

Afia Muhammad Akram

Date of Birth: 27th July 1985
Nationality: Pakistani
Email: afiamakram@gmail.com
afiamakram@ue.edu.pk
Mobile: +923236009330
Marital status: Married
Official address: Department of Zoology, Division of Science and
Technology, University of Education, Township,
Lahore.

EMPLOYMENT HISTORY

- 25th March 2021-Present** **Associate Professor**
Division of science and technology, University of Education,
Lahore.
- Oct 2017 – March 2021** **Assistant Professor**
Division of science and technology, University of Education,
Lahore.
- April 2016- Sep 2017** **Assistant Professor**
Institute of molecular biology and biotechnology, The University
of Lahore, Lahore.
- Mar 2015-Mar 2016** **Assistant professor (Interim placement for fresh Ph.D.)**
Department of Biotechnology, University of Sargodha, Sargodha.
- Nov 2013- Mar 2015** **Visiting lecturer (Biology, Zoology)**
Department of Science Education, Institute of Education and
research, University of the Punjab, Lahore.
- Aug 2010-Aug 2012** **Research Associate**

Participated as research associate in HEC funded Project,
Department of zoology, University of the Punjab, Lahore.
- Oct 2009-Nov 2009** **Shaukat Khanum Memorial Cancer Hospital and Research
Centre (SKMCH&RC) Lahore.**

Elective Research Intern
Training for techniques in molecular biology.

ACADEMIC QUALIFICATION

2010-2014	Ph.D. Zoology University of The Punjab, Lahore.	
2008- 2010	M.S. Zoology University of The Punjab, Lahore.	3.93 CGPA
2004 – 2008	B.S. (Hons) Zoology University of The Punjab, Lahore.	3.86 CGPA
2001 – 2003	HSSC Pre-medical Majors: Biology, Physics and Chemistry. Federal Board of Intermediate and Secondary Education, Islamabad.	Result : 75%
1999-2001	SSC Science Majors: Biology, Physics and Chemistry. Federal Board of Intermediate and Secondary Education, Islamabad.	Result:76%

RESEARCH WORK

Ph.D.	Investigations of BCR-ABL kinase domain mutations and their association with Imatinib treatment in Chronic myeloid leukemia patients from Pakistan
M.S.	Frequency of TEL-AML1 fusion oncogene in acute lymphoblastic leukemia (ALL) patients of Pakistan.
B.S. (Hons)	Quantitative analysis of Low molecular weight Protein Profile of young obese human.

RESEARCH PROJECTS COMPLETED

Year 2015-16

Start up-research Grant (SRGP-HEC): Clinical relevance of Janus kinase 2 (JAK2) V617F mutation and JAK2 exon 12 mutations in chronic myeloproliferative disorders **(PKR 0.25m)**

Year 2018-22

National research Project for Universities (NRPU): Investigation Of CEBPA Gene Mutations and their Prognostic Significance In Acute Myeloid Leukemia (AML) Patients From Pakistan **(PKR 6.17m).**

RESEARCH PUBLICATIONS

Year	Publication	Impact factor
2022	Nawaf Al-anazi ¹ , Zafar Iqbal, Tanveer Akhtar, Ahmad M. Khalid, Aamer Aleem, Saba Shahzadi, Afia M. Akram et al. , Association of BCR-ABL Alternative Splice Variants with Disease Progression, Treatment Response and Survival in Chronic Myeloid Leukemia Patients Treated with Firstline Imatinib Monotherapy. <i>Adv. Life Sci.</i> 9(4): 612- 617.	0.63
2022	Afia Muhammad Akram, Mubashir Hassan , Asma Chaudhary, Sikandar Hayat, Qurban Ali, Taha Hussain, Amjad Zafar, Muhammad Arshad Javed. Identification and in silico analysis of novel alteration Arg420Gly in KIT proto oncogene among acute myeloid leukemia patients. <i>Scientific reports</i> , 12(1): 19252. doi: 10.1038/s41598-022-23934-y.	4.996
2021	Atia Rehman , Afia Muhammad Akram , Asma Chaudhary , Nadeem Sheikh , Zawar Hussain , Walaa F Alsanie, Rahat Abdul Rehman , Naila Hameed , Tayyaba Saleem , Amjad Zafar , Muhammad Absar , Zafar Iqbal , Alaa Alhazmi , Hosam Ali Baeshen, Zuhair M Mohammedsaleh, Samina Qamer, Samy Sayed, Ahmed Gaber. RUNX1 mutation and elevated FLT3 gene expression cooperates to induce inferior prognosis in cytogenetically normal acute myeloid leukemia patients. <i>Saudi Journal of Biological Science.</i> , 2021 Sep;28(9):4845-4851. doi: 10.1016/j.sjbs.2021.07.012.	4.219
2021	Asma Chaudhary, Zawar Hussain, Afia Muhammad Akram, Mohammed Alorabi, Noreen Sarwar, Rahat Abdul Rehman, Naveed Ahmad Khan, Muhammad Faiz Khan, Qandeel Minahal, Hesham Ali El Enshasy, Solleh Ramli, Ali TanKee Zuan, Alaa Alhazmij, Syed Mohammed Basheeruddin Asdaq, SaminaQamer, Mohamed Alkafafy, Impact of <i>Bacillus subtilis</i> supplemented feed on growth and biochemical constituents in <i>Labeo rohita</i> fingerlings. <i>Journal of king saud university- Science.</i> 33(8): 101668	4.01
2021	Majid Hussain, Syed Makhdoom Hussain, Razia Iqbal, M. Mudassar Shahzad, Syed Zakir Hussain Shah, Afia Muhammad Akram, Nisar Ahmad and Muhammad Zubair ul Hassan Arsalan. Effect of Citric Acid Acidified Moringa oleifera Seed Meal based Diet on Minerals Absorption, Carcass Composition and Hematological Indices of <i>Cirrhinus mrigala</i> Fingerlings. <i>Pakistan Journal of Zoology.</i> https://dx.doi.org/10.17582/journal.pjz/20190531050527	0.8
2021	Asma Chaudharya, Afia Muhammad Akrama, Qurat-ul-Ain Ahmada, Zawar Hussain, S. Zahra, Qandeel Minahala , S. Azhar, S. Ahmad, Sikandar Hayate , M. A. Javed, M. S. Haiderg , Q. Alie and S. Karita. Optimized biotransformation of acid-treated water melon peel hydrolyzate into ethanol. <i>Brazilian Journal of Biology</i> , 2023(83): e253009. doi.org/10.1590/1519-6984.253009.	1.36
2021	Afia Muhammad Akram, Asma Chaudhary, Humera Kausar , Faye Althobaiti , Afshan Syed Abbas , Zawar Hussain , Naz Fatima , Erum Zafar , Wajiha Asif , Umair Afzal , Zoufishan Yousaf , Amjad Zafar , Steve M. Harakeh , Samina Qamer. Analysis of RAS gene mutations in cytogenetically normal de novo acute myeloid leukemia patients reveals some novel alterations. <i>Saudi journal of biological Sciences</i> , 28(7): 3735-3740.	4. 219

2021	Asma Chaudhary, Afia Muhammad Akram, Ayesha Aihetasham, Zawar Hussain, Afshan Syed Abbas, Rahat Abdul Rehman, Qurat-ul-Ain Ahmad, AnjumTahira, Ayesha Saleem, Samina Qamer, Youssef Alghamdi, Samy F.Mahmoud, Samy Sayed. Punica granatum waste to ethanol valorisation employing optimized levels of saccharification and fermentation. <i>Saudi journal of biological Sciences</i> . 28(7): 3710-19.	2.82
2020	Ayesha Saleem, Ali Hussain, Asma Chaudhary, Qurat-ul-Ain, Ahmad, Mehwish Iqtedar, Arshad Javid & Afia Muhammad Akram. Acid hydrolysis optimization of pomegranate peels waste using response surface methodology for ethanol production. <i>Biomass Conversion and Biorefinery</i> . 2020): 1-12.	2.15
2020	Zafar Iqbal, Muhammad Absar , Amer Mahmood , Aamer Aleem , Mudassar Iqbal, Abid Jameel , Tanveer Akhtar , Sajjad Karim , Mahmood Rasool , Zeenat Mirza , Muhammad Khalid, Afia Muhammad Akram , Muhammad Farooq Sabar , Ahmad M Khalid, Khalid Aljarrah, Janhangir Iqbal, Muhammad Khalid, Ijaz H Shah, Nawaf Alanazi. Discovery and Protein Modeling Studies of Novel Compound Mutations Causing Resistance to Multiple Tyrosine Kinase Inhibitors in Chronic Myeloid Leukemia. <i>Asian Pacific Journal of cancer prevention</i> . 21 (12), 3517-3526.	Y
2020	Asma Chaudhary, Afia Muhammad Akram , Qurat-Ul-Ain Ahmad, Qandeel Minahal, Chaman Ara, Shagufta Andleeb, Mehwish Iqtedar And Qurban Ali. Rsm-Based Fermentative Ethanogenesis Employing Acid Hydrolysate Watermelon Peels. <i>Plant Cell Biotechnology and Molecular Biology</i> 21(63&64):63-77; 2020.	Y
2020	Asma Chaudhary, Qurat-ul-Ain Ahmad, Afia Muhammad Akram , Mehwish Iqtedar and Javed Iqbal Qazi. Effect of Sphingomonas sp., as a Probiotic on Survival, Growth and Biochemical Constituents of Vibrio anguillarum Challenged Labeo rohita Fingerlings. <i>Pakistan Journal of Zoology</i> , 1-11 DOI: https://dx.doi.org/10.17582/journal.pjz/20181009061048 .	0.790
2020	Asma Chaudhary, Qurat-ul-Ain Ahmad, Afia Muhammad Akram , Sadia Roshan and Javed Iqbal Qazi. Antagonistic Probioticity of Novel Bacterial Isolates from Pakistan against Fish Pathogen Pseudomonas fluorescens in Labeo rohita Fingerlings. <i>Pakistan Journal of Zoology</i> , 1-14. DOI: https://dx.doi.org/10.17582/journal.pjz/20191226131233	0.790
2019	Muhammad Mudassar Shahzad, Syed Makhdoom Hussain, Afia Muhammad Akram , Arshad Javid, Majid Hussain, Syed Zakir Hussain Shah and Asma Chaudhary. Improvement in Nutrient Digestibility and Growth Performance of Catla catla Fingerlings Using Phytase in Moringa oleifera Leaf Meal Based Diet. <i>Pakistan Journal of Zoology</i> , 52(1), 157-168.	0.790
2019	Syed Makhdoom Hussain, Anam Khalid, Muhammad Mudassar Shahzad*, Azhar Rasul, Afia Muhammad Akram , Nisar Ahmad, Fatima Khalid. Effect of dietary supplementation of selenium nanoparticles on growth performance and nutrient digestibility of common carp (Cyprinus carpio Linnaeus, 1758) fingerlings fed sunflower meal based diet. <i>Indian J. Fish.</i> , 66(3): 53-59, 2019.	0.23
2018	Afia Muhammad Akram , Humera kausar, Asma Chaudhary, Ahmad Mukhtar Khalid, Muhammad Mudassar Shahzad, Muhammad Waheed Akhtar,	3.182

	Muhammad Farooq Sabar, Nadia Sajid, Nawaf Al Anazi, Aamir Aleem, Zafar Iqbal. Detection of Exon 12 and 14 Mutations in Janus Kinase 2 Gene Including a Novel Mutant in V617F Negative Polycythemia Vera Patients from Pakistan. <i>Journal of cancer</i> , 9(23):4341-4345 .	
2017	Afia Muhammad Akram , Zafar Iqbal, Tanveer Akhtar, Ahmed Mukhtar Khalid, Muhammad Farooq Sabar, Mahmood Hussain Qazi, Zeba Aziz, Nadia Sajid, Aamer Aleem, Mahmood Rasool, Muhammad Asif, Saleh Aloraibi, Khaled Aljamaan & Mudassar Iqbal. Presence of novel compound BCR-ABL mutations in late chronic and advanced phase imatinib sensitive CML patients indicates their possible role in CML progression. <i>Cancer biology and therapy</i> , 18(4): 214–221 .	3.531
2016	Zafar Iqbal, Afia Muhammad Akram , Tanveer Akhtar, Aamer Aleem, Muhammad Farooq Sabar, Zeba Aziz, Nadia Sajid, Mahmood Rasool, Muhammad Asif, Mahmood Hussain Qazi, Saleh Oraibi, Ammara T Gill, Khalid Al Jamaan, Mudassar Iqbal, and Ahmad Mukhtar Khalid ³ Brief Research Report: Novel Compound BCR-ABL Mutations in Late Chronic Phase Imatinib Sensitive CML Patients Are Associated with Progression to Advance Disease Phase. <i>Blood</i> , 128 (22):3089 .	13.164
2015	Zafar Iqbal, Tanveer Akhtar, Tashfin Awan, Aamer Aleem, Noreen Sabir, Mahmood Rasool, Muhammad Absar, Afia M. Akram , Masood A. Shammam, Ijaz H. Shah, Muhammad Khalid, Abid S. Taj, Abid Jameel, Abdullah Alanazi, Ammara T. Gill, Jamil Amjad Hashmi, Akhtar Hussain, Muhammad Farooq Sabar, Ahmad M. Khalid, Mahmood Hussain Qazi, Sajjad Karim, Muhammad Hassan Siddiqi, Aamir Mahmood, Mudassar Iqbal, Anjum Saeed, Muhammad Imran Irfan. 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. <i>Molecular Diagnosis & Therapy</i> , 19(5): 277-87 .	2.896
2014	Afia Muhammad Akram , Tanveer Aktar and Zafar Iqbal, 2014. Survival assessment and optimization of BCR/ABL-KD amplification protocol for detection of Imatinib resistant mutations in Ph+ Chronic Myeloid Leukemia patients from Pakistan. <i>Gene therapy and molecular biology</i> , 16: 10-29 . Accession # 95761601	0.2
2012	Noreen Sabir, Zafar Iqbal, Aamer Aleem, Tashfeen Awan, Tahir Naeem, Sultan Asad, Ammara H Tahir, Muhammad Absar, Rana MW Hasanato, Sulman Basit, Muhammad Azhar Chishti, Muhammad Faiyaz Ul-Haque, Ahmad Mukhtar Khalid, Muhammad Farooq Sabar, Mahmood Rasool, Sajjad Karim, Mahwish Khan, Baila Samreen, Afia Muhammad Akram , Muhammad Hassan Siddiqi, et al, 2012. Prognostically Significant Fusion Oncogenes in Pakistani Patients with Adult Acute Lymphoblastic Leukemia and their Association with Disease Biology and Outcome. <i>Asian Pacific Journal of Cancer Prevention</i> , 13 : 3349-55 . DOI: 10.7314/APJCP.2012.13.7.3349	1.271

2011	Afia Muhammad Akram , Rida Ali, Nabila Roohi and Ayesha Ilyas, 2011. Quantitative Profiling of Serum Protein Fractions in Young Obese Human. <i>Pakistan Journal of Zoology</i> , 43(3): 489-495.	0.202
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ABSTRACTS PUBLISHED

Year	Abstract
2020	Zafar Iqbal, Muhammad Absar, Tanveer Akhtar, Nawaf Al-Anazi, Ahmad Khalid, Naila Batool Khalid, Muhammad Farooq Sabar, Sulman Basit, Aamer Aleem, Afia Muhammad Akram , Abid Jameel, Amer Mahmood. Identification of Genomic Variants Associated With Long Term Molecular Response to Tyrosine Kinase Inhibitors in Chronic Myeloid Leukemia. <i>EHA library. Iqbal Z. 06/12/20; 294666; EP748.</i>
2020	Zafar Iqbal, Muhammad Absar, Tanveer Akhtar, Nawaf Al-Anazi, Ahmad Khalid, Naila Batool Khalid, Muhammad Farooq Sabar, Sulman Basit, Aamer Aleem, Afia Muhammad Akram , Abid Jameel, Amer Mahmood. Next Generation Sequencing Identifies Common Mutational Signatures in Novel Genes Representing Different Biological Pathways Associated With Acute Transformation in Chronic Myeloid Leukemia. <i>EHA Library. Iqbal Z. 06/12/20; 294680; EP762</i>
2019	Zafar Iqbal, Muhammad Absar, Abid Jameel, Tanveer Akhtar , Sulman Basit, Aamer Mahmood, Aamir Aleem, Nawaf Alanazi, Ullah Anhar , Naila Batool Khalid , Sibtain Afzal , Jamil Amjad Hashmi , Afia M Akram, Khushnooda Ramzan, Mahmood Rasool , Muhammad Hasaan Aziz , Muhammad Farooq Sabar, Mudassar Iqbal, Ahmad Mukhtar Khalid. Investigations on Novel Gene Variants Associated with Longterm Response to Tyrosine Kinase Inhibitors (TKIs) in Chronic Myeloid Leukemia: Implication in TKI-Cessation Clinical Trails. <i>Blood 134 (Supplement_1): 2939 https://doi.org/10.1182/blood-2019-125518.</i>
2018	Afia Muhammad Akram, Tanveer Akhtar, Asma Chaudhary, Muhammad Mudassar Shahzad, AhmadMukhtar Khalid, Nadia Sajid, Muhammadarooq Sabar and Zafar Iqbal. BCR-ABL Kinase Domain Mutations Exist in Few Imatinib Treated Chronic Myeloid Leukemia (CML) Patients Exhibiting Stable Cytogenetic and Hematologic Responses. <i>Blood, 132:5427.</i>
2015	Zafar Iqbal, Afia Muhammad Akram , Tanveer Akhtar, Muhammad Khalid, Zeba Aziz, Aamer Aleem, Ammara T Gill, Ahmad M Khalid, Abdullah Alanazi, Ijaz H Shah, Muhammad Khalid, Muhammad Farooq Sabar, and Mudassar Iqbal. High Frequencies of Compound BCR-ABL Mutations and Their Association with Imatinib Resistant, Disease Progression and Late Chronic Phase Disease in Pakistani Chronic Myeloid Leukemia Patients Necessitate the Inclusion of Molecular Testing in Routine Clinical Settings. <i>Blood, 126 (23).</i>
2014	Zafar Iqbal, Tanveer Akhtar, Afia M Akram , Muhammad Khalid, Ijaz Hussain Shah, Aamir Aleem, Muhammad Khalid, Javed Iqbal, Zeba Aziz, Muhammad Absar, Jamil Amjad Hashmi, /mehmood Hussain Qazi, Ahmed Mukhtar Khalid, Muhammad Farooq Sabar, Sajjad Karim, Mahmood Rasool, Aamir Mahmood, Ammara Tariq Gill, Giuseppe Saglio and Mudassar Iqbal. Detection of Compound BCR-ABL Mutations in TKI Resistant CML Patients Including a Novel K245N Mutation Associated with Primary Nilotinib Resistance By Employing a Newly Developed Cost Effective BCR-ABL Sequencing Protocol for

detection of Imatinib resistant mutations in Ph+ Chronic Myeloid Leukemia patients from Pakistan. <i>Blood</i> , 124 : 1810.

Ph.D. RESEARCH SUPERVISED

UDZ04F17, Ms Atia Rehman, Session 2017-22

Dissertation Title: *Study of CCAAT Enhancer Binding Protein Alpha Gene Mutations in Acute Myeloid Leukemia Patients*

Status: Submitted for external evaluation

M.Phil. RESEARCH SUPERVISED

Student ID	Student name	Title of theses	Status	Year
20-UE-01407	Amna Munawar	Detection of CEBPA gene alterations in bZip domain and their in silico analysis in Acute myeloid leukemia patients from Central Punjab Pakistan.	Completed	2022
20-UE-01086	Qamar Abbas	Identification Of Cebpa Gene Alterations In Transactivation Domain And Their Computational Analysis In Acute Myeloid Leukemia Patients From Central PunjabPakistan.	Completed	2022
19-UE-00395	Nimra Perveen	Identification of NPM1 Exon 12 Mutations In Acute Myeloid Leukemia Patients From Central Punjab, Pakistan	Completed	2021
19-UE-00633	Wajiha Asif	Detection of Runx1 exon 5 Alterations in Acute Myeloid Leukemia Patients From Central Punjab, Pakistan	completed	2021
18-UE-00924	Hafiza Aqsa Mahmood	Detection of CBF β /MYH11(inv16) Fusion Oncogene in Acute Myeloid Leukemia Patients from central Punjab, Pakistan.	Completed	2020
18-UE-01167	Iqra Khaliq	Identification of RUNX1 Gene Exon 3 and 5 Mutations in Acute Myeloid Leukemia Patients (AML) from central Punjab, Pakistan.	Completed	2020
17-UE-02664	Aabroo sulehry	Identification and prognostic significance of c.kit exon 17 mutation in Acute Myeloid Leukemia (AML) patients from pakistan.	Completed	2019
17-UE-02631	Muhammad Umair Afzal	Identification and prognostic significance of K-RAS exon 1 mutations in Acute Myeloid Leukemia (AML) patients from Pakistan	completed	2019

PTBF13E009	Sumaya Riaz	Clinical relevance of JAK2 V617F mutation in myeloid type leukemia.	Completed	2016
PTBF13E010	Fouzia Lal	Molecular identification Of <i>Mycobacterium Tuberculosis</i> in natural reservoirs of Sargodha, Pakistan.	Completed	2016
PBTF13E20	Bakhtawar Bashir	Molecular identification Of <i>Mycobacterium Tuberculosis</i> in liquid waste of hospitals in Lahore.	Completed	2016

MS. RESEARCH Co-SUPERVISED

Student ID/Registration No.	Student name	Title of theses	Status	Year
18-UE-01372	Ammara Rasheed	Identification of PML-RARA t(15;17) Fusion Transcripts in Acute Myeloid Leukemia Patients From Central Punjab, Pakistan	Completed	2020
18-UE-00744	Sajid Ali	Detection of AML1-ETO t(8;21) Fusion Oncogene in Acute Myeloid leukemia Patients from Central Punjab, Pakistan.	Complete	2020

BS. RESEARCH SUPERVISED

Student ID/Registration No.	Student name	Title of theses	Status	Year
18-UE-01122	Khansa Jamil	Computational Evaluation of Single Nucleotide Alterations Reported in Human TP53 Gene among Acute Myeloid Leukemia Patients	Completed	2022
18-UE-00804	Shanza Chaudhary	<i>In Silico</i> Evaluation of Single Nucleotide Alterations Identified in Human IDH2 Gene among Acute Myeloid Leukemia Patients	Completed	2022
18-UE-01216	Hamna Mahfooz	Computational Exploration of Single Nucleotide Alterations detected in Human IDH1 Gene in Acute Myeloid Leukemia	Completed	2022

		Patients		
18-UE-01272	Wajeaha Mubashir	<i>In Silico</i> Analysis of Single Nucleotide Alterations reported in Human GATA2 Gene among Acute Myeloid Leukemia Patients	Completed	2022
17UE03501	Taha hussain	Detection of possible alterations in RUNX1 gene exon 3 among Patients of Acute Myeloid Leukemia from Punjab, Pakistan	Completed	2021
DS150524	Aqsa Zaman	Detection of JAK2 exon 14 Mutations and their Prognostic Relevance in Acute Myeloid Leukemia (AML) Patients From Pakistan.	Completed	2019
DS150556	Amina Wahid	Screening of c-kit exon 8 Mutations and their Prognostic significance in Acute Myeloid Leukemia (AML) Patients From Pakistan.	Completed	2019
DS150547	Sana Akbar	Identification of c-kit exon 11 Mutations and their Prognostic importance in Acute Myeloid Leukemia (AML) Patients From Pakistan.	Completed	2019
DS150554	Zoufishan Yousaf	Screening of N-RAS exon 1 Mutations and their Prognostic significance in Acute Myeloid Leukemia (AML) Patients From Pakistan	Completed	2019
DS150566	Erum Zafar	Identification of N-RAS exon 2 Mutations and their Prognostic importance in Acute Myeloid Leukemia (AML) Patients From Pakistan.	Completed	2019
DS150552	Wajiha Asif	Detection of K-RAS Exon 2 Mutations and their Prognostic Relevance in Acute Myeloid Leukemia (AML) Patients From Pakistan.	Completed	2019
BSZOOOL/F14/M02	Aliza Aslam	Preventive effects of Basil (<i>Ocimum basilicum</i>) against hepatic toxicity induced by Cadmium in Swiss albino mice.	Completed	2018
BSZOOOL/F14/M36	Mavera Mukhtar	Preventive effects of Basil (<i>Ocimum basilicum</i>) against renal toxicity induced by Cadmium in Swiss albino mice.	Completed	2018
BSBT02133018	Mahnoor Fatima Farooqi	Direct sequencing analysis of JAK2 Exon 12 mutations in myeloproliferative neoplasms.	completed	2017
BSBT02133021	Rida Fatima	Clinical relevance of JAK 2 Exon 14 mutations in myeloproliferative neoplasms.	Completed	2017
BSBT02133039	Muhammad Saad Afzal	Frequency of JAK2 V617F mutation in myeloproliferative neoplasms.	Completed	2017

COURSES TAUGHT

- Human genetics
- Developmental biology
- Advances in molecular biology
- Techniques in molecular biology
- Biosafety and bioethics
- Principles of animal life 1&2
- Animal diversity 1&2
- Basic immunology
- Hematology
- Parasitology
- Helminthology and host parasite relationship
- Epidemiology of parasitic diseases
- Biological Techniques

CONFERENCES/WORKSHOPS/SEMINARS ORGANIZED

- 13th Dec, 2022 Organizing team member in 1st One-Day Hands-on training on Animal taxidermy, University of Education, Township Lahore
- 25th Nov, 2022 Organizing team member of 4th One-Day International Symposium On **World Fisheries Day**, University of Education, Township Lahore.
- 18th Oct, 2022 Organizer- **Living Beyond Cancer: Tumor and Cell Death**
- 18th-19th Jan 2022 Organizing team member; 1st Virtual international conference of Zoology: **Zoological Emerging Scientific Trends (ZEST 2022)**
- 3rd Nov, 2021 Organizer- virtual seminar on **Covid-19 immunization and implications**
- 20th Feb, 2021 Organizing team member **Aqua Idea Workshop International 2021**
- 21st November 2020 Member organizing committee “**One day international Symposium on World Fisheries day**”
- 4th October 2020 Member organizing committee “World Animal Day”
- 29th Feb, 2020 Session chairperson-Human resources, “**AQUA IDEA workshop**”.
- 10th April, 2019 Organized one day seminar on “**Next generation sequencing through gene reader Platform** (Preseanted by: Qiagen- Singapur regional team).
- 23-25 April, 2019 Organizer- **2nd International conference on Quality Assurance in higher Education**, by “Pakistan Network of Quality Assurance in Higher Education (PNQAHE)”

CONFERENCES/WORKSHOPS/SEMINARS PARTICIPATED

- 7th Sep, 2021 Attended International Webinar on “**Skills Development For Research and Innovation**”
- 14-18th Dec, 2020 **Virtual Training on Biorisk Management**
- 28-29 June, 2018 Oral Presentation at **5th international conference on Natural and synthetic drugs.**
- 27 Feb-01Mar, 2018 Oral Presentation at **38th Pakistan Congress of Zoology**
- 10-12 Mar, 2017 Presented research findings at **Highlights of ASH in Asia- Hong Kong.**
- 11-13 Nov, 2016 Attended **15th Shaukat Khanum Cancer Symposium**
- Nov 03, 2016 One day workshop on **CRISPR/Cas9 Genome Editing Technology.**
- Feb28-Mar01, 2015 Presented research findings at **Highlights of ASH in Asia (Bangkok, Thailand).**
- Mar 17, 2014 Attended Workshop on **Recent developments in human nutrition.**
- Mar 3-5, 2012 Attended **32nd Pakistan Congress of Zoology**
- Aug, 2011 Attended **Spoken English Short Course** Spoken English, Formal presentation training and Listening & communication empowerment skills.
- Feb, 2010 **Honey bee farming and Management Training.**
On-Farm Training on Integrated Honeybee management for Production of Honey and other beekeeping products.
- Feb, 2010 **Haemcon 2010. 12th National Haematology conference.**
Evidence based Haematology. Practical approach to Agarose Gel Electrophoresis and Polymerase chain reaction.
- 20-21 Oct, 2010 **National Biotechnology Exhibition and seminar 2010**
- 2-4 Mar, 2010 **30th Pakistan Congress of Zoology**
- 4-6 Apr, 2006 **26th Pakistan Congress of Zoology**

AWARDS AND ACHIEVEMENTS

- 2019** Awarded travel grant by American society of Hematology (ASH) as sponsored trainee at Highlights of ASH in Asia- Bangkok, Thailand.
- 2017** Recognized as Productive scientist by *Pakistan Council of Science and*

Technology (PCST).

- 2017** Awarded travel grant by American society of Hematology (ASH) to Present research findings at Presented research findings at Highlights of ASH in Asia- Hong Kong.
- 2015** Awarded travel grant by American society of Hematology (ASH) to Present research findings at Presented research findings at Highlights of ASH in Asia-Bangkok, Thailand.
- 2010** 2nd position in MS.
- 2010** 2nd Position in Poster presentation in 30th Pakistan congress of Zoology
- 2008** 2nd Position in B.S. (Hons)
- 2004-08** Awarded with Merit scholarship throughout BS. (Hons).
- 2003** 1st Position in HSSC examination. Awarded a Gold Medal.
- 2001** 3rd Position SSC examination. Awarded a brass medal.

SKILLS ACQUIRED

- Professional/practical
- DNA/RNA Extraction
- PCR/ nRT-PCR
- Genotyping of PCR product
- Sequencing analysis of PCR products
- Agarose gel electrophoresis
- SDS-PAGE
- DNASTAR(SeqMan: sequencing analysis tools)
- Writing and Data analysis
- SPSS
- EndNote
- Power point
- Geneious (Sequencing analysis software)
- MEGA (Sequencing analysis software)

CO-CURRICULAR ACHIEVEMENTS

- Served as student councilor for MS. Admissions 2013, PU.
- Served as student councilor for MS. Admissions 2012, PU.
- Served as student councilor for BS. Admissions 2011 PU.
- Organizer Annual dinner 2009, Deptt. of Zoology, PU.
- Member of Sports Organizing committee 2009, Deptt. of Zoology, PU.
- Captain of Shaista Ikram ullah House at college level during the years 2001-2003.
- Best Debater and Compare throughout school and college level during 1995-2003.