, Dissertations and Varied Content Types in Teaching and Research”**
Online via ProQuest in collaboration with Higher Education Commission, Pakistan.
October 19, 2020.
- **Reframe Rare in Pakistan: Breaking Silos and Bringing Synergies**
Multidisciplinary Conference on Rare Genetic Diseases in Pakistan.
Agha Khan University, Karachi.
March 6-7, 2020.
- **Establishing Registries for Tracking Patient Outcomes**
Agha Khan University, Karachi.
March 5, 2020.
- **Bioinformatics Hands-On on IMD Genomics**
Agha Khan University, Karachi.
March 5, 2020.
- **2nd International Conference on Nanoscience and Nanotechnology (ICONN)**
SBA School of Science and Engineering,
Lahore University of Management Sciences, Lahore.
November 1-2, 2019.
- **Workshop on “Toxicological Screenings in the Process of New Drug Development”**
Kinnaird College for Women, Lahore.
April 4, 2019.
- **Workshop on “Innovative Aspects of Nanotechnology-An Interactive Session”**
Kinnaird College for Women, Lahore.
April 2, 2019
- **Kinnaird’s 1st International Conference on Science, Technology and Innovation**
Kinnaird College for Women, Lahore.
April 2-4, 2019.
- **Emerging Scientist 2019**
Asian Council of Science Editors, Faisalabad, Pakistan.
March 30-31, 2019.
- **Web of Science Conference**
Centre of Excellence in Molecular Biology, Punjab University, Lahore.
March 11, 2019.
- **International Symposium on “Genetic Disorders and Prevention”**
Department of Molecular Biology,
Virtual University of Pakistan, Lahore.
February 06-07, 2019.
- **Two Day Workshop on “Secondary Data Analysis”**
Department of Public Health (UHS) & Department of Economics (COMSATS), Lahore.
January 29-30, 2019.
- **International Workshop on “Latest Trends in Domestic and Wild Animal Genomics and Biotechnology”**
Department of Molecular Biology, Virtual University of Pakistan, Lahore.
November 21-22, 2018.
- **Workshop on “ISO 21001 Educational Organization Management System (EOMS)”**
Quality Enhancement Cell
November 3, 2018.

- **Two Day Training / Workshop of University & College Faculty on 'Career Counseling'**
Staff Development Academy, Punjab Higher Education Commission, Lahore.
January 9-10, 2018.
- **Practices for Career Path Development by Dr. Lizbeth England**
FCCU & Society of Pakistan English Language Teachers, FCCU, Lahore.
November 3, 2017.
- **Workshop on "Bioinformatics and Computational Drug Designing"**
Kinnaird College for Women, Lahore.
January 27-28, 2017.
- **5th International Symposium on "Biomedical Materials (Clinical Requirements and Regulatory Affairs)"**
*Interdisciplinary Research Centre in Biomedical Materials,
Comsats Institute of Information Technology, Lahore.*
December 14-16, 2016.
- **British Council Active Citizens Training of Facilitators**
British Council Pakistan & Kinnaird College for Women, Lahore.
August 15-19, 2016.
- **National Symposium on "Potential Impact of Genetic Testing & Counseling"**
Department of Molecular Biology, Virtual University of Pakistan, Lahore.
August 4, 2016.
- **Workshop on "Different Forms of Research Designs and Steps in Planning for a Research Grant Application"**
Forman Christian College, Lahore.
April 22, 2016.
- **Workshop on "From Research Idea to Research Question and Developing Theoretical Concepts"**
Forman Christian College, Lahore.
April 22, 2016.
- **ICGEB Course on "Basic Biotechnology Techniques"**
Centre of Excellence in Molecular Biology, Punjab University, Lahore.
March 7-9, 2016.
- **2nd International Conference on "Biotechnology: Challenges and Opportunities in Pakistan"**
University of South Asia, Lahore
February 24-25, 2016.
- **International Conference of Biochemistry, Biotechnology and Biomaterials**
University of Agriculture, Faisalabad, Pakistan.
February 22-24, 2016.
- **International Symposium on Advances in Molecular Biology of Plants & Health Sciences**
Centre of Excellence in Molecular Biology, Punjab University, Lahore, Pakistan.
December 29-31, 2015.
- **2nd National Students Conference on Biological Sciences**
Co-chairperson of session on *Health Biotechnology*
National Institute for Biotechnology and Genetic Engineering, Faisalabad, Pakistan.
October 12-14, 2015.
- **Training Workshop on "Developing and Assessing Proposals"**
Higher Education Commission Tertiary Education Support Program
Higher Education Commission, Islamabad, Pakistan.
October 9-10, 2015.
- **Alternative Assessments in Service Training Workshop**
Kinnaird College for Women, Lahore, Pakistan.
March 07, 2014.

- **Teach the Teacher Training Workshop**
Kinnaird College for Women, Lahore, Pakistan.
October 18, 2012.
- **Workshop on LaTeX**
Kinnaird College for Women, Lahore, Pakistan.
March 22, 2012.
- **Workshop on Matlab**
Kinnaird College for Women, Lahore, Pakistan.
February 25, 2012.
- **Workshop on Turnitin**
Kinnaird College for Women, Lahore, Pakistan.
February 9, 2012.
- **Higher Education Commission Workshop on Micro-teaching**
Kinnaird College for Women, Lahore, Pakistan.
December 1, 2011.
- **Latest Techniques in Conservation of Animal Genetic Resources of Pakistan**
University of Veterinary and Animal Sciences, Lahore, Pakistan.
September 14-15, 2011.
- **Cell Biology Cluster and Postgraduate School (5th Annual Meeting)**
LO-Skolen, Helsingør, Denmark.
November 6-7, 2008.
- **2nd International Summer School in Functional Genomics**
*Wilhelm Johannsen Centre for Functional Genome Research,
University of Copenhagen, Denmark.*
August 18-29, 2008.
- **Genomic Disorders 2007** (Wellcome Trust Scientific Conference)
*Wellcome Trust Conference Centre
Wellcome Trust Genome Campus, Hinxton, Cambridge, UK.*
March 21-23, 2007.
- **Workshop on “Intelligent Data Analysis Methods in Functional Genomics”**
*Centre for Advanced Studies in Mathematics
Lahore University of Management Sciences, Lahore.*
March 17-18, 2007.
- **24th Pakistan Congress of Zoology** (International congress)
Allama Iqbal Open University, Islamabad, Pakistan.
March 30- April 1, 2004.
- **National Guards Training**
*Kinnaird College for Women,
May 20, 1996-March 6, 1997.*

RESEARCH PROJECTS

- **Project ID: 5884 (ONGOING)**
Role: Principal Investigator
Title: Molecular Characterization of Families Affected with Primary Microcephaly
Grant: PKR 2.36 million
Funding Agency: Higher Education Commission (under NRP), Islamabad.
- **Project ID: 2492 (COMPLETED)**
Role: CO-Principal Investigator
Title: Effect of Light-emitting Diodes on Plant-mediated Biosynthesis, Morphology, Anti- cancerous and Antimicrobial activities of Smart Metallic Bombs (Silver and Zinc Oxide Nanoparticles)
Grant: PKR 0.43 million
Funding Agency: Higher Education Commission (under SRGP), Islamabad.

RESEARCH COLLABORATIONS

- **Prof. Dr. Alain VERLOES** **2016**
 Département de Génétique
 Hôpital Robert DEBRE
 48 d SERURIER
 Fr 75019 Paris, France
- **Prof. Dr. Shahid Mehmood Baig** **2018**
 Human Molecular Genetics Laboratory,
 National Institute for Biotechnology and Genetic Engineering,
 Faisalabad, Pakistan.
 Part of the International Research Consortium of the following
 Universities/R&D Institutions:

 - Uppsala University, Sweden
 - Copenhagen University, Denmark
 - Cologne University, Germany
 - Lubeck University, Germany
 - Beijing Genomic Institute (BGI), China
 - Genetron Health Beijing, China
 - Duke University, USA.
- **Prof. Stylianos E. Antonarakis** **2019**
 Department of Genetic Medicine and Development
 University of Geneva Medical School
 1, rue Michel-Servet,
 1211 Geneva 4, Switzerland.
- **Prof. Dr. Christophe Hano** **2019**
 Université d` Orleans
 Laboratoire de Biologie des Ligneux et des Grandes Cultures
 EA1207, INRA USC1328
 COM`ACTTIFS, GDR CNRS3711
 E`uipe LIGANS
 21 rue de Loigny la Bataille
 F28000 Chartres, France.
- **Prof. Bilal Haider Abbasi** **2020**
 Chairperson
 Department of Biotechnology
 Quaid-i-Azam University, Islamabad.