

Dr. Mohsin Khurshid

Associate Professor

Institute of Microbiology,
Government College University, Faisalabad, Pakistan
Phone: +92-3334301513
Email: mohsin.mic@gmail.com
mohsinkhurshid@gcuf.edu.pk



Education:

PhD (Doctor of Philosophy, Microbiology)

Institute of Microbiology, Government College University Faisalabad, Pakistan
2015-2018

Thesis Title: Genetic diversity and molecular basis of multidrug resistance in *Acinetobacter baumannii* clinical isolates

MPhil (Master of Philosophy, Microbiology)

Department of Microbiology, Quaid-i-Azam University, Islamabad, Pakistan
2007-2009

MSc (Master of Science, Microbiology)

Department of Microbiology, University of Karachi, Karachi, Pakistan
2005-2007

BSc (Bachelor of Science, Medical Laboratory Technology)

Institute of Nursing & Health Sciences, Sheikh Zayed Hospital, University of the Punjab, Lahore, Pakistan
2001-2004

Professional Experience:

- 1. Associate Professor** (Dec 2022 to date)
Institute of Microbiology
Government College University, Faisalabad, Pakistan
- 2. Assistant Professor** (May 2019 to Dec 2022)
Institute of Microbiology
College of Allied Health Professionals (March 2018 to May 2019)
Government College University, Faisalabad, Pakistan
- 3. Lecturer** (July 2014 – March 2018)
College of Allied Health Professionals,
Government College University, Faisalabad, Pakistan
- 4. Lecturer** (October 2013 – July 2014)
Department of Biosciences, Faculty of Basic Sciences,
University of Wah, Wah Cantt, Pakistan

5. **Lecturer** (October 2009 – August 2013)
Department of Pharmaceutics, College of Pharmacy,
King Saud University, Riyadh, Saudi Arabia
6. **Research Associate** (July 2008 – August 2009)
National Institute for Biotechnology & Genetic Engineering (NIBGE) Faisalabad, Pakistan
Research Project: "Cloning, Expression, and characterization of INGAP encoded gene, a prospective means of amelioration of diabetes"
7. **Medical Technologist** (March 2006 – October 2007)
Department of Clinical Pathology, Jinnah Postgraduate Medical Centre (JPMC) Karachi, Pakistan
Major Responsibilities: Supervision of Microbiology & Special Chemistry Section including, SOP's Preparation, Development of Laboratory Manuals/reports/ guidelines/Research Protocols, Budget development, Equipment Purchasing, applied research & Development, Personnel Management, Hospital & community relations, Recordkeeping, directing communication (internal & external) and controlling, inventory, purchasing and Laboratory accreditation standards of Federal Government
8. **Lecturer** (March 2006 to Sep 2007)
College of Medical Laboratory Technology, Jinnah Postgraduate Medical Centre (JPMC) Karachi, Pakistan
Main Responsibilities: Teaching Courses of Microbiology, Anatomy & Histology, and Clinical Pathology, conducting Practical, arranging Examinations and curriculum development.
9. **Tr. Medical Technologist** (July 2004 – June 2005)
Micro & Molecular Biology Section, Department of Pathology, Shaukat Khanum Memorial Cancer Hospital & Research Centre, Lahore, Pakistan

Fellowships:

1. **Research Fellow** at Institute of Antibiotics, Huashan Hospital, Fudan University, Shanghai, China
(July 27, 2017 – Dec 11, 2017)

Competitive Research Grants:

- **Principal Investigator (PI)**, National Research Program for Universities (NRPU) research project entitled "Molecular basis of multidrug resistance in *Acinetobacter baumannii* clinical isolates" of worth **1.713781 million PKR** funded by **Higher Education Commission (HEC), Pakistan**
- **Co-Principal Investigator (Co-PI)**, Punjab Innovation and Research Challenge Award entitled "Formulation of novel synbiotic feed supplement (SFS) for improved growth and meat quality of chicks" of worth **7.5 million PKR** funded by **Punjab Higher Education Commission (PHEC), Pakistan**

Research Metrics (as of 23-07-2025)

Source	Total Citations	h-index
Google Scholar	9183	39
Scopus	6095	33
Web of Science	5720	32

Google Scholar Profile: <https://scholar.google.com.pk/citations?user=wBOse8oAAAAJ&hl=en&oi=ao>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=55071537600>

Web of Science Researcher Profile: <https://www.webofscience.com/wos/author/record/1106292>

Publications (Edited Books):

- **Human Microbiome: Techniques, Strategies, and Therapeutic Potential** (Eds, **Mohsin Khurshid** and Muhammad Sajid Hamid Akash) Springer, Singapore ISBN: 978-981-97-3790-1
- **Microbial Biotechnology in Textile Innovation** (Eds, **Mohsin Khurshid** Muhammad Aamer Mehmood, Muhammad Kashif) Springer, Singapore ISBN: 978-981-95-0347-6

Publications (Book Chapters):

1. Noor F, **Khurshid M**, Aslam B, Ashfaq UA. Role of computational biology in microbiome research. In: Khurshid M, Akash MSH, editors. *Human microbiome*. Springer, Singapore (2024); 85-117.
2. Aslam S, Masoud MS, Ashfaq UA, Ansari MUR, Nahid N, Imran M, Munir S, **Khurshid M**, Qasim M. Genomic tools and technologies: Revolutionizing livestock improvement. In: Safdar M, editors. *Animal production and health*. ISRES Publishing (2024); 46-64.
3. Unakal C, Saravanakumar R, Akpaka PE, Pandit B, Daniel E, **Khurshid M**. Oral microbiome and its implication on systemic diseases. In: Khurshid M, Akash MSH, editors. *Human microbiome*. Springer, Singapore (2024); 201-249
4. Najumuddin, Ullah I, Taqveem A, **Khurshid M**. Microbiome and circadian rhythms: implications for sleep, aging, and therapeutic strategies. In: Khurshid M, Akash MSH, editors. *Human microbiome*. Springer, Singapore (2024); 303-343
5. Munir S, Aslam S, Imran M, Ashfaq UA, Ejaz H, Taqveem A, **Khurshid M***. Building a better microbiome: advances in microbiome engineering for human health. In: Khurshid M, Akash MSH, editors. *Human microbiome*. Springer, Singapore (2024); 625-656
(*Corresponding author)
6. Shahid A, Arshad A, Aslam B, Ali MA, Munir S, Aslam S, **Khurshid M***. Antimicrobial resistance: causes, mechanisms, origins, and characterization. In: Liu D, editor. *Handbook of Molecular Biotechnology*. CRC Press (2024); 382-396.
(*Corresponding author)

7. Noor F, Ashfaq UA, Khalid HR, **Khurshid M**. Generation of host-pathogen interaction data: an overview of recent technological advancements. In: Ashraf MT, Khan AA, Aldakheel FM, editors. *Developments in Microbiology, Systems Biology Approaches for Host-Pathogen Interaction Analysis*. Academic Press, Elsevier (2024); 53-79.
8. Munir S, Ashfaq UA, Qasim M, Fatima T, Aslam S, Sarfraz MH, Kober AKMH, **Khurshid M***. Molecular omics: a promising systems biology approach to unravel host-pathogen interactions. In: Ashraf MT, Khan AA, Aldakheel FM, editors. *Developments in Microbiology, Systems Biology Approaches for Host-Pathogen Interaction Analysis*. Academic Press, Elsevier (2024); 81-102.
(*Corresponding author)
9. Fatima SM, Ashfaq UA, Qasim M, Aslam S, Munir S, Sarfraz MH, Bilal M, **Khurshid M***. Applications of nanomaterials in cancer diagnosis. In: Cruz JN, editor. *Nanobiomaterials*. Materials Research Foundations (2023); 250-280.
(*Corresponding author)
10. Sarfraz MH, **Khurshid M**, Aslam B, Zahoor MA, Hayat S, Saqalein M, Sarfraz MF, Muzammil S. Ion exchange resins for clinical applications. In: Inamuddin, Khan M, Mazumder MAJ, Luqman M, editors. *Ion Exchange Resins: Biomedical and Environmental Applications*. Materials Research Foundations (2023); 120-141.
11. Shahbaz A, Hussain N, Saba S, Gul I, **Khurshid M**, Derakhshan Z, Hadibarata T, Bilal M. Prospecting bio-enzymes for a greener environment. In: Kumar A, Bilal M, Ferreira LFR, Kumari M, editors. *Microbial Biomolecules*. Academic Press (2023); 451-470.
12. Khan A, Malik S, Ali N, **Khurshid M**, Zubair M, Gao X, Ni L, Bilal M. Polymers-based nanocomposites for decontamination of water matrices. In: *Emerging Techniques for Treatment of Toxic Metals from Wastewater*. Elsevier (2023); 427-457.
13. Shahid A, Muzammil S, Aslam B, Ashfaq UA, Hayat S, Bilal M, Rajoka MSR, Nisar MA, **Khurshid M***. Antibiotics and antibiotic-resistant bacteria in the environment: sources and impacts. In: Singh P, Sillanpää M, editors. *Degradation of Antibiotics and Antibiotic-Resistant Bacteria from Various Sources*. Developments in Microbiology. Academic Press (2023); 39-65.
(*Corresponding author)
14. Aslam B, Ahmad M, Tariq MU, Muzammil S, Siddique AB, **Khurshid M**, Shahid A, Rasool MH, Chaudhry TH, Amir A, Salman M, Baloch Z. Antibiotic resistance: retrospects and prospects. In: Singh P, Sillanpää M, editors. *Degradation of Antibiotics and Antibiotic-Resistant Bacteria from Various Sources*. Developments in Microbiology. Academic Press (2023); 1-37.
15. Shahid A, Zulfiqar A, Muzammil S, Hayat S, Zain M, Bilal M, **Khurshid M***. Drug delivery systems based on blood cells. In: Denizli A, Nguyen TA, Rajan M, Alam MF, Rahman K, editors. *Nanotechnology for Hematology, Blood Transfusion, and Artificial Blood*. Micro and Nano Technologies. Elsevier (2022); 167-193.
(*Corresponding author)
16. Zain M, Yasmeen H, Yadav SS, Amir S, Bilal M, Shahid A, **Khurshid M***. Applications of nanotechnology in biological systems and medicine. In: Denizli A, Nguyen TA, Rajan M, Alam MF, Rahman K, editors. *Nanotechnology for Hematology, Blood Transfusion, and Artificial Blood*. Micro and Nano Technologies. Elsevier (2022); 215-235.
(*Corresponding author)

17. Munir S, Ashfaq UA, Rehman K, Niazi SG, Ashraf S, Akbar R, Shahid A, **Khurshid M***. Polymorphism and drug-metabolizing enzymes: challenges and strategies. In: Akash MSH, editor. *Biochemistry of Drug Metabolizing Enzymes*. Academic Press (2022); 347-374, **(*Corresponding author)**
18. Shahid A, Munir S, Akhter N, Hayat S, Mehwish HM, Rajoka MSR, **Khurshid M***. Modulation of the human microbiome and drug metabolism. In: Akash MSH, editor. *Biochemistry of Drug Metabolizing Enzymes*. Academic Press (2022); 375-397. **(*Corresponding author)**
19. Aslam B, Afzaal M, Sameen A, **Khurshid M**, Saeed F, Jabeen S, Aadil RM. Microbial symbiotic implications in exploring novel antibiotics. In: Singh J, Sharma D, editors. *Microbial Resource Technologies for Sustainable Development*. Elsevier (2022); 213-226. Elsevier (2022); 213-226.
20. Mujahid F, Mahmood S, Hayat S, Saqalein M, Aslam B, **Khurshid M**, Muzammil S. Drug Delivery using Nano-Material based Enzymes. In: Inamuddin, Altalhi T, Cruz JN, Luqman M, editors. *Nanomaterial-Supported Enzymes*. Materials Research Forum LLC, Millersville PA, USA (2022); 192-214.
21. Shahid M, **Khurshid M**, Mehmood MA, Malik S, Manzoor I, Muhammad S. Bacterial contamination in food chain: sources, impact and control. In: Fahad S, Adnan M, Saud S, Nie L, editors. *Climate Change and Ecosystems: Challenges to Sustainable Development*. 1st Edition. CRC Press (2022).
22. Aslam S, Munir S, Masoud MS, Ashfaq UA, Nahid N, **Khurshid M**, Qasim M. Proteins and peptides as biomarkers for diagnosis of cardiovascular diseases. In: Khan MS, editor. *Frontiers in Molecular Pharming*. Bentham Science Publishers (2021); 296-320.
23. Rehman K, Fiayyaz F, **Khurshid M**, Sabir S, Akash MSH. Antibiotics and antimicrobial resistance: temporal and global trends in the environment. In: Hashmi MZ, editor. *Antibiotics and Antimicrobial Resistance Genes in the Environment*. Elsevier (2020); 7-27.
24. Munir S, Ashfaq UA, Shah AA, Shahid M, Akash MSH, **Khurshid M***. Microbe-based antiangiogenesis therapies for cancer management. In: Rahman A-U, Choudhary MI, editors. *Anti-Angiogenesis Drug Discovery and Development*. Bentham Science Publishers (2020); 86-124 **(*Corresponding author)**
25. Hayat S, Ashraf A, Aslam B, Asif R, Muzammil S, Zahoor MA, Waseem M, Malik IR, **Khurshid M**, Afzal M, Saqalein M, Siddique MH, Muzammil A, Sabir S. Actinobacteria: potential candidates as plant growth promoters. In: Hossain A, editor. *Plant Stress Physiology*. IntechOpen, London, United Kingdom (2021).
26. Shahid A, Rasool M, Akhter N, Aslam B, Hassan A, Sana S, Rasool MH, **Khurshid M***. Innovative strategies for the control of biofilm formation in clinical settings. In: Dincer S, editor. *Bacterial Biofilms*. IntechOpen, London, United Kingdom (2019). **(*Corresponding author)**
27. Aslam B, Muzammil S, Siddique AB, Nawaz Z, Shafique M, Zahoor MA, Waseem M, Rasool M, **Khurshid M**, Arshad MI, Aslam MA, Rasool MH, Baloch Z. Carbapenem resistance: mechanisms and drivers of a global menace. In: Kirmusaoğlu S, editor. *Pathogenic Bacteria*. IntechOpen, London, United Kingdom (2019).

2025

1. Hayat HF, **Khurshid M***, Rasool MH, Aslam B. Characterization, antibacterial and antioxidant potential of exopolysaccharide produced by *Limosilactobacillus reuteri* MK1 isolated from poultry intestine. *Pakistan Veterinary Journal* (2025); Accepted (IF: 3.8)
(*Corresponding author)
2. Kausar A, Sohail M, **Khurshid M**, Saleem HGM. Carbapenem Resistant *Serratia marcescens* Harboring blaOXA-48, armA and aac(6')-Ib-cr Genes: The First Baseline Study from Pakistan. *Current Microbiology*; (2025) 82, 321. (IF: 2.3)
3. Shokat Z, Sufyan M, Alshammari A, Albekairi N, Albekairi TH, **Khurshid M**, Waqas U, Ashfaq UA. Integrative Network Pharmacology to Evaluate Bioactive Phytochemicals of *Aesculus hippocastanum* and Their Multitarget Mechanisms Against Chronic Venous Insufficiency. *Scientifica* (2025), 6871086. (IF: 2.3)
4. Ashraf Z, Rasool MH, **Khurshid M**, Aslam B. Antimicrobial resistance and virulence profiling of *Klebsiella pneumoniae* isolated from urinary tract infections in community and hospital settings in Pakistan. *Pakistan Journal of Pharmaceutical Sciences* (2025), 38; 2: 395-405 (IF: 1.7)
5. Sarwar A, Aslam B, Mahmood S, Muzammil S, Siddique AB, Sarwar F, **Khurshid M**, Rasool MH, Sasanya J, and Aljasir S. Distribution of multidrug-resistant proteus mirabilis in poultry, livestock, fish, and the related environment: One Health heed. *Veterinary World* (2025), 18(2): (IF: 1.7)
6. Sarfraz MH, Hayat S, Siddique MH, Ashraf A, Zubair M, **Khurshid M**, Ahmed T, Li B, Sarfraz MF, Ali B, Bach H, Muzammil S. Bioinspired synthesis and characterization of chitosan-based MgO nanoparticles: Evaluating antibacterial potential against MDR pathogens and anticancer activity in HEPG2 cell lines. *International Journal of Biological Macromolecules* (2025), 312: 144091. (IF: 7.7)
7. Mahmood S, Rasool MH, **Khurshid M**, Aslam B. Genetic outlook of Colistin resistant *Salmonella enterica* Serovar Typhimurium recovered from Poultry-Environment Interface: A One Health Standpoint. *Pakistan Veterinary Journal* (2025) (IF: 3.8)
8. Madni WA, Zahoor MA, Nawaz Z, **Khurshid M**. Prevalence and Sequence Analysis of *Escherichia coli* Harboring Colistin, Gentamicin, Streptomycin, Tetracycline and Quinolones Resistant Genes from Commercial Broilers. *Pakistan Veterinary Journal* (2025) (IF: 3.8)
9. Jafri FI, Akbar M, Rehman MZ, **Khurshid M**. Soil amendment with *Dryopteris nigropaleacea* enhances natural control of *Fusarium* wilt by modulating morphological, biochemical, and physiological traits of tomato plants. *Physiological and Molecular Plant Pathology* (2025); 136, 102538 (IF: 2.8)

2024

10. Saeed M, Rasheed FR, Rasool MH, Hayat S, **Khurshid M***. Carbapenem-Resistant *Burkholderia cepacia* Complex Isolates Carrying blaNDM-1 and blaNDM-5 in Ventilator-Associated

Pneumonia Patients and Contaminated Ventilator Tubing. *Transboundary and Emerging Diseases* (2024); 3352135 (IF: 3.5)

(*Corresponding author)

11. Shafiq M, Ahmed I, Saeed M, Malik A, Fatima S, Akhtar S, **Khurshid M***, Hyder MZ. Predominance of bla_{NDM}- and bla_{IMP} Harboring *Escherichia coli* Belonging to Clonal Complexes 131 and 23 in a Major University Hospital. *Medicina* (2024); 60(9):1528 (IF: 2.4)
(*Corresponding author)
12. Taqveem A, Rasool MH, Aslam B, Mujahid F, Ibrar A, Ejaz H, Abdalla AE, Alruwaili Y, Alruwaili M, Abosalif K, Nawaz Z, **Khurshid M***. Methicillin-Resistant *Staphylococcus aureus* among Students: Nasal Carriage Rate, Contributing Factors, and Antimicrobial Susceptibility. *Medicina* (2024) (Accepted) (IF: 2.4)
(*Corresponding author)
13. Aslam S, Qasim M, Noor F, Shahid M, Ashfaq UA, Munir M, Al-Harathi HF, Mashraqi MM, Waqas U, **Khurshid M***. Potential Target Metabolites From Gut Microbiota Against Hepatocellular Carcinoma: A Network Pharmacology and Molecular Docking Study. *International Journal of Microbiology* (2024); 2024: 4286228 (IF: 2.8)
(*Corresponding author)
14. Mujahid F, Rasool MH, Shafiq M, Aslam B, **Khurshid M**. Emergence of Carbapenem-Resistant Uropathogenic *Escherichia coli* (ST405 and ST167) Strains Carrying bla_{CTX-M-15} and bla_{NDM-5} and Diverse Virulence Factors in Hospitalized Patients. *Pathogens* (2024); 13, 964. (IF: 3.3)
15. Haider A, Abbas Z, Taqveem A, Ali A, **Khurshid M**, Naggar RFE, Rohaim MA, Munir M. Understanding and Controlling Lumpy Skin Disease in Livestock: Molecular Pathogenesis and Intervention Strategies. *Veterinary Sciences* (2024); 11, 561 (IF: 2.0)
16. Chen S, Saqib M, Khan HS, Bai Y, Ashfaq UA, Mansoor MK, Moming A, Liu J, Zhou M, Niazi SK, Wu Q, Sial AR, Tang S, Sarfraz MH, Javed A, Hayat S, **Khurshid M**, Khan I, Athar MA, Taj Z, Zhang B, Deng F, Zohaib A, Shen S. Risk of infection with arboviruses in a healthy population in Pakistan based on seroprevalence. *Virologica Sinica* (2024); 39(3):369-377 (IF: 5.5)
17. Aslam B, Asghar R, Muzammil S, Shafique M, Siddique AB, **Khurshid M**, Ijaz M, Rasool MH, Chaudhry TH, Amir A; Baloch Z. AMR and Sustainable Development Goals: At a Crossroads. *Globalization and Health* (2024); 20, 73 (IF: 10.8)
18. Ijaz M, Hasan I, Jiang Z, Ullah Z, Aslam B, **Khurshid M**, Sun Y, Guo B. Combinatory Immunotherapy for Glioblastoma Treatment. *Advanced Therapeutics* (2024); 2400217. (IF: 3.7)
19. Ashraf S, Sufyan M, Aslam B, Khalid H, Albekairi NA, Alshammari A, Alharbi M, Nisar MA, **Khurshid M***, Ashfaq UA. Uncovering chikungunya virus-encoded miRNAs and host-specific targeted genes associated with antiviral immune responses: an integrated bioinformatics approach. *Scientific Reports* (2024); 14, 18614 (IF: 3.8)
(*Corresponding author)
20. Shafique M, **Khurshid M**, Muzammil S, Arshad MI, Malik IR, Rasool MH, Khalid A, Khalid R, Asghar R, Baloch Z, Aslam B. Traversed dynamics of Climate Change and One Health. *Environmental Sciences Europe* (2024) 36, 135. (IF: 5.9)

21. Tariq MU, Muzammil S, Ashfaq UA, Arshad MI, Shafique M, Ejaz H, **Khurshid M**, Eltayeb LB, Mazhari BBZ, Elamir MYM, Al-Harthi HF, Rasool MH, Aslam B. Characterizing Bacteriophage PKp-V1 as a Potential Treatment for ESBL-producing Hypervirulent K1 *Klebsiella pneumoniae* ST258 Isolated from Veterinary Specimens. *Veterinary World* (2024); 17(9): 2008-2016
(IF: 1.7)
22. Aslam S, Qasim M, **Khurshid M***, Ashfaq UA, Ali MA. Exploring the Probiotic Potential and Safety of a Locally Sourced *Lactobacillus fermentum* Strain Isolated from Dahi, a Traditional Dairy Product. *Pakistan Journal of Zoology* (2024); 56, (6) 2943-2952
(IF: 0.687)
(*Corresponding author)
23. Ijaz M, Ullah Z, Aslam B, **Khurshid M**, Chen P, Guo B. From promise to progress: the dynamic landscape of glioblastoma immunotherapy. *Drug Discovery Today* (2024); 29 (11): 104188
(IF: 6.5)
24. Khan R, Javed H, Fatima W, Ahsan A, Khan MIU, Ahmad S, **Khurshid M***. The Unspoken Wounds: Understanding the Psychological Impact on Healthcare Professionals Fighting COVID-19 in Pakistan. *Transboundary and Emerging Diseases* (2024): 3364960
(IF: 4.3)
(*Corresponding author)
25. Sarfraz MH, Hayat S, Siddique MH, Aslam B, Ashraf A, Saqalein M, **Khurshid M**, Sarfraz MF, Afzal M, Muzammil S. Chitosan based coatings and films: A perspective on antimicrobial, antioxidant, and intelligent food packaging. *Progress in Organic Coatings* (2024); 188 (2024) 108235
(IF: 6.6)
26. Ijaz M, **Khurshid M**, Gu J, Hasan I, Roy S, Ullah Z, Liang S, Cheng J, Zhang Y, Mi C, Bing G. Breaking Barriers in Cancer Treatment: Nanobiohybrids Empowered by Modified Bacteria and Vesicles. *Nanoscale* (2024); 16(18):8759-8777
(IF: 6.7)
27. Shahzadi A, Ashfaq, UA, **Khurshid M***, Nisar MA, Syed A, Bahkali AH. Deciphering Multi-target Pharmacological Mechanism of Cucurbita pepo Seeds against Kidney Stones: Network Pharmacology and Molecular Docking Approach. *Current Pharmaceutical Design* (2024); 30 (4), 295-309
(IF: 3.1)
(*Corresponding author)
28. Rasool M, Rasool MH, **Khurshid M**, Aslam B. Biogenic synthesis and characterization of silver nanoparticles: exploring antioxidant and anti-Inflammatory activities and assessing antimicrobial potential against multidrug-resistant bacteria. *Asian Journal of Agriculture and Biology* (2024); 3; 1-20
(IF: 2.2)
29. Saeed M, Rasheed F, Jamil I, Rasool MH, Saba N, Ahmad M, Wazeer A, Waheed A, **Khurshid M**, Burkholderia cepacia: Understanding Pathogenicity, Virulence Factors, and Therapeutic Strategies. *Journal of Islamabad Medical & Dental College* (2024); 13(1): 167-173.
30. Ahmad M, Saeed M, Rasheed F, Rasool MH, Jamil I, Saba N, Wazeer A, Qasim Z, **Khurshid M**. Typhoid Fever: Pakistan's Unique Challenges and Pragmatic Solutions. *Journal of Islamabad Medical & Dental College* (2024); 13(1): 151-161
31. Saeed M, Ahmad M, Jamil I, Rasheed F, Waheed A, **Khurshid M**, Rasool MH. *Burkholderia Cepacia* Complex in Disinfectants: Challenges and Strategies for Outbreak Control. *JSM Microbiology* (2024); 10(1); 1061

32. Saeed M, Rasheed F, Jamil I, Rasool MH, **Khurshid M.** (2024). Combatting Burkholderia Cepacia in Neonatal Intensive Care. *Annals of PIMS-Shaheed Zulfiqar Ali Bhutto Medical University*, 20(3), 399-400.
33. Saeed M, Rasheed F, Jamil I, Ahmad M, Wazeer A, Waheed A, Fatima Z, Rasool MH, **Khurshid M.** From COVID-19 Reflections; Crucial Strategies for Ensuring Healthcare Worker and Patient Safety in Developing Countries. *Annals of Pakistan Institute of Medical Sciences* (2024); 21 (1): 8-15
34. Mujitaba A, Saeed M, Rasheed F, Rasool H, Saba N, Khan SA, Ali S, Ahmad M, **Khurshid M.** Psychological Impact of the COVID-19 Pandemic on the Pakistani Population and Health Care Providers. *Journal of Islamabad Medical & Dental College* (2024); 13 (2): 392-395
35. Sarwar A, Saqib M, Taqveem A, **Khurshid M**, Mansoor M K Seroprevalence of Transfusion-Transmissible Infections in Blood Donors: Insights from Public and Private Blood Centers in Jaranwala. *Global Immunological & Infectious Diseases Review* (2024); IX(III), 77-84
36. Owais M, Mushtaq N, Raza HA, Kalim Z, **Khurshid M.** Differential Haematological and Inflammatory Markers in Symptomatic and Asymptomatic COVID-19 Patients: A Retrospective Cohort Study. *Premier Journal of Public Health* (2024); 1; 100003

2023

37. Iqbal G, Javed H, Raza FA, Gohar UF, Fatima W, **Khurshid M.** Diagnosis of acute dengue virus infection using enzyme-linked immunosorbent assay and real-time PCR. *Canadian Journal of Infectious Diseases and Medical Microbiology* (2023): 3995366 **(IF: 2.585)**
(*Corresponding author)
38. Iftikhar A, Nausheen R, **Khurshid M**, Iqbal RK, Muzaffar H, Malik A, Khan AA, Batool F, Akhtar S, Yasin A, Anwar H. Pancreatic regenerative potential of manuka honey evidenced through pancreatic histology and levels of transcription factors in diabetic rat model. *Heliyon* (2023); 9(9): e20017 **(IF: 4.0)**
39. Sarfraz MH, Muzammil S, Hayat S, **Khurshid M**, Sayyid AH. Fabrication of chitosan and *Trianthema portulacastrum* mediated copper oxide nanoparticles: Antimicrobial potential against MDR bacteria and biological efficacy for antioxidant, antidiabetic and photocatalytic activities. *International Journal of Biological Macromolecules*. (2023); 242: 124954 **(IF: 8.025)**
40. Sarfraz MH, Zubair M, Aslam B, Ashraf A, Siddique MH, Hayat S, Cruz JN, Muzammil S, **Khurshid M**, Sarfraz MF, Hashem A, Dawoud TM, Avila-Quezada GD, Abd_Allah EF. Comparative analysis of Phyto-fabricated Chitosan, Copper Oxide and Chitosan based CuO nanoparticles: Antimicrobial potential against *Acinetobacter baumannii* isolates and anticancer activity against HepG2 cell lines. *Frontiers in Microbiology* (2023); 14: 1188743 **(IF: 6.064)**
41. Zahra D, Shokat Z, Ahmad A, Javaid A, **Khurshid M**, Ashfaq UA, Nashwan AJ. Exploring the recent developments of alginate silk fibroin material for hydrogel wound dressing: A review. *International Journal of Biological Macromolecules* (2023); 248; 125989 **(IF: 8.2)**

42. Akram K, Khan I, Rehman A, Hayat A, Rehman MU, **Khurshid M**, Hayat P, Alshammari A, Alharbi M, Massa S. Exploring the Antimicrobial Potential of Biologically Synthesized Zero Valent Iron Nanoparticles. *Open Chemistry* (2023); (In Press) (IF: 2.3)
43. Qasim M, Abdullah M, Ashfaq UA, Noor F, Nahid N, Alzamami A, Alturki NA, **Khurshid M**. Molecular mechanism of *Ferula Asafoetida* for the treatment of asthma: Network pharmacology and molecular docking approach. *Saudi Journal of Biological Sciences* (2023), 30 (2); 103527 (IF: 4.052)
44. Kamal I, Ashfaq UA, Hayat S, Aslam B, Sarfraz MH, Yaseen H, Rajoka MSR, Shah AA, **Khurshid M**. Prospects of antimicrobial peptides as an alternative to chemical preservatives for food safety. *Biotechnology Letters* (2023), 45, 137–162 (IF: 2.716)
(*Corresponding author)
45. Usman M, Rasool MH, **Khurshid M**, Aslam B, Baloch Z. Co-occurrence of *mcr-1* and carbapenem resistance in Avian Pathogenic *E. coli* Serogroup O78 ST95 from colibacillosis-infected broiler chickens. *Antibiotics* (2023), 12(5), 812 (IF: 5.222)
46. Younas M, Rasool MH, **Khurshid M**, Khan A, Nawaz MZ, Ahmad I, Lakhan MN, Moringa oleifera leaf extract mediated green synthesis of silver nanoparticles and their antibacterial effect against selected gram-negative strains. *Biochemical Systematics and Ecology* (2023), 107, 104605 (IF: 1.462)
47. Arslan M, Haider A, **Khurshid M**, Bakar SSUA, Jani R, Masood F, Tahir T, Mitchell K, Panchagnula S, Mandair S. From Pixels to Pathology: Employing Computer Vision to Decode Chest Diseases in Medical Images. *Cureus* 15(9): e45587

2022

48. Bilal M, Munir H, Khan MI, **Khurshid M**, Rasheed T, Rizwan K, Franco M, Iqbal HMN. Gums-based engineered bio-nanostructures for greening the 21st-century biotechnological settings. *Critical Reviews in Food Science and Nutrition* (2022); 62(14): 3913-3929 (IF: 11.176)
49. Sarfraz MH, Shahid A, Asghar S, Aslam B, Ashfaq UA, Raza H, Prieto MA, Simal-Gandara J, Barba FJ, Rajoka MSR, **Khurshid M***, Nashwan AJ. Personalized nutrition, microbiota, and metabolism: a triad for eudaimonia. *Frontiers in Molecular Biosciences* (2022); 9; 1038830 (IF: 6.113)
(*Corresponding author)
50. Munir S, **Khurshid M**, Ahmad M, Ashfaq UA, Zaki MEA. Exploring the antimicrobial and pharmacological potential of NF22 as a potent inhibitor of *E. coli* DNA gyrase: An in vitro and in silico study. *Pharmaceutics* (2022); 14(12), 2768 (IF: 6.525)
51. Aslam B, Chaudhry TH, Arshad MI, Muzammil S, Siddique AB, Yasmeen N, **Khurshid M**, Amir A, Salman M, Rasool MH, Xueshan X, Baloch Z. Distribution and genetic diversity of MDR *Klebsiella pneumoniae* at the human-animal-environment interface in Pakistan. *Frontiers in Microbiology* (2022); 13: 898248 (IF: 6.064)
52. Yar A, Choudary MA, Rehman A, Hussain A, Elahi A, Rehman F, Waqar AB, Alshammari A, Alharbi M, Nisar MA, **Khurshid M**, Khan Z. Genetic Diversity and Virulence Profiling of Multi-Drug Resistant *Escherichia coli* of Human, Animal, and Environmental Origins. *Antibiotics* (2022); 11(8): 1061 (IF: 5.222)

53. Aslam B, Siddique MH, Siddique AB, Shafique M, Muzammil S, **Khurshid M**, Rasool MH, Ahmad M, Chaudhry TH, Amir A, Salman M, Baloch Z, Alturki NA, Alzamami A. Distribution of mcr-1 harboring hypervirulent *Klebsiella pneumoniae* in clinical specimens and lytic activity of Bacteriophage KpnM against isolates. *Infection and Drug Resistance*. (2022); 15: 5795-5811 (IF: 4.177)
54. Siddique MH, Hayat S, Muzammil S, Ashraf A, Khan AM, Ijaz MU, **Khurshid M**, Afzal M. Ecofriendly phytosynthesized zirconium oxide nanoparticles as antibiofilm and quorum quenching agents against *Acinetobacter baumannii*. *Drug Development and Industrial Pharmacy*. (2022); 48 (9) :502-509 (IF: 3.727)
55. Jamil A, Zahoor MA, Nawaz Z, Siddique AB, **Khurshid M**. Genetic Diversity of *Escherichia coli* Co-harboring mcr-1 and Extended Spectrum Beta-lactamases from Poultry. *Biomed Research International*. (2022); 8224883. (IF: 3.246)
56. Alam M, Rasool MH, Khan I, **Khurshid M**, Aslam B. Multilocus Sequence Typing of Carbapenem-Resistant *Acinetobacter baumannii* isolates harboring blaOXA-23 and blaIMP in Cattle from Punjab, Pakistan. *Microbial Drug Resistance*. (2022); 28 (10): 997-1002 (IF: 2.706)
57. Javaid A, Zahra D, Rashid F, Mashraqi M, Alzamami A, **Khurshid M**, Ashfaq UA. Regulation of micro-RNA, epigenetic factor by natural products for the treatment of cancers: Mechanistic insight and translational Association. *Saudi Journal of Biological Sciences*. (2022); 29 (6): 103255 (IF: 4.219)
58. Sarwar F, Rasool MH, **Khurshid M**, Qamar MU, Aslam B. *Escherichia coli* Isolates Harboring blaNDM Variants and 16S Methylases Belonging to Clonal Complex 131 in Southern Punjab, Pakistan. *Microbial Drug Resistance* (2022), 28 (6): 623-635 (IF: 3.431)
59. Umar A, Liaquat S, Fatima I, Rehman A, Rasool D, Alshammari A, Alharbi M, Rajoka MSR, **Khurshid M**, Ashfaq UA, Haque A. Vaccinomics to design a multi-epitopes vaccine against *Legionella pneumophila*. *Biomed Research International* (2022); 4975721 (IF: 3.246)
60. Aslam B, **Khurshid M**, Ahmad M, Baloch Z. A Response to Article "Distribution of mcr-1 Harboring Hypervirulent *Klebsiella pneumoniae* in Clinical Specimens and Lytic Activity of Bacteriophage KpnM Against Isolates" [Response to Letter]. *Infection and Drug Resistance*. (2022); 15: 6601-6602 (IF: 4.177)
61. Rashid F, Javaid A, Rahman M, Sufyan M, Alshammari A, Alharbi M, Nisar MA, **Khurshid M**, Ashfaq UA. Integrating pharmacological and computational approaches for the phytochemical analysis of *Syzygium cumini* and its anti-diabetic potential. *Molecules* (2022); 27 (17): 5734 (IF: 4.927)
62. Hayat S, Ashraf A, Zubair M, Aslam B, Siddique MH, **Khurshid M**, Saqalein M, Khan AM, Almatroudi A, Naeem Z, Muzammil S. Biofabrication of ZnO nanoparticles using *Acacia arabica* leaf extract and their antibiofilm and antioxidant potential against foodborne pathogens. *PLOS One* (2022), 5;17(1); e0259190 (IF: 3.240)
63. Tabassum S, Khalid HR, Haq WU, Aslam S, Alshammari A, Alharbi M, Rajoka, MSR, **Khurshid M**, Ashfaq UA. Implementation of System Pharmacology and Molecular Docking Approaches to Explore Active Compounds and Mechanism of *Ocimum Sanctum* against Tuberculosis. *Processes* (2022), 10 (2): 298 (IF: 2.847)

64. Shahid F, Alghamdi YS, Mashraqi M, **Khurshid M**, Ashfaq UA. Proteome based mapping and molecular docking revealed dnaA as a potential drug target against *Shigella sonnei*. *Saudi Journal of Biological Sciences*. (2022), 29 (2); 1147-1159 (IF: 4.219)
65. Razzaq MK, Akhtar M, Ahmad RM, Cheema KL, Hina A, Karikari B, Raza G, Xing G, Gai J, **Khurshid M**. CRISPR-Cas9 based stress tolerance: new hope for abiotic stress tolerance in chickpea (*Cicer arietinum*). *Molecular Biology Reports* (2022); 49 (9): 8977-8985 (IF: 2.316)
66. Iftikhar A, Nausheen R, Muzaffar H, Naeem MA, Farooq M, **Khurshid M**, Almatroudi A, Alrumaihi F, Allemailem KS, Haseeb Anwar. Potential Therapeutic Benefits of Honey in Neurological Disorders: The Role of Polyphenols. *Molecules* (2022) 27 (10): 3297 (IF: 4.412)
67. Shahid A, **Khurshid M**, Aslam B, Muzammil S, Mehwish HM, Rajoka MSR, Hayat HF, Sarfraz MH, Razzaq MK, Nisar MA, Waseem M. Cyanobacteria derived compounds: emerging drugs for cancer management. *Journal of Basic Microbiology* (2022); 62 (9), 1125-1142 (IF: 2.650)
68. Iqbal A, Shafique M, Zahoor MA, Muzammil S, Nawaz Z, Jabbar A, **Khurshid M**, Hussain R, Islam MA, Almatroudi A, Allemailem KS, Rasool MH, Aslam B. The occurrence of multidrug-resistant *Mycobacterium tuberculosis* from patients of pulmonary Tuberculosis. *The Journal of Infection in Developing Countries* (2022); 16 (4): 698-704 (IF: 0.968)
69. Shahid A, Nasir K, Aslam S, Kamran M, Sarfraz MH, Saleem HGM, **Khurshid M***. Potential Role of Microbiota in the Prevention and Therapeutic Management of Infectious Diseases. *Pakistan Journal of Biochemistry and Biotechnology* (2022); 3 (2): 34-48
(*Corresponding author)
70. Ahmad M, Siddique AB, Muzammil S, Shafique M, Nawaz Z, **Khurshid M**, Rasool MH, Jalees MM, Sarwar N, Aslam B. Occurrence of hypervirulent *Klebsiella pneumoniae* in clinical settings and lytic potential of bacteriophages against the isolates. *Jundishapur Journal of Microbiology* (2022), 15 (1): e120027 (IF: 0.747)
71. Kamran M, Choudary MA, Amin H, Asghar S, Shahid A, Zafar S, Javed H, Sarfraz MH, **Khurshid M***. Antimicrobial Susceptibility Pattern of *Pseudomonas aeruginosa* Isolated from Clinical and Environmental Sources in Punjab, Pakistan. *Pakistan Biomedical Journal* (2022), 5 (3): 80-84
(*Corresponding author)
72. Ahmad M, Kamran M, Amin H, Zafar S, Asghar S, Siddique U, Khalid A, Sarfraz A, **Khurshid M***, Ullah I. Prevalence and Risk Factors of hepatitis B and C infections in general population of Tehsil Arifwala. *Pakistan Biomedical Journal* (2022), 5 (6): 111-115
(*Corresponding author)
73. **Khurshid, M**. Capacity Building of Healthcare Professionals for Disaster Readiness in Pakistan. *Journal of Wazir Muhammad Institute of Paramedical Technology*, (2022); 2 (2), 1.

2021

74. Aslam B, Arshad MI, Aslam MA, Muzammil S, Siddique AB, Yasmeen N, **Khurshid M**, Rasool M, Ahmad M, Rasool MH, Fahim M, Hussain R, Xia X, Baloch Z, Bacteriophage Proteome: insights and potentials of an alternate to antibiotics. *Infectious Diseases and Therapy* (2021) 10(3):1171-1193. (IF: 5.322)
75. Shahid A, Muzammil S, Rasheed F, Aslam B, Ali MA, Haider SZ, Babar ME, Saeed M, Waqas U, **Khurshid M***. Emergence of armA mediated aminoglycoside resistance in multidrug-

resistant *Acinetobacter baumannii* in Pakistani hospitals. *Pakistan Journal of Zoology* (2021); 53, (6); 2507-2510 (IF: 0.831)

(*Corresponding author)

76. Aslam B, **Khurshid M**, Arshad MI, Muzammil S, Rasool M, Yasmeen N, Shah T, Chaudhry TH, Rasool MH, Shahid A, Xueshan X, Baloch Z. Antibiotic Resistance: One Health One World Outlook. *Frontiers in Cellular and Infection Microbiology* (2021) (IF: 5.293)
77. Aldakheel FM, Abrar A, Munir S, Aslam S, Allemailem KS, **Khurshid M**, Ashfaq UA. Proteome wide mapping and reverse vaccinology approaches to design a multi-epitope vaccine against *Clostridium perfringens*. *Vaccines* (2021), 9(10), 107 (IF: 4.422)
78. Umar A, Haque A, Alghamdi YS, Mashraqi MM, Rehman A, Shahid F, **Khurshid M**, Ashfaq UA. Development of a Candidate Multi-Epitope Subunit Vaccine against *Klebsiella aerogenes*: Subtractive Proteomics and Immuno-Informatics Approach. *Vaccines* (2021), 9(11), 1373 (IF: 4.422)
79. Tariq MH, Bhatti R, Ali NF, Ashfaq UA, Shahid F, Almatroudi A, **Khurshid M**. Rational Design of Chimeric Multiepitope Based Vaccine (MEBV) against Human T-cell Lymphotropic Virus Type 1: An Integrated Vaccine Informatics and Molecular docking Based Approach. *PLOS One* (2021) 16(10): e0258443. (IF: 3.240)
80. Rajoka MSR, Thirumdas R, Mehwish HM, Umair M, **Khurshid M**, Hayat HF, Phimolsiripol Y, Pallarés N, Martí-Quijal FJ, Barba FJ. Role of food antioxidants in modulating gut microbial communities: Novel understandings in intestinal oxidative stress damage and their impact on host health. *Antioxidants* (2021), 10(10), 1563. (IF: 6.312)
81. Alvi RF, Aslam B, Rasool MH, Muzammil S, Siddique AB, Yasmeen N, **Khurshid M**, Sarwar N, Almatroudi A, Hussain R, Baloch Z. Transcriptional response of multidrug-resistant *Klebsiella pneumoniae* clinical isolates to ciprofloxacin stress. *The Canadian Journal of Infectious Diseases and Medical Microbiology* (2021): 5570963 (IF: 2.471)
82. Shahid A, Aslam B, Muzammil S, Aslam N, Shahid M, Almatroudi A, Allemailem KS, Saqalein M, Nisar MA, Rasool MH, **Khurshid M***. The prospects of antimicrobial coated medical implants. *Journal of Applied Biomaterials and Functional Materials* (2021); 19 (IF: 2.604)
(*Corresponding author)
83. Shahid A, Ali MA, Muzammil S, Aslam B, Shahid M, Saqalein M, Akash MSH, Almatroudi A, Allemailem KS, **Khurshid M***. Antibiotic residues in food chains; impact on the environment and human health: A Review. *Applied Ecology and Environmental Research* (2021); 19(5):3959-3977 (IF: 0.711)
(*Corresponding author)
84. Ashfaq UI, Saleem S, Masoud MS, Ahmad M, Nahid N, Bhatti R, Almatroudi A, **Khurshid M**. Rational design of multi epitope-based subunit vaccine by exploring MERS-COV proteome: Reverse vaccinology and Molecular docking approach. *PLOS One* (2021); 16(2): e0245072 (IF: 3.240)
85. Anwar H, Iftikhar A, Muzaffar H, Almatroudi A, Allemailem KS, Navaid S, Saleem S, **Khurshid M**. Biodiversity of Gut Microbiota: Impact of Various Host and Environmental Factors. *Biomed Research International* (2021); 5575245 (IF: 3.411)

86. Saleem M, Malik S, Mehwish HM, Ali MW, Hussain N, **Khurshid M**, Rajoka MSR, Chen Y. Isolation and functional characterization of exopolysaccharide from *Lactobacillus plantarum* S123 isolated from traditional Chinese cheese. *Archives of Microbiology* (2021); 203 (6): 3061-3070 (IF: 2.552)
87. Ilyas S, Rasool MH, Arshed MJ, Qamar MU, Aslam B, Almatroudi A, **Khurshid M**. The *Escherichia coli* Sequence Type 131 harboring extended-spectrum beta-lactamases and carbapenemases genes from poultry birds. *Infection and Drug Resistance* (2021); 14: 805-813 (IF: 4.003)
88. Rasool MH, Mehmood A, Saqalein M, Nisar MA, Almatroudi A, **Khurshid M**. Development, biological characterization, and immunological evaluation of Virosome Vaccine against Newcastle Disease in Pakistan. *Biomed Research International* (2021): 8879277. (IF: 3.411)
89. Qurat-ul-Ain H, Ijaz M, Siddique AB, Muzammil S, Shafique M, Rasool MH, Almatroudi A, **Khurshid M**, Chaudhry TH, Aslam B. Efficacy of phage-antibiotic combination against MDR *Klebsiella pneumoniae* clinical isolates. *Jundishapur Journal of Microbiology* (2021) 14(1): e111926 (IF: 0.747)
90. Asghar MT, **Khurshid M**, Nazir J, Shakoory AR. Induction of apoptosis in human lung epithelial cell by *Sphingomonas* sp. Shah, a recently identified cell culture contaminant. *Critical Reviews in Eukaryotic Gene Expression* (2021); 31 (2), 55-62 (IF: 1.807)
91. **Khurshid M**, Rasool MH. Genetic diversity and molecular characterization of carbapenem-resistant *Acinetobacter baumannii* clinical isolates from the Punjab, Pakistan. *International Journal of Infectious Diseases* (2020); 101:57. (IF: 3.623)
(*Corresponding author)
92. Waheed S, Rasool MH, Aslam B, Muzammil S, Waseem M, Shahid M, Saqib M, Hayat S, Naeem M, Taj Z, Kabir S, Saqalein M, Nisar MA, **Khurshid M***. Antagonistic Potential of Dairy Origin *Enterococcus faecium* Against Multidrug-Resistant Foodborne Pathogens. *Romanian Biotechnological Letters*. 2021; 26(2): 241 0-2419 (IF: 0.590)
(*Corresponding author)
93. Saeed M, Aslam A, Rasheed F, Rasool MH, Azhar A, Khan, HS, Saleem, HGM, Waheed, A, Ashraf Z, Anwar AI, **Khurshid M**, Zohaib A. Emergence of Plasmid-mediated Quinolone-Resistant *Salmonella* Typhi Clinical Isolates from Punjab, Pakistan. *Pakistan BioMedical Journal*, (2021) 4(2).

2020

94. **Khurshid M***, Rasool MH, Ashfaq UA, Aslam B, Waseem M, Ali MA, Almatroudi A, Rasheed F, Saeed M, Guo Q, Wang M. *Acinetobacter baumannii* sequence types harboring genes encoding aminoglycoside modifying enzymes and 16SrRNA methylase; a multicenter study from Pakistan. *Infection and Drug Resistance*. (2020); 13: 2855–2862. (IF: 4.003)
(*Corresponding author)
95. **Khurshid M***, Rasool MH, Ashfaq UA, Aslam B, Waseem M. Xua Q, Zhang X, Guo Q, Wang M. Dissemination of blaOXA-23 harbouring Carbapenem-Resistant *Acinetobacter baumannii* clones in Pakistan. *Journal of Global Antimicrobial Resistance* (2020); 21, 357-362 (IF: 2.469)
(*Corresponding author)

96. Munir S, Shahid A, Aslam B, Ashfaq UA, Akash MSH, Ali MA, Almatroudi A, Allemailem KS, Rajoka MSR, **Khurshid M***. The therapeutic prospects of naturally occurring and synthetic indole alkaloids for depression and anxiety disorders. *Evidence-Based Complementary and Alternative Medicine* (2020); 8836983 (IF: 2.629)
(*Corresponding author)
97. Rasheed F, Saeed M, Alikhan NF, Baker D, **Khurshid M**, Ainsworth EV, Turner AK, Imran AA, Rasool MH, Saqalein M, Nisar MA, Rehman MFU, Wain J, Yasir M, Langridge GC, Ikram A. Emergence of Resistance to Fluoroquinolones and Third Generation Cephalosporins in *Salmonella* Typhi in Lahore, Pakistan. *Microorganisms* (2020); 8(9):1336. (IF: 4.128)
98. Afzal M, Mazhar SF, Sana S, Naeem M, Rasool MH, Saqalein M, Nisar MA, Rasool M, Bilal M, Khan AA, **Khurshid M***. Neurological and cognitive significance of probiotics: a holy grail deciding individual personality. *Future Microbiology*. 15 (11) 1059-1074. (IF: 2.907)
(*Corresponding author)
99. Saeed M, Rasool MH, Rasheed F, Saqalein M, Nisar MA, Imran AA, Tariq S, Amir A, Ikram A, **Khurshid M***. Extended-spectrum beta-lactamases producing extensively drug-resistant *Salmonella* Typhi in Punjab, Pakistan. *Journal of Infection in Developing Countries* (2020); 14(2): 169-176 (IF: 1.175)
(*Corresponding author)
100. Taj Z, Rasool MH, Almatroudi A, Saqalein M, **Khurshid M***. Extensively drug-resistant *Acinetobacter baumannii* from a pet cat with urinary tract infection belonging to international clone II: the first report from Pakistan. *Polish Journal of Microbiology* (2020); 69 (2): 231-234 (IF: 0.776)
(*Corresponding author)
101. **Khurshid M***, Rashid A, Husnain M, Rasool MH, Waqas U, Saeed M, Naeem M, Sohail M. In-Vitro assessment of the therapeutic potential of polymyxins and tigecycline against multidrug resistant *Acinetobacter* isolates from infected wounds. *Journal of Ayub Medical College Abbottabad* (2020); 32(4):459-464. (*Corresponding author)
102. Munir S, Shah AA, Shahid M, Manzoor I, Aslam B, Rasool MH, Saeed M, Ayaz S, **Khurshid M***. Quorum Sensing interfering strategies and their implications in the management of biofilm associated bacterial infections. *Brazilian Archives of Biology and Technology* (2020); 63, e20190555 (IF: 0.758)
(*Corresponding author)
103. Chaudhry TH, Aslam B, Arshad MI, Alvi RF, Muzammil S, Yasmeen N, Aslam MA, **Khurshid M**, Rasool MH, Ma Z, Baloch Z. Emergence of blaNDM-1 harboring *Klebsiella pneumoniae* ST29 & ST11 in veterinary settings and waste of Pakistan. *Infection and Drug Resistance* (2020) 13: 3033-3043 (IF: 4.003)
104. Ahmed T, Shahid M, Noman M, Niazi MBK, Zubair M, Almatroudi A, **Khurshid M**, Tariq F, Mumtaz R, Li B. Bioprospecting a native silver-resistant *Bacillus safensis* strain for green synthesis and subsequent antibacterial and anticancer activities of silver nanoparticles. *Journal of Advanced Research* (2020); 24: 475-483 (IF: 10.479)
105. Muzammil S, **Khurshid M**, Nawaz I, Siddique MH, Zubair M, Nisar MA, Imran M, Hayat S. Aluminium oxide nanoparticles inhibit EPS production, adhesion and biofilm formation by multidrug resistant *Acinetobacter baumannii*. *Biofouling* (2020); 36 (4), 492-504 (IF: 2.847)

106. Abbas A, Mushtaq A, Cheema AI, Mahmood F, Khan MA, Naqqash T, **Khurshid M**, Manzoor I, Muhammad S, Shahid M. Heterologous expression of azoreductase-encoding gene *azrS* of *Bacillus* sp. MR-1/2 for enhanced azo dye decolorization and wastewater treatment. *Archives of Microbiology* (2020); 202(8):2135-2145 (IF: 1.642)
107. **Khurshid M***, Akash MSH. Probiotic preparations for infantile gastroenteritis; the clinical and economic perspective. *Future Microbiology* (2020); 15 (8):567-569. (IF: 2.746)
(*Corresponding author)
108. Haq MEU, Akash MSH, Rehman K, **Khurshid M**. Therapeutic role of metformin and troglitazone to prevent cancer risk in diabetic patients: evidences from experimental studies. *Turkish Journal of Biochemistry* (2020) 45(3), 229-239 (IF: 0.329)
109. Khalid M, Bilal M, Munir H, Shah SZH, **Khurshid M**, El-Shazly M, Iqbal HMN. In-vitro Evaluating of Anti-bacterial, Anti-biofilm and Cytotoxic Activity of Naturally Inspired *Juglans regia*, *Tamarix aphylla* L., and *Acacia modesta* with Medicinal Potentialities. *Journal of Pure and Applied Microbiology* (2020) ;14(2):1133-1142.
110. Shahid F, Ashfaq UA, Saeed S, Munir S, Almatroudi A, **Khurshid M**. In Silico Subtractive Proteomics Approach for Identification of Potential Drug Targets in *Staphylococcus saprophyticus*. *International Journal of Environmental Research and Public Health* (2020); 17(10): 3644 (IF: 2.468)
111. Siddique MH, Aslam B, Imran M, Ashraf A, Nadeem H, Hayat S, **Khurshid M**, Afzal M, Malik IR, Shahzad M, Qureshi U, Khan ZUH, Muzammil S. Effect of Silver Nanoparticles on Biofilm Formation and EPS production of Multi-Drug Resistant *Klebsiella pneumoniae*. *BioMed Research International* (2020); 6398165 (IF: 2.197)
112. Mazhar SF, Afzal M, Almatroudi A, Munir S, Ashfaq UA, Rasool M, Raza H, Munir HMW, Rajoka MSR, **Khurshid M***. The prospects for the therapeutic implications of genetically engineered probiotics. *The Journal of Food Quality* (2020); 9676452 (IF: 1.360)
(*Corresponding author)
113. Aslam B, Chaudhry TH, Arshad MI, Alvi RF, Shahzad N, Yasmeen N, Idris A, Rasool MH, **Khurshid M**, Ma Z, Call DR, Baloch Z. The first *bla_{KPC}* harbouring *Klebsiella pneumoniae* ST258 strain isolated in Pakistan. *Microbial Drug Resistance* (2020); 26(7):783-786 (IF: 2.397)
114. Akash MSH, Rehman K, Fiyyaz F, Sabir S, **Khurshid M**. Diabetes-associated infections: development of antimicrobial resistance and possible treatment strategies. *Archives of Microbiology* (2020); 202: 953–965 (IF: 1.642)
115. Munir S, Shah AA, Shahid M, Ahmed MS, Shahid A, Rajoka MSR, Akash MSH, Akram M, **Khurshid M***. Anti-angiogenesis potential of phytochemicals for the therapeutic management of tumors. *Current Pharmaceutical Design* (2020); 26 (2): 265-278. (IF: 2.412)
(*Corresponding author)
116. Munir S, Shah AA, Rahman H, Bilal M, Rajoka MSR, Khan AA, **Khurshid M***. Nanozymes for medical biotechnology and its potential applications in biosensing and nanotherapeutics. *Biotechnology Letters*. (2020); 42, 357–373 (IF: 2.154)
(*Corresponding author)

117. Baloch Z, Aslam B, Rasool M, Idris A, Muzammil S, Alvi RF, **Khurshid M**, Rasool MH, Zhang D. CRISPR-Cas system: a potential alternative tool to cope antibiotic resistance. *Antimicrobial Resistance & Infection Control*. (2020); 9, 131 (IF: 3.224)
118. Kabir S, Shahid M, Waseem M, Muzammil S, Nawaz MZ, Rasool MH, Shahzad A, Hayat S, Taj Z, **Khurshid M**, Rizvi NB, Waheed S, Nisar MA, Saqalein M. Dairy origin lactobacilli: Functional analyses and antagonistic potential against multidrug-resistant foodborne pathogens. *International Food Research Journal*. (2020); 27(1): 131-14 (IF: 0.662)
119. Rajoka MSR, Mehwish HM, Zhang H, Ashraf M, Fang H, Zeng X, Wu Y, **Khurshid M**, Zhao L, He Z. Antibacterial and antioxidant activity of exopolysaccharide mediated silver nanoparticle synthesized by *Lactobacillus brevis* isolated from Chinese koumiss. *Colloids and Surfaces B: Biointerfaces*; 2020: 186, 110734 (IF: 3.973)
120. Qamar MU, Lopes BS, Hassan B, **Khurshid M**, Shafique M, Nisar MA, Mohsin M, Nawaz Z, Muzammil S, Aslam B, Ejaz H, Toleman MA. The present danger of New Delhi metallo- β -lactamase: a threat to public health. *Future Microbiology*. 2020: 15 (18), 1759-1778 (IF: 3.165)

2019

121. **Khurshid M***, Rasool MH, Siddique MH, Azeem F, Naeem M, Sohail M, Sarfraz M, Saqalein M, Taj Z, Nisar MA, Qamar MU, Shahzad A. Molecular mechanisms of antibiotic co-resistance among carbapenem resistant *Acinetobacter baumannii*. *Journal of Infection in Developing Countries* (2019); 13 (10): 899-905 (IF: 1.175)
(*Corresponding author)
122. Rajoka MSR, Mehwish HM, Fang H, Padhiar AA, Zeng X, **Khurshid M**, He Z, Zhao L. Characterization and anti-tumor activity of exopolysaccharide produced by *Lactobacillus kefir* isolated from Chinese kefir grains. *Journal of Functional Foods* (2019); 63, 103588 (IF: 3.197)
123. Shahid M, Ismail M, Rashid MH, Javed MR, **Khurshid M**, Khan F, Ahmed T, Noman M, Sadaf M. Current situation of biofuel production and its enhancement by CRISPR/Cas9-mediated genome engineering of microbial cells. *Microbiological Research* (2019); 219; 1-11 (IF: 2.777)
124. Ramzan S, Rashid A, Rasool M, Ashraf Z, Waheed A, Naeem M, **Khurshid M***. Comparison between the Medical versus Surgical interventions for the management of nasal polyp. *Pakistan Journal of Medical and Biological Sciences*. (2019); 2 (1): 58-64. (*Corresponding Author)
125. Zafar R, Tahir IM, Akhter N, Mehboob H, Munir N, **Khurshid M**, Akram M. Diagnostic modalities employed for the diagnosis of *Mycobacterium tuberculosis*. *Pakistan Journal of Medical and Biological Sciences*. (2019); 2 (1): 53-61.
126. Razzaq MK, Rauf S, **Khurshid M**, Iqbal S, Bhat JA, Farzand A, Riaz A. Pollen viability an index of abiotic stresses tolerance and methods for the improved pollen viability. *Pakistan Journal of Agricultural Research* (2019); 32(4): 609-624.
127. Hayat S, Siddique MH, Aslam B, Nadeem H, Ashraf A, Saqalein M, **Khurshid M**, Shahzad N, Muzammil S. Extended-Spectrum- β -Lactamase producing multidrug resistant *Klebsiella pneumoniae* isolates from pediatrics. *Pakistan Journal of Zoology* (2019); 51(4), 1251-1257 (IF: 0.547)

128. **Khurshid M***, Khan AA, Najam SS, Siddique T, Islam M, Zain M, Khan AR, Shah AA, Baig SM, Awan FR. A Study of Association between Diabetes Mellitus and Chronic Hepatitis B Virus Infection. *West Indian Medical Journal* (2019); 68 (2); 108-114 (IF: 0.332)
(* Corresponding Author)

2018

129. Baloch Z, Aslam B, Muzammil S, **Khurshid M**, Rasool MH, Ma K. Selection inversion; probable tool to cope antibiotic resistance. *Infection and Drug Resistance* (2018) 11:1903-1905 (IF: 3.443)
130. Aslam B, Baloch Z, Wei W, Arshad MI, **Khurshid M**, Muzammil S, Rasool MH, Nisar MA Alvi RF, Aslam MA, Qamar MU, Salamat MKF. Antibiotic resistance; a rundown on global crisis. *Infection and Drug Resistance* (2018) 11:1645-1658 (IF: 3.443)
131. Qamar MU, Saleem S, Toleman MA, Saqalein M, Waseem M, Nisar MA, **Khurshid M**, Taj Z, Jahan S. In vitro and in vivo activity of Manuka honey against NDM-1-producing *Klebsiella pneumoniae* ST11. *Future Microbiology* (2018) 13(1):13-26 (IF: 3.374)
132. Rajoka MSR, Hayat HF, Sarwar S, Mehwish HM, Ahmad F, Hussain N, Shah SZH, **Khurshid M**, Siddiqui M, Shi J. Isolation and evaluation of probiotic potential of lactic acid bacteria isolated from poultry intestine. *Microbiology* (2018); 87, 116–126 (IF: 0.856)
133. Basit M, Rasool MH, Hassan MF, **Khurshid M**, Tahir MF, Waseem M, Aslam B. Evaluation of lipopeptide biosurfactants produced from native strains of *Bacillus cereus* as adjuvant in inactivated low pathogenicity Avian Influenza H9N2 Vaccine. *International Journal of Agriculture and Biology*. (2018); 20(6):1419-23 (IF: 0.746)
134. Saleem R, **Khurshid M***, Ahmed S. Laccases, Manganese Peroxidases and Xylanases used for the bio-bleaching of paper pulp; an environmental friendly approach. *Protein & Peptide Letters* (2018); 25 (2) 180-186 (IF:1.069)
(* Corresponding Author)
135. Saleem N, Naeem M, Rashid A, Akhter N, Tahir IM, **Khurshid M***. Diabetic nephropathy: Pathogenesis and therapeutic management. *Pakistan Journal of Medical and Biological Sciences*. (2018); 2(1): 64-74.
(* Corresponding Author)
136. Ashfaq S, Akhter N, Tahir IM, **Khurshid M**, Akram M. A Review on Diagnostic Approaches for Enteric Fever. *Pakistan Journal of Medical and Biological Sciences*. (2018); 2(1): 51-59.

2017

137. **Khurshid M***, Rasool MH, Ashfaq UA, Aslam B, Waseem M. Emergence of IS*Aba1* harboring Carbapenem Resistant *Acinetobacter baumannii* isolates in Pakistan. *Future Microbiology* (2017); 12 (14): 1261-1269. (IF: 3.637)
(* Corresponding Author)
138. Aslam B, Nisar MA, **Khurshid M**, Salamat MKF. Immune escape strategies of *Borrelia burgdorferi*. *Future Microbiology* (2017); 12 (13): 1219-1237 (IF: 3.637)

139. Aslam N, Ghaffar A, **Khurshid M**, Hussain SM, Afzal M. Diagnosis of hepatitis C in pregnant mothers and its transfer pattern in neonates. *Pakistan Journal of Pharmaceutical Sciences* (2017); 30(6): 2253-2257 (IF: 0.649)
140. Shafique M, Rasool MH, **Khurshid M**. Respiratory Syncytial Virus: an overview of infection biology and vaccination strategies. *Future Virology* (2017); 12(5): 297-313 (IF: 0.886)
141. Aslam B, Basit M, Nisar MA, **Khurshid M***, Rasool MH. Proteomics: technologies and their applications. *Journal of Chromatographic Science* (2017); 55(2): 182-196 (IF: 1.32)
(* Corresponding Author)
142. Shahid M, Hussain B, Riaz D, **Khurshid M**, Ismail M, Tariq M. Identification and partial characterization of potential probiotic lactic acid bacteria in freshwater *Labeo rohita* and *Cirrhinus mrigala*. *Aquaculture Research*. (2017); 48(4): 1688-169 (IF: 1.606)
143. Aslam B, Nisar MA, **Khurshid M**, Muzammil S, Hayat S. Nanotechnology: potential tool for immunology. *Panminerva Medica* (2017); 59(3): 277-278 (IF: 1.60)
144. Aslam B, **Khurshid M**, Nisar MA, Muzammil S, Hayat S. Superantigens: procession of frets. *Brazilian Journal of Infectious Diseases*. (2017); 21(3): 357-358 (IF: 1.412)
145. Rashid A, **Khurshid M**, Naz U, Naeem M, Ashraf MM, Saqib M, Ans M, Tufail A. Male breast; invasive ductal cell carcinoma infested with myiasis; a case report. *Professional Medical Journal* (2017); 24(4): 633-636
146. Akbar R, Rashid A, Naeem M, Shafique M, Sohail M, Naz S, **Khurshid M***. Trends in antimicrobial susceptibility of bacterial Isolates from hospitalized patients with urinary tract infection. *Pakistan Journal of Medical and Biological Sciences*. (2017); 1(2): 21-27.
(* Corresponding Author)

2016

147. Shrivastava A, Khan AA, **Khurshid M**, Kalam MA, Jain SK, Singhal, PK. Recent developments in L-asparaginase discovery and its potential as anticancer agent. *Critical Reviews in Oncology/Hematology*. (2016); 100 (1-10) (IF: 5.039)
148. Khan SU, Rahman H, Ayaz S, Qasim M, Jabbar A, **Khurshid M**, Hussain M, Muhammad N, Rehman SU, Ali N. GeneXpert assay for rapid detection of Mycobacterium tuberculosis complex in respiratory specimens from a high TB endemic area of Pakistan. *Microbial Pathogenesis*. (2016); 95, 82-85 (IF: 1.794)
149. Zahoor MA, **Khurshid M**, Qureshi R, Naz A, Shahid M. (2016). Cell culture-based viral vaccines: current status and future prospects. *Future Virology*. (2016); 11 (7), 549-562 (IF: 1.011)
150. Sohail M, Rashid A, Aslam B, Waseem M, Shahid M, Akram M, **Khurshid M***, Rasool MH. Antimicrobial susceptibility of Acinetobacter clinical isolates and emerging antibiogram trends for nosocomial infection management. *Revista da Sociedade Brasileira de Medicina Tropical*. (2016); 49(3):300-304 (IF: 0.949)
(* Corresponding Author)

151. Rasool MH, Yousaf R, Siddique AB, Saqalein M, **Khurshid M**. Isolation, Characterization, and Antibacterial Activity of Bacteriophages Against Methicillin-Resistant *Staphylococcus aureus* in Pakistan. *Jundishapur Journal of Microbiology*. (2016); 9(10): e36135 (IF: 0.655)
152. Butt IA, Aslam B, Rasool MH, Shafiq HB, **Khurshid M**, Aslam MA. Distribution of various pathogenic bacteria from pediatric ward settings. *Saudi Medical Journal*. (2016); 37 (11): 1268-1271 (IF: 0.562)
153. Najam SS, Awan FR, Islam M, **Khurshid M**, Khan AR, Siddique T, Zain M, Bilal A. Leptin Correlation with Obesity, Diabetes and Gender in a Population from Faisalabad, Pakistan. *Archives of Medicine*. (2016); 8:5.
154. Aslam N, Unbbreen S, Hussain SM, Rashid A, Ali Q, **Khurshid M**, Hussain AI, Rehman J, Afzal M. Oxidative Stress in the Patients of Hepatitis C Virus. *Oxidation Communications*. (2016); 39(2), 1405-1416 (IF: 0.489)

2015

155. Arshad MN, Nisar MA, **Khurshid M**, Hussain SZ, Maqsood U, Asghar MT, Nazir J. Molecular Basis of Arsenite (As³⁺) Induced Acute Cytotoxicity in Human Cervical Epithelial Carcinoma Cells. *Libyan Journal of Medicine* (2015); 10. (IF: 1.333)
156. **Khurshid M***, Aslam B, Nisar MA, Akbar R, Rahman H, Khan AA, Rasool MH. Bacterial munch for infants: potential pediatric therapeutic interventions of probiotics. *Future Microbiology*. (2015); 10 (11) 1881-1895 (IF: 4.275)
(* Corresponding Author)
157. Sohail M, **Khurshid M***, Saleem HGM, Khan AA. Characteristics and antibiotic resistance of urinary tract pathogens isolated from Punjab, Pakistan. *Jundishapur Journal of Microbiology*. (2015); 8(7): e19272 (IF: 0.780)
(* Corresponding Author)
158. Siddique T, Awan FR, Najam SS, Khan AR, Qureshi JA, **Khurshid M**, Islam M, Zain M. Amplification, cloning and expression of the reg3 δ gene from mouse pancreas. *Pakistan Journal of Biotechnology*. (2015); 12 (1): 55-61

2014

159. Saleem R, **Khurshid M***, Ahmed S. Xylanase, laccase and manganese peroxidase production from white rot fungi. *Iranica Journal of Energy & Environment* (2014); 5 (1): 57-64.
(* Corresponding Author)

2013

160. Khan AA, **Khurshid M***, Tawfik AF. In vitro evaluation of vincristine and fluconazole combination against Candida. *Pakistan Journal of Pharmaceutical Sciences* (2013); 26(5): 1031-1040 (IF: 1.103)
(* Corresponding Author)
161. Khan AA, **Khurshid M**, Khan S, Alshamsan A. Gut microbiota and probiotics: Current status and its role in cancer therapeutics. *Drug Development Research* (2013); 74(6): 365-375 (IF: 1.193)

2012

162. Khan AA, Shrivastava A, **Khurshid M**. Normal to cancer microbiome transformation and its implications in cancer diagnosis. *BBA: Reviews on Cancer* (2012); 1826(2): 331-337 (IF: 9.88)
163. Raish M, **Khurshid M**, Ansari MA, Chaturvedi PK, Bae SM, Kim JH, Park EK, Park DC, Ahn WS. Analysis of molecular cytogenetic alterations in uterine leiomyosarcoma by array-based comparative genomic hybridization. *Journal of Cancer Research & Clinical Oncology* (2012); 138 (7): 1173-1186 (IF: 2.558)

Popular Articles

- Article/Interview entitled “A Talk with Dr. Mohsin Khurshid on Polio eradication in Pakistan” Published in SCIENTIAMAG.

Conference/Workshops/Seminars (Organized)

- 13th International Biennial Conference, Pakistan Society of Microbiology, at Government College University, Faisalabad, Pakistan on December 22-24, 2021.
- One Day Seminar on “Application of Ionizing Radiations in Everyday Life, Radiation Hazards and Means of Protection” at Directorate of Medical Sciences, Government College University Faisalabad, Pakistan on April 27, 2016.

Conference/Workshops/Seminars (Oral Presentations)

1. **Genome Analysis of Extensively drug-resistant Salmonella Typhi Strains from Punjab, Pakistan.** Fourth International Conference on Emerging trends in Bioinformatics and Biosciences held at Hazara University, Mansehra, KPK, Pakistan (September 15-17, 2022).
2. **Molecular Characterization of Extensively Drug-Resistant Salmonella Typhi Clinical Isolates from Lahore, Pakistan.** 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021).
3. **Antimicrobial Resistance: Insights on a global challenge.** International Conference on Interdisciplinary Innovation and Invention in Biotechnology and Nanotechnology (IIIBN)-2021, The Women University Multan, Pakistan (November 24-26, 2021) (Invited Speaker)
4. **ESBL and Carbapenemases producing bacteria; A global menace.** 10th Virtual Journal Club “Microbiology and Antimicrobial Resistance”. Organized by National Institute of Health (NIH), Islamabad, Pakistan (September 22, 2021)
5. **Genetic diversity and molecular basis of carbapenem resistant among *Acinetobacter baumannii* clinical isolates.** Third National Conference on Emerging Trends in Bioinformatics & Biosciences held at Hazara University, Mansehra, KPK, Pakistan (October 03-05, 2019)
6. **Clonal dissemination of bla_{OXA-23} producing carbapenem resistant *Acinetobacter baumannii* in Pakistan.** 12th International Biennial Conference of Pakistan Society for Microbiology “Next

Generation of Microbial Therapeutics” held at Abbottabad University of Science and Technology (AUST), Abbottabad, KPK, Pakistan (February 20-22, 2019)

7. **Bacteria and cancer therapeutics; reinvigoration to an old approach** at *3rd International Conference on Biotechnology: Challenges and opportunities in Pakistan*” organized by University of South Asia, Lahore, Pakistan (February 8-9, 2017)
8. **Bacteria derived potential therapeutic agents for cancer management**” at *10th Biennial International Conference of Pakistan Society for Microbiology, Exploring Microbes for Future endeavours* at University of the Punjab, Lahore, Pakistan (March 25-28, 2015)
9. **Measles: Epidemiology, Laboratory diagnosis and Immunization** at *“Awareness Seminar on Polio & Measles* at Directorate of Medical Sciences, Government College University Faisalabad, Pakistan (March 10, 2015)
10. **The Preventive and Therapeutic potential of Probiotics in Obesity and Diabetes** at *“Awareness & Research Symposium on Diabetes and Related Metabolic Disorders* at National Institute for Biotechnology & Genetic Engineering (NIBGE), Faisalabad, Pakistan (November 20, 2014). (Invited Speaker)
11. **Guest Speaker**, One day seminar on “Biosafety and Biosecurity” at Department of Allied Health Sciences, The University of Lahore, Gujrat campus, Gujrat, Pakistan on October 24, 2018.

Conference/Workshops/Symposium (Abstracts/Posters/Proceedings)

1. **Khurshid M**, Rasool MH, Saeed M, Rasheed F, Aslam B. Genome analysis of Extensively drug-resistant *Salmonella* Typhi strains from Punjab, Pakistan. Fourth International Conference on Emerging trends in Bioinformatics and Biosciences held at Hazara University, Mansehra, KPK, Pakistan (September 15-17, 2022). (Abstract)
2. Rasool MH, **Khurshid M**, Aslam B. Monkeypox: Is the world on the verge of another epidemic? Fourth International Conference on Emerging trends in Bioinformatics and Biosciences held at Hazara University, Mansehra, KPK, Pakistan (September 15-17, 2022). (Abstract)
3. Ahmad M, Siddique AB, Muzammil S, Shafique M, Nawaz Z, **Khurshid M**, Rasool MH, Jalees M, Sarwar N, Aslam B. Occurrence of hypervirulent *Klebsiella pneumoniae* in clinical settings and lytic potential of bacteriophages against the isolates. Fourth International Conference on Emerging trends in Bioinformatics and Biosciences held at Hazara University, Mansehra, KPK, Pakistan (September 15-17, 2022). (Abstract)
4. Zahoor MA, Jamil A, Nawaz Z, Siddique AB, **Khurshid M**. Diversity of *Escherichia coli* co-harboring *mcr-1* and extended spectrum beta-lactamases from poultry. Fourth International Conference on Emerging trends in Bioinformatics and Biosciences held at Hazara University, Mansehra, KPK, Pakistan (September 15-17, 2022). (Abstract)
5. Alam M, Rasool MH, **Khurshid M**, Aslam B. Genetic Diversity and Molecular Basis of Carbapenem Resistance in *Acinetobacter baumannii* isolates from Cattle. Fourth International Conference on Emerging trends in Bioinformatics and Biosciences held at Hazara University, Mansehra, KPK, Pakistan (September 15-17, 2022). (Abstract)

6. Maham, Rasool MH, **Khurshid M**, Taj Z, Arshad J, Maryam, Anjum F. Antibacterial effect of Garlic on Multidrug resistant *Acinetobacter baumannii*. Fourth International Conference on Emerging trends in Bioinformatics and Biosciences held at Hazara University, Mansehra, KPK, Pakistan (September 15-17, 2022). (Abstract)
7. Sarwar F, Rasool MH, **Khurshid M**, Aslam B, Qamar MU, Saqalein M. New Delhi Metallo-lactamase *Escherichia coli* Belonging to Sequence Type 131 in Tertiary Care Hospitals of Southern Punjab, Pakistan. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
8. Ahmad M, Siddique AB, Muzammil S, Shafique M, Nawaz Z, **Khurshid M**, Rasool MH, Jalees M, Sarwar N, Aslam B. Occurrence of Hypervirulent *Klebsiella pneumoniae* in Clinical Settings and Lytic Potential of Bacteriophages against The Isolates. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
9. Shahid A, Muzammil S, Aslam B, Saqalein M, Rasool MH, **Khurshid M**. Environmental and Health Impact of Antibiotic Residues in Food Chains. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
10. Rasool M, Shahid A, Aslam B, Rasool MH, **Khurshid M**. The Prospects of CRISPR-Cas System for The Amelioration of Antibiotic Resistance. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
11. Hayat S, Siddique MH, Ashraf A, **Khurshid M**, Muzammil S. Ecofriendly Photosynthesized Zirconium Oxide Nanoparticles as Antibiofilm Agent against MDR *Acinetobacter baumannii*. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
12. Hassan A, Rasool MH, **Khurshid M**, Saqalein M. Prevalence and Antimicrobial Susceptibility Pattern of Carbapenem Resistance from Pediatric Bloodstream Infections. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
13. Farooq A, Rasool MH, **Khurshid M**, Siddique AB, Aslam B, Saqalein M, Taj Z. Prevalence and antimicrobial susceptibility pattern of bacteria from Pediatric blood culture. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
14. Yaseen Z, Rasool MH, Nawaz MZ, Shafique M, **Khurshid M**, Saqalein M. Antibacterial Activity of *Cuminum cyminum* against Multidrug-Resistant Bacteria. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
15. Bajwa MHA, Muzammil S, Anayat A, Khurshid M, Saqalein M, Waseem M. Investigating the Impact of Combined Application of *Bravibacterium* Spp., and Nanoparticle on The Alleviation of Chromium Stress in Brassica Plants. 13th International Biennial Conference, Pakistan Society

for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)

16. **Khurshid M**, Saeed M, Rasheed F, Aslam B, Rasool MH. Molecular Characterization of Extensively Drug-Resistant Salmonella Typhi Clinical Isolates from Lahore, Pakistan. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
17. Wahab A, Rasool MH, Shafique M, Qamar MU, **Khurshid M**, Aslam B, Saqalein M. Prevalence and Antimicrobial Sensitivity Pattern of ESBL Producing Gram Negative Bacteria. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
18. Arshad A, Shahid A, Aslam B, Saqalein M, Rasool MH, **Khurshid M**. Endocrine Role of Gut Microbiota and Its Therapeutic Implications for Neurological and Psychiatric Disorders. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
19. Ziafat N, Rasool MH, Aslam B, Saqalein M, **Khurshid M**, Taj Z. Prevalence and Antimicrobial Susceptibility Paradigm of Bacteria Isolated from Urinary Tract Infections. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
20. Mudassar M, Rasool MH, **Khurshid M**, Shafique M. Transfusion Transmissible Infections Among Multi Transfused Beta-Thalassemia Patients. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
21. Arshad MA, Rasool MH, **Khurshid M**, Shafique M, Aslam B, Saqalein M. Occurrence and Antibiotics Sensitivity Profiling of Bacteria from Operation Theatres of DHQ Hospital, Narowal Punjab Pakistan. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
22. Khurshid T, Rasool MH, Aslam B, **Khurshid M**, Saqalein M. Antibacterial Activity of Silver Nanoparticles Against Clinical Isolates of *Klebsiella pneumoniae*. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
23. Khalid A, Rasool MH, Siddique AB, Aslam B, Khurshid M, Saqalein M, Taj Z. Evaluation of antibacterial activity of Nigella sativa against Multidrug Resistant Bacteria. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)
24. Younas M, Rasool MH, **Khurshid M**, Nawaz MZ. An In-Vitro Investigation of the Antimicrobial Activity of Green Synthesized Silver Nanoparticle Using Moringa Oleifera Leaf Extract Against MDR Strains. 13th International Biennial Conference, Pakistan Society for Microbiology (TIBC-PSM-2021) held at Government College University, Faisalabad, Pakistan (December 22-24, 2021) (Abstract)

25. **Khurshid M.** Antimicrobial Resistance: Insights on a global challenge. International Conference on Interdisciplinary Innovation and Invention in Biotechnology and Nanotechnology (IIIBN)-2021, The Women University Multan, Pakistan (November 24-26, 2021) (Abstract)
26. Rasool MH, Mehmood A, Saqalein M, Nisar MA, **Khurshid M.** Preparation and evaluation of virosome vaccine against Newcastle disease using indigenous virus in Pakistan. Third National Conference on Emerging Trends in Bioinformatics & Biosciences held at Hazara University, Mansehra, KPK, Pakistan (October 03-05, 2019) (Abstract)
27. **Khurshid M,** Rasool MH, Aslam B, Waseem M, Taj Z, Wang M. Genetic diversity and molecular basis of carbapenem resistant among *Acinetobacter baumannii* clinical isolates. Third National Conference on Emerging Trends in Bioinformatics & Biosciences held at Hazara University, Mansehra, KPK, Pakistan (October 03-05, 2019) (Abstract)
28. Qureshi A, Rasool MH, **Khurshid M,** Aslam B. Molecular characterization of efflux mediated fluoroquinolones and tetracycline resistance in *Acinetobacter baumannii* clinical isolates. Third National Conference on Emerging Trends in Bioinformatics & Biosciences held at Hazara University, Mansehra, KPK, Pakistan (October 03-05, 2019) (Abstract)
29. Rasool M, Rasool MH, Zahoor MA, Nawaz MZ, **Khurshid M.** Sero-epidemiology of hepatitis C in hemodialysis patients from tertiary care hospitals of Faisalabad. Third National Conference on Emerging Trends in Bioinformatics & Biosciences held at Hazara University, Mansehra, KPK, Pakistan (October 03-05, 2019) (Abstract)
30. Shahid A, Rasool M, Rasool MH, **Khurshid M.** Gut microbiota: endocrine role and implications in neurological disorders. Third National Conference on Emerging Trends in Bioinformatics & Biosciences held at Hazara University, Mansehra, KPK, Pakistan (October 03-05, 2019) (Abstract)
31. Tanveer A, Rasool MH, Nawaz MZ, Aslam B, **Khurshid M.** Seroprevalence and risk factors assessment of *Helicobacter pylori* in asymptomatic individuals of district Faisalabad. Third National Conference on Emerging Trends in Bioinformatics & Biosciences held at Hazara University, Mansehra, KPK, Pakistan (October 03-05, 2019) (Abstract)
32. Alam M, Rasool MH, Nawaz MZ, Saqalein M, **Khurshid M.** Epidemiological investigations on the seroprevalence of hepatitis C and associated risk factors analysis in district Gilgit, Pakistan. Third National Conference on Emerging Trends in Bioinformatics & Biosciences held at Hazara University, Mansehra, KPK, Pakistan (October 03-05, 2019) (Abstract)
33. Waqas U, Rasool M, Shahid A, Saqalein M, Rasool MH, **Khurshid M.** The development and therapeutic benefits of designer probiotics. Third National Conference on Emerging Trends in Bioinformatics & Biosciences held at Hazara University, Mansehra, KPK, Pakistan (October 03-05, 2019) (Abstract)
34. **Khurshid M,** Rasool MH, Ashfaq UA, Aslam B, Waseem M, Sohail M, Qamar MU, Nisar MA, Saqalein M. In-vitro assessment of therapeutic potential of Polymyxins and Tigecycline against multidrug resistant *Acinetobacter* isolates from infected wounds. Seventh Shanghai International Congress of Clinical Microbiology and Antimicrobial Chemotherapy (SICCMAC) in **Shanghai, China** on September 14-17, 2017. (e-poster)

35. Rasool MH, Riaz S, Aslam B, Saqib M, Taj Z and **Khurshid M**. Occurrence, molecular identification and antibiotic resistance profiling of Methicillin Resistant *Staphylococcus aureus* isolated from surgical and accidental wounds. 1st National Conference on “Recent Trends in Microbiology” at Abbottabad University of Science and Technology, Pakistan, December 20-21, 2016. *HEC Recognized: Yes*
36. Aslam B, Alvi RF, Nisar MA, **Khurshid M**, Rasool MH. Quorum sensing inhibition; soon-to-be control of bacterial infection. Proc. Agro-Vet Conference on Progressive Agro-Vet sector; A key to Prosperous Pakistan organized by Agro-Vet Forum Pakistan held on April 24, 2016 in Faisalabad. pp 3.
37. Aslam B, Nisar MA, **Khurshid M**, Alvi RF, Rasool MH. (2016). RNA interference; Best thing since sliced bread. Proc. Agro-Vet Conference on Progressive Agro-Vet sector; A key to Prosperous Pakistan organized by Agro-Vet Forum Pakistan held on April 24, 2016 in Faisalabad. pp 39.
38. **Khurshid M**, Rasool MH, Rashid A, Aslam B, Waseem M, Guo Q, Wang M. (2019). Clonal dissemination of bla_{OXA-23} producing carbapenem resistant *Acinetobacter baumannii* in Pakistan. Proc. 12th International Biennial Conference of Pakistan Society for Microbiology “Next Generation of Microbial Therapeutics” held at Abbottabad University of Science and Technology (AUST), Abbottabad, Pakistan on February 20-22, 2019. pp: 58.
39. Rasool MH, Afzal AM, Hassan MF, **Khurshid M**, Waseem M, Aslam B. (2019). Molecular Characterization and Biosorptive Potential of two Native Strains of *Bacillus Cereus* isolated from Textile Effluents of Faisalabad Pakistan. Proc. 12th International Biennial Conference of Pakistan Society for Microbiology “Next Generation of Microbial Therapeutics” held at Abbottabad University of Science and Technology (AUST), Abbottabad, Pakistan on February 20-22, 2019. pp: 231.
40. Rasool, MH, Islam N, Nawaz MZ, Saqalein M, **Khurshid M**, Asghar M, Arshad MA. (2019). Association between Hepatitis C and Diabetes Mellitus: A case-control epidemiological study in Faisalabad Pakistan. Proc. 12th International Biennial Conference of Pakistan Society for Microbiology “Next Generation of Microbial Therapeutics” held at Abbottabad University of Science and Technology (AUST), Abbottabad, Pakistan on February 20-22, 2019. pSp: 237.
41. Rasool MH, Asghar U, Nawaz MZ, Saqalein M, **Khurshid M**, Islam N, Arshad MA. (2019). Sero-prevalence and associated risk factor analysis of Hepatitis C in District Mandi-Bahauddin, Pakistan. Proc. 12th International Biennial Conference of Pakistan Society for Microbiology “Next Generation of Microbial Therapeutics” held at Abbottabad University of Science and Technology (AUST), Abbottabad, Pakistan on February 20-22, 2019. pp: 238.
42. **Khurshid M**, Rashid A, Ali A, Khan AA. Bacteria and cancer therapeutics; reinvigoration to an old approach. 3rd International Conference on Biotechnology: Challenges and opportunities in Pakistan” organized by University of South Asia, Lahore, Pakistan (February 8-9, 2017)
43. Zahra T, **Khurshid M**. Wind power as the renewable energy; Prospects for Pakistan. 3rd International Conference on Biotechnology: Challenges and opportunities in Pakistan” organized by University of South Asia, Lahore, Pakistan (February 8-9, 2017)
44. Naeem M, Rasool MH, **Khurshid M**, Aslam B, Sohail M, Qamar MU, Hayat S, Saqib M, Shahzad A. Insights on Multi-drug Resistance of *mecA* positive *Staphylococcus aureus* clinical

isolates from four tertiary care hospitals of Lahore metropolis; A public health threat. 3rd International Conference on Biotechnology: Challenges and opportunities in Pakistan" organized by University of South Asia, Lahore, Pakistan (February 8-9, 2017)

45. **Khurshid M**, Shahid M, Khan AA, Saleem HGM, Dab RH. "Bacteria derived potential therapeutic agents for cancer management" 10th Biennial International Conference of Pakistan Society for Microbiology, Exploring Microbes for Future endeavours held on March 25-28, 2015 at University of the Punjab, Lahore, Pakistan. Vol: pp:- (Conference Publications)
46. Siddique T, Awan FR, **Khurshid M**, and Qureshi JA. "INGAP: A possible therapeutic protein for the insulin producing beta-cells" Commercialization and development of Biotechnology conference. NIBGE, Faisalabad. 2009. Vol: pp:- (Conference Publications)
47. Awan FR, **Khurshid M**, Najam SS, Islam M, Khan AR, Siddique T, Zain M, Baig SM, Bilal A, Qureshi JA. "Biochemical and molecular studies of type 2 diabetic patients." 19th Annual Meeting of Medical Research Society of Pakistan (MRSP) on 31st October 2009 at the University of Health Sciences, Lahore. Vol: pp:- (Conference Publications) *HEC Recognized: Yes*
48. Siddique T, Awan FR, **Khurshid M**, Khan AR, Najam SS, Islam M, Zain M, Baig SM, Bilal A, Qureshi JA. "INGAP-rP: A potential therapeutic protein for islet neogenesis." 5th International Symposium on Biotechnology held on 4-7 October 2009 at the University of Sindh, Jamshoro. Vol: pp:- (Conference Publications)
49. Zain M, Awan FR, **Khurshid M**, Najam SS, Islam M, Khan AR, Siddique T, Baig SM, Bilal A, Qureshi JA. "Biochemical and Molecular Studies of Diabetic Nephropathy." 5th International Symposium on Biotechnology held on 4-7 October 2009 at the University of Sindh, Jamshoro. Vol: pp:- (Conference Publications)
50. Islam M, Awan FR, **Khurshid M**, Najam SS, Khan AR, Siddique T, Zain M, Baig SM, Bilal A, Qureshi JA. "Anthropometric and Genetic Studies of Type 2 Diabetic Patients." 5th International Symposium on Biotechnology held on 4-7 October 2009 at the University of Sindh, Jamshoro. Vol: pp:- (Conference Publications)
51. Khan AR, Awan FR, **Khurshid M**, Najam SS, Islam M, Siddique T, Zain M, Baig SM, Bilal A, Qureshi JA. "Biochemical and Proteomic Study on Serum Samples of Type 2 Diabetic." 5th International Symposium on Biotechnology held on 4-7 October 2009 at the University of Sindh, Jamshoro. Vol: pp:- (Conference Publications)

Conference/Workshops/Seminars (Participated)

- Workshop on “Lab Biosafety and Biosecurity” at College of Veterinary and Animal Sciences (CVAS) Jhang, Pakistan (February 13, 2019)
- Awareness Seminar on “Breast Cancer” organized by Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan (October 18, 2018)
- Training Workshop (5 days) on “Project Execution: Public Procurement Regulatory Authority (PPRA) Rules” organized by Government College University, Faisalabad, Pakistan (January 22-26, 2018)
- Seminar on “World Orthotics and Prosthetics Day” organized by Department of Orthotics and Prosthetics, Government College University, Faisalabad, Pakistan (January 17, 2018)
- Training (2 days) of Presiding Officers and Sr. Assistant Presiding Officers organized by Election Commission of Pakistan (ECP) and the United Nations Development Program (2018)
- One Day seminar on “Roles of Microbes in Sustainable Development” organized by Department of Microbiology, Government College University, Faisalabad, Pakistan (December 22, 2017)
- Workshop on “Recent Trends in Molecular Diagnosis of Viral Diseases” organized by University of Agriculture, Faisalabad (UAF), Pakistan (January 12-14, 2017)
- Awareness Seminar on “Crimean Congo Hemorrhagic Fever” organized by Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan (October 27, 2016)
- One Day Seminar on “Crimean Congo Hemorrhagic Fever” organized by Department of Microbiology, Government College University, Faisalabad, Pakistan (September 7, 2016)
- National One Day Symposium on “One Health” organized by United States Agency for International Development (USAID) at University of Agriculture Faisalabad (UAF), Faisalabad, Pakistan (August 8, 2016)
- One Day Seminar on “Industrial Linkage and Eastern Medicine for the Better Promise of Tomorrow” organized by Department of Eastern Medicine, Government College University, Faisalabad, Pakistan (May 19, 2016)
- One Day Workshop on “Infrared Spectroscopy; Principles and Applications” organized by Office of Research, Innovation and Commercialization (ORIC) Government College University, Faisalabad (GCUF), Pakistan and Rays Technologies, Lahore (February 25, 2016)
- One Day seminar on “World Radiology Day” organized by College of Allied Health Professionals, Government College University, Faisalabad, Pakistan (December 15, 2015)
- GCUF-ASM One Day Biosafety Workshop organized by Department of Microbiology Government College University Faisalabad (GCUF), Pakistan and the American Society for Microbiology (ASM), USA (November 11, 2015)
- Awareness Seminar on “Breast Cancer” organized by Directorate of Medical Sciences and Directorate of Student Affairs at Government College University, Faisalabad, Pakistan (October 7, 2015)

- Workshop on “Digital Library” organized by Higher Education Commission (HEC), Islamabad, Pakistan and Office of Research, Innovation and Commercialization (ORIC) Government College University, Faisalabad (GCUF), Pakistan (September 1-7, 2015)
- Awareness Seminar on “Polio and Measles” organized by Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan (March 2015)
- On-line Course on “Plasma Membranes and Dengue Virus Infections” organized at L.E.J. National Science Information Center (LEJNSIC), University of Karachi, Karachi, Pakistan (March 4-18, 2015)
- Symposium on “Diabetes and Related Metabolic Disorders” held at National Institute for Biotechnology & Genetic Engineering (NIBGE), Faisalabad, Pakistan (November 20, 2014)
- Participated in 2nd Saudi International Nanotechnology Conference at King Abdul-Aziz City for Science and Technology (KACST) Headquarter Riyadh, Saudi Arabia (November 11-13, 2012)
- Participated at Saudi International Biotechnology Conference at King Abdul-Aziz City for Science and Technology (KACST) Headquarter Riyadh, Saudi Arabia (September 18-19, 2012)
- Participated in 4th annual conference of Infectious Diseases Society of Pakistan at Liaquat National Hospital, Karachi, Pakistan (March 17-19, 2006)
- Workshop on “Electron Microscopy” organized by Karachi University-NED University of Engineering & Technology, Karachi, Pakistan (March 9-11, 2006)

Biosafety and Biosecurity Trainings/Workshops

- Member, Institutional Biosafety Committee (IBC), Government College University Faisalabad, Pakistan
- Participated in the “Train the Trainers” Workshop on Biological Risk Mitigation Program on August 22-24, 2022, at The Islamia University Bahawalpur organized by “Pakistan Biological Safety Association”.
- Leading the participants in Pakistan on E-training “Safe and Secure Detection and Characterization of Pathogens, Field Sample Collection, Laboratory Diagnostic and Data Security, Pakistan” April 2022 to June 2022 by Georgetown University, USA and CRDF Global.

Courses Taught (Undergraduate & Postgraduate)

No.	Course Title	Level
1	MIC-709 - Advanced Medical Microbiology	Postgraduate (PhD)
2	MIC-721 - Molecular Mechanisms of Antimicrobial Agents	Postgraduate (PhD)
3	MIC-705 - Advanced Immunology	Postgraduate (MPhil/MS)
4	MIC-719 - Recombinant DNA Technology	Postgraduate (MPhil/MS)
5	MIC-726 - Research Methodology and Scientific Writing	Postgraduate (MPhil/MS)
6	MIC-403 - Bacteriology	Undergraduate
7	MIC-302 - Cell Biology	Undergraduate
8	MIC-306 - Human Physiology	Undergraduate
9	MIC-507 - Molecular Biology and Biotechnology	Undergraduate
10	MIC-510 - Microbial Enzymology	Undergraduate
11	MIC-611 - Research Methodology	Undergraduate
12	MLT-201 - Fundamentals of Medical Lab Technology)	Undergraduate
13	MLT-206 - Immunology & Serology	Undergraduate
14	MLT-209 - Report Writing	Undergraduate
15	AHP-112 - Microbiology & Sterilization	Undergraduate
16	MLT-213 - Biosafety & Hazards	Undergraduate
17	MLT-215 - Practical Training	Undergraduate
18	MLT-212 - Clinical Bacteriology	Undergraduate
19	MIC-321 - General Microbiology and Sterilization	Undergraduate
20	MLT-408 - Immunology and Serology	Undergraduate
21	MLT-422 - Advanced Immunology	Undergraduate
22	MLT-604 - Clinical Laboratory Management	Undergraduate
23	MIC-421 - Advanced Clinical Microbiology	Undergraduate
24	OTT-605 - Clinical and Applied Microbiology	Undergraduate
25	MIC-321 - General Microbiology and Sterilization	Undergraduate
26	MLT-407 - Clinical Lab Practice	Undergraduate
27	MLT-605 - Advanced Clinical Microbiology	Undergraduate
28	AHP-402 - Scientific Writing	Undergraduate
29	BNB-402 - Bioinformatics-I	Undergraduate

Research Students Supervision:

Doctor of Philosophy (PhD) (As Major Supervisor)

1. **Faiza Sarwar** (PhD Microbiology, Government College University Faisalabad, Pakistan). Prevalence and molecular characterization of New Delhi Metallo- β -lactamase producing *Escherichia coli* and evaluation of lytic potential of coliphages against NDM positive strains. (2022).
2. **Zeeshan Taj** (PhD Microbiology, Government College University Faisalabad, Pakistan). Efflux Mediated Multidrug Resistance in *Acinetobacter baumannii* Isolates. (2024)
3. **Samman Munir** (PhD Biotechnology, Government College University Faisalabad, Pakistan). Evaluation of pharmacological potential of heterocyclic derivatives against microbial growth and Alzheimer disease. (2024)
4. **Sehar Aslam** (PhD Biotechnology, Government College University Faisalabad, Pakistan). Biosynthesis of Silver Nanoparticles using indigenously isolated Probiotics Strains and evaluation of their biological activities. (2024)
5. **Muhammad Saeed** (PhD Microbiology, Government College University Faisalabad, Pakistan). Epidemiology and Molecular basis of Multidrug Resistance in *Burkholderia cepacia* clinical isolates. (2020-23) [Thesis Submitted]
6. **Hafiz Fakhar Hayat** (PhD Microbiology, Government College University Faisalabad, Pakistan). Evaluation of Biological Activities of Exopolysaccharides produced by indigenously isolated Lactic Acid Bacteria. (2019-22) [Thesis Submitted]
7. **Rameen Parvez** (PhD Microbiology, Government College University Faisalabad, Pakistan). Molecular basis of multidrug resistance in Enterobacterales isolates from commercial and backyard poultry. (2019-22) [Continued]
8. **Amna Kausar** (PhD Medical Laboratory Sciences, Riphah International University, Islamabad). Genetic Mechanisms of Antimicrobial Resistance in *Serratia Marcescens* Clinical Isolates. 2022-25. [Thesis Submitted] as Co-Supervisor

Doctor of Philosophy (PhD) Supervision (As Member Supervisory Committee)

1. **Minhas Alam** (PhD Microbiology, Government College University Faisalabad, Pakistan). Molecular Epidemiology and Antimicrobial Resistance Paradigm of *Acinetobacter* species: A one health approach. (2021) [Member-2]
2. **Muhammad Usman** (PhD Microbiology, Government College University Faisalabad, Pakistan). Genetic Diversity and Antibiotic Resistance Paradigm of Avian Pathogenic *E. coli* causing Colibacillosis in Poultry. (2018-21) [Member-2] (Continued)
3. **Zia Ashraf** (PhD Microbiology, Government College University Faisalabad, Pakistan). Virulence Profiling and Molecular Mechanisms of Antimicrobial Resistance in Bacterial Pathogens from Urinary Tract Infections. (2020-23) [Member-1] (Thesis Submitted)

4. **Quratulain Babar** (PhD Biochemistry, Government College University Faisalabad, Pakistan). Isolation and Characterization of Lipopeptides from Indigenously Purified and Identified Bacillus Species. (2020-23) [Member-2] (Thesis Submitted)
5. **Muhammad Hassan Sarfraz** (PhD Microbiology, Government College University Faisalabad, Pakistan). Synthesis and characterization of chitosan-based nanoparticles: In-vitro studies on antimicrobial and antioxidant potential. (2020-23) [Member-1] (Continued)
6. **Maqsood Ahmad** (PhD Microbiology, Government College University Faisalabad, Pakistan). Epidemiology and Molecular basis of Extensively Drug-Resistant *Salmonella* Typhi clinical isolates from Punjab Pakistan. (2020-23) [Member-1] (Continued)
7. **Muhammad Nauman** (PhD Microbiology, Government College University Faisalabad, Pakistan). Genetic analysis of multidrug resistant *Mycobacterium tuberculosis* in Punjab, Pakistan. (2021-24) [Member-2] (Continued)
8. **Fatima Mujahid** (PhD Microbiology, Government College University Faisalabad, Pakistan). Molecular basis of antimicrobial resistance and antibiofilm potential of biogenic silver nanoparticles against uropathogenic *Escherichia coli*. (2021-24) [Member-1] (Thesis Submitted)
9. **Rasti Abbas** (PhD Microbiology, Government College University Faisalabad, Pakistan). Chemically and green synthesized metallic nanoparticles and their evaluation as antibacterial and antioxidant agents. (2021-24) [Member-2] (Continued)
10. **Sara Mahmood** (PhD Microbiology, Government College University Faisalabad, Pakistan). Genetic outlook of *Salmonella enterica* recovered from poultry and associated environment. (2021-24) [Member-2] (Thesis Submitted)
11. **Atifa Ambreen** (PhD Microbiology, Government College University Faisalabad, Pakistan). Molecular insights into antimicrobial resistance of *Salmonella* Typhi in pediatric blood stream infections. (2022-25) [Member-2] (Continued)
12. **Nadia Parveen** (PhD Microbiology, Government College University Faisalabad, Pakistan). Molecular basis of multidrug resistance and biofilm production in *Escherichia coli* isolates from catheter-associated urinary tract infections. (2022-25) [Member-2] (Continued)
13. **Ayesha Ambreen** (PhD Microbiology, Government College University Faisalabad, Pakistan). *Salmonella* Typhi in food: surveillance, molecular characterization and resistance trends. (2022-25) [Member-1] (Continued)
14. **Saba Sonia** (PhD Microbiology, Government College University Faisalabad, Pakistan). Epidemiological investigations of Brucellosis and Toxoplasmosis among pregnant females in Punjab, Pakistan. (2022-25) [Member-1] (Continued)

Master of Philosophy (MPhil) Supervision (As Major Supervisor)

1. **Swebba Waheed** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence of *Staphylococcus aureus* nasal carriage and analysis of associated risk factors among healthcare workers (2025)

2. **Hashmat Khan** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Frequency and antimicrobial resistance pattern of *Staphylococcus aureus* isolated from surgical and burn wounds (2025)
3. **Tehreem Siddiqui** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Sero-prevalence and risk factors analysis of *Helicobacter pylori* infection in district Vehari (2025)
4. **Ahsen Taqveem** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Nasal carriage and antimicrobial susceptibility patterns of *Staphylococcus aureus* in students (2024)
5. **Ayesha Latif** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Nasal carriage and antimicrobial susceptibility patterns of *Staphylococcus aureus* in healthy population of Faisalabad (2024)
6. **Asma Sarwar** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Seroprevalence of transfusion-transmissible infections among blood donors at public and Private Blood Centers in Jaranwala (2024)
7. **Khadija Tufail** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Detection of Class 1 Integron-Integrase Gene in Drinking Water of Faisalabad. (2023)
8. **Azeem Aslam** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibacterial Effect of Essential Oils from Selected Medicinal Plants on Multidrug Resistant Gram-Negative Bacteria. (2023)
9. **Hamza Javed** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antioxidant and antibacterial activity of natural spices against pathogenic bacteria. (2022)
10. **Saida Saleem** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence of extended spectrum beta lactamase genes among Gram negative rods from blood cultures. (2022)
11. **Sayyeda Farwa Mazhar** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence of *bla*_{CTX-M} gene among *Escherichia coli* isolates from clinical specimens. (2022)
12. **Khadim Hussain** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence of *bla*_{CTX-M} producing Gram-negative bacterial pathogens from a teaching hospital in Dera Ghazi Khan. [Continued]
13. **Iqra Kamal** (MPhil Biotechnology, Government College University Faisalabad, Pakistan) Surveillance and molecular analysis of Extended-spectrum beta-lactamase-producing *E. coli* in cattle. (2022)
14. **Aniqa Arshad** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibacterial Potential of Biologically Synthesized Magnesium Oxide Nanoparticles using *Escherichia coli* against *Staphylococcus aureus*. (2021)

15. **Aqsa Shahid** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibacterial Potential of Biologically Synthesized Magnesium Oxide Nanoparticles Using *Saccharomyces Cerevisiae* against Gram-Negative Bacteria. (2021)
16. **Komal Shahid** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antimicrobial Susceptibility Pattern of Extended-Spectrum Beta-lactamase Producing Enterobacteriaceae in Pediatric Bloodstream Infections. (2021)
17. **Yousaf Ali** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Seroprevalence of Transfusion Transmissible Infections among Blood Donors at Public and Private Blood Centers in District Vehari. (2021)
18. **Muhammad Usman** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Seroprevalence of Hepatitis D Virus among Hepatitis B virus Infected Patients in District Vehari. (2021)
19. **Umair Waqas** (MPhil Microbiology, Government College University Faisalabad, Pakistan) In vitro Evaluation of Cefoperazone-Sulbactam Susceptibility against Class D Beta-lactamases producing Carbapenem Resistant *Acinetobacter baumannii* strains. (2020)
20. **Maqsood Ahmad** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antifungal susceptibility and Molecular Characterization of *Candida albicans* from intensive care patients. (2020)
21. **Moon Ramzan** (MPhil Microbiology, Government College University Faisalabad, Pakistan) HIV and Viral Hepatitis Co-infection among injection drug users in Lahore Pakistan. (2020)
22. **Muhammad Kamran** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antimicrobial Susceptibility Profiling of ESBL Producing Multidrug Resistant Gram-Negative Bacterial Pathogens from Cockroaches. (2020)
23. **Faikha Javed** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Aminoglycoside and carbapenem co-resistance among *Escherichia coli* from the urinary tract infection patients. (2020)
24. **Muhammad Naveed Akhtar** (MPhil Molecular Biology, Virtual University of Pakistan). Molecular mechanisms of tetracycline resistance among *Acinetobacter baumannii* isolates from clinical specimens. (2020)
25. **Syed Zohaib Haider** (MPhil Molecular Biology, Virtual University of Pakistan) Molecular characterization of 16S rRNA Methylase *armA* producing aminoglycoside resistant *Acinetobacter baumannii* isolates. (2019)
26. **Hafiz Khalil ur Rehman** (MPhil Physiology, Government College University Faisalabad, Pakistan) The Dysbiosis Index to Assess Oral and Fecal Microbial Dynamics of the Human Population Living in Various Socioeconomic Areas of District Faisalabad. (2021)
27. **Haffsa Maqadass** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Molecular Characterization of *aphA6* harbouring Aminoglycosides Resistant *Acinetobacter baumannii* isolates. (2019)

28. **Muhammad Mudassar** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence of Transfusion Transmissible Infections among Patients of Beta Thalassemia from Faisalabad Pakistan. (2019)
29. **Amber Qureshi** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Molecular analysis of Efflux-Mediated Antibiotic Resistance against Tetracyclines and Fluoroquinolones in Clinical Isolates of *Acinetobacter baumannii*. (2019)
30. **Muhammad Saeed** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Molecular Characterization and Genetic basis of Cephalosporin Resistance in *Salmonella* Typhi isolates from febrile patients. (2019)
31. **Saba Ali Ahmad** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Occurrence and Characterization of Carbapenem Resistant Determinants from Hospital Wastewater. (2019)
32. **Iqra Aziz** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Molecular characterization and genetic basis of aminoglycosides resistance in *Escherichia coli* isolates from clinical specimens. (2019)
33. **Amir Nawaz** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Identification of antimicrobial resistant bacteria isolated from various broiler hatchery facilities in Rahim Yar Khan. (2019)
34. **Sobia Noreen** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Bacterial contaminants of operation theatre settings in public and private sector hospitals in Gojra. (2019)
35. **Samman Munir** (MPhil Biotechnology, Government College University Faisalabad, Pakistan) Molecular characterization of nosocomial carbapenem resistant *Acinetobacter baumannii*. (2019)

Master of Philosophy (MPhil) Supervision (As Member Supervisory Committee)

1. **Sania Akram** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence and risk determinants of Pulmonary Tuberculosis in symptomatic patients at tehsil headquarter hospital Sadiqabad (2025) [Member-2]
2. **Rushda Gohar** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibiotic resistance profiling of *Escherichia coli* isolates from aquaculture environment (2025) [Member-1]
3. **Tanzeela Tariq** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Cross sectional epidemiological study of syphilis in pregnant females of district Faisalabad (2025) [Member-2]
4. **Sabeeka Shahwar** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Nasal carriage and antimicrobial susceptibility profiles of *Staphylococcus aureus* in food handlers (2025) [Member-1]

5. **Muhammad Hasnain Raza** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Seroprevalence of Hepatitis B and C among healthy individuals of district Faisalabad: A cross-sectional study (2025) [Member-1]
6. **Sana Liaqat** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Diversity and metabolic potential of indigenous bacteria isolated from industrial waste (2025) [Member-1]
7. **Azalfah Ibrar** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Activity of biogenic silver nanoparticles against multidrug resistant *Klebsiella pneumoniae* (2025) [Member-1]
8. **Ayesha Zahoor** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Detection of blaTEM harboring *Escherichia coli* among urinary tract infected patients. (2024) [Member-1]
9. **Alia Jabeen** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibacterial activity of Tea tree essential oil and Aloe vera against Acne Bacteria. (2024) [Member-2]
10. **Rubab Asghar** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Detection of blaCTX-M harboring *Proteus mirabilis* from broiler carcasses. (2024) [Member-2]
11. **Amna Rana** (MPhil Biochemistry, Government College University Faisalabad, Pakistan). Isolation and Characterization of Lipopeptides from Indigenously Purified and Identified *Bacillus* Species. (2023). [Member-2]
12. **Iqra Kanwal** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibacterial Activity of Aloe vera against Multidrug Resistant *Acinetobacter baumannii*. (2021-23) [Member-1]
13. **Basam Ali** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Evaluation of Cumin Essential Oil against *Escherichia coli* Isolated from Yoghurt. (2023) [Member-1]
14. **Abdul Razaq** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Detection of Metallo- β -Lactamases in *Pseudomonas aeruginosa* Isolates from District Dera Ghazi Khan. (2021-23) [Member-1]
15. **Khansaa Abid** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Characterization of Extended-Spectrum Beta-lactamase producing *Escherichia coli* in Drinking Water Samples from the Universities. (2021-23) [Member-2]
16. **Aleena Shafqat** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibacterial and Antioxidant Activity of Chitosan-based Copper Oxide Nanoparticles against Selected Gram-Negative Bacteria. (2021-23) [Member-1]
17. **Arslan Abbas** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Sero-prevalence and Risk Factors Analysis of HIV and Syphilis in District Gilgit and Nagar, Pakistan. (2021-23) [Member-2]

18. **Jazab Naeem** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibiofilm Potential of Zinc Oxide Nanoparticles and Selected Antibiotics against Multidrug Resistant ESKAPE Pathogens. (2021-23) [Member-1]
19. **Shameen Tariq** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Detection of *bla*CTX-M Harboring *Escherichia coli* from the Excreta of Small Ruminants. (2021-23) [Member-2]
20. **Maham** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibacterial activity of Garlic (*Allium sativum*) against Multidrug Resistant bacteria. (2022). [Member-1]
21. **Hafiz Muhammad Siddiq** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Effect of cinnamon oil on planktonic and biofilm forms of *Acinetobacter baumannii*. (2022) [Member-1]
22. **Fatima Javed** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibacterial and antibiofilm potential of green synthesized magnesium oxide nanoparticles against *Klebsiella pneumoniae*. (2022) [Member-2]
23. **Humna Fatima** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Detection of antimicrobial resistant bacteria in fecal samples of birds from wildlife sanctuaries in district Faisalabad. (2022) [Member-1]
24. **Urwa Tul Isha Malik** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Detection of *Escherichia coli* harboring Extended Spectrum β -lactamases from leafy greens sold by selected formal and informal grocery retail stores. (2022) [Member-2]
25. **Abdullah Khan** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Wave wise Seroprevalence of Covid-19 in healthcare workers of Chiniot. [Member-2] [Continued]
26. **Urooj Qamar** (MPhil Biochemistry, Government College University Faisalabad, Pakistan) Preparation of different formulations of thermostable microbial protease through immobilization on polysaccharides supporting matrix. (2022) [Member-2]
27. **Ali Hassan** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antimicrobial Resistance paradigm of Carbapenem-resistant Enterobacteriaceae in pediatric bloodstream infections. (2021) [Member-1]
28. **Farrah Naz** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Molecular Epidemiology of Severe Acute Respiratory Syndrome Coronavirus-2 in Lahore Metropolis. (2021) [Member-2]
29. **Hasnain Raza** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Isolation and molecular characterization of clinically isolated Methicillin-Resistant *Staphylococcus aureus* from tertiary care hospitals of Faisalabad. (2021) [Member-1]
30. **Hafiz Ali Raza** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibacterial and antioxidant activity of biogenic MnO nanoparticles against *Klebsiella pneumoniae*. (2021) [Member-1]

31. **Tabinda Khurshid** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Evaluation of antibacterial activity of Silver Nanoparticles against clinical isolates of *Klebsiella pneumoniae*. (2021) [Member-2]
32. **Muhammad Sarwar Javed** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Sero-epidemiology of Hepatitis B and C in Healthy population of Tehsil Arifwala. (2021) [Member-1]
33. **Samreen Sarwar** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Nasal carriage of Methicillin-Resistant *Staphylococcus aureus* among healthcare workers from a Public Sector Hospital of District Vehari. (2021) [Member-2]
34. **Rizwan Hayder** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Isolation and antimicrobial susceptibility profiling of *Pseudomonas aeruginosa* from pediatric ward settings. (2021) [Member-2]
35. **Aina Farooq** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence and antimicrobial susceptibility pattern of bacteria from Paediatric blood cultures. (2021) [Member-1]
36. **Muhammad Atique Arshad** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Occurrence and antimicrobial susceptibility pattern of bacteria from Operation Theaters of District Head Quarter Hospital Narowal. (2021) [Member-1]
37. **Faiqa Akram** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Investigation of various efflux pumps involved in chromium resistance in *Bacillus cereus* strain M1. (2021) [Member-2]
38. **Hafiz Syed Waqar Hassan** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibacterial efficacy of ZnO Nanoparticles against MDR Gram-negative bacteria. (2021) [Member-2]
39. **Hammad Raza** (MPhil Biochemistry, Government College University Faisalabad, Pakistan) Study of Structure Activity Relationship of Anti HCV Peptides. (2021) [Member-1]
40. **Alina Shehzadi** (MPhil Biochemistry, Government College University Faisalabad, Pakistan) Single nucleotide polymorphism (SNP) analysis of APOC II gene in patients with Hypertriglyceridemia. (2021) [Member-2]
41. **Adnan Zameer** (MPhil Analytical Chemistry, Government College University Faisalabad, Pakistan) Development of Paper Based Biosensors for Rapid Detection of Hygienic Condition in Milk. (2021) [Member-2]
42. **Sabahat** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence of virulence genes in *Klebsiella pneumoniae* isolated from neonatal sepsis. (2020) [Member-2]
43. **Fareeha Fayyaz** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Evaluation of Antibacterial activity of *Azadirachta indica* (Neem) aqueous and organic extracts against Multidrug Resistant *Acinetobacter baumannii* clinical isolates. (2020) [Member-2]

44. **Tayyab Mushtaq** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence and Antimicrobial Susceptibility Profiling of ESBL producing Gram Negative Bacteria from different hospitals in Jaranwala. (2020) [Member-1]
45. **Mahtab Ahmad** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Genetic analysis of multidrug resistant *Acinetobacter baumannii* isolates. (2020) [Member-2]
46. **Rumesa Asrar** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence and Antimicrobial Susceptibility Profiling of ESBL producing Gram Negative Bacteria from DHQ Hospital Bhakkar. (2020) [Member-1]
47. **Mehwish Younas** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Antibacterial activity of Green synthesized Silver Nanoparticles from *Moringa oleifera* against Multidrug Resistant *Acinetobacter baumannii*. (2020) [Member-1]
48. **Ali Raza** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Aminoglycoside and Carbapenem Co-resistance in *Acinetobacter baumannii* Clinical Isolates. (2020) [Member-1]
49. **Waqar Amin** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Molecular detection of carbapenem resistant genes in clinically isolated *Acinetobacter baumannii*. (2020) [Member-2]
50. **Muhammad Usman** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence of Transfusion Transmissible Infections among Blood Donors in Lahore (2020) [Member-1]
51. **Muhammad Aamir Hassan** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Comparative evaluation of different Nanoparticles against clinical isolates of Multidrug Resistant *Acinetobacter baumannii*. (2020) [Member-1]
52. **Faiza Riaz** (MPhil Microbiology, Government College University Faisalabad, Pakistan) Prevalence and detection of Fluoroquinolone Resistance in Clinical Isolates of *Proteus mirabilis* from Patients of Intensive Care Units. (2020) [Member-2]
53. **Hafiza Zainab Khursheed** (MPhil Biochemistry, Government College University Faisalabad, Pakistan) Isolation and identification of methanogenic and methanotropic bacteria from different rice paddy soils. (2020) [Member-2]

Bachelor of Science (BS) Students

- **Rubab Akbar**, (BS Biosciences, University of Wah, Wah Cantt, Pakistan). 2014 Antimicrobial Susceptibility Pattern of Urinary Tract Pathogens (**Supervisor**)

Research Projects:

1. Research Associate

Projected entitled “Cloning, Expression, and characterization of INGAP encoded gene, a prospective means of amelioration of diabetes” at National Institute for Biotechnology & Genetic Engineering (NIBGE) Faisalabad, Pakistan funded by **Pakistan Science Foundation (PSF), Pakistan**

2. Co-Investigator

Projected entitled “In vitro evaluation of vincristine and fluconazole combination against *Candida*: Study towards risk-benefit analysis of fluconazole use in acute lymphoblastic leukemia patients”. College of Pharmacy, King Saud University, Riyadh, Saudi Arabia funded by **King Saud University, Riyadh, Saudi Arabia**

Memberships:

- Member American Society for Microbiology (ASM)
- Life Member Medical Microbiology Association of Pakistan (MMAAP)
- Life Member Pakistan Biological Safety Association (PBSA)
- Member International Society for Infectious Diseases (ISID)
- Member The International Society of Exercise and Immunology (ISEI)
- Member Saudi Society for Genomics and Molecular Oncology (SSGMO)
- Member International Scientific Association for Probiotics and Prebiotics (ISAPP)
- Member Applied Microbiology International
- Member Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEEES)
- Member Infectious Disease Research Network (IDRN), UK
- Member European Respiratory Society (ERS)

Nucleotide Sequences Published:

1. **MW397206.1**, Isolation, and characterization of indigenous probiotic strains (2020)
2. **KY228372.1**, Molecular Characterization of Multi-Drug Resistant *Acinetobacter baumannii* Clinical Isolates (2016)
3. **KY885011.1**, Emergence of ISAbal harboring carbapenem-resistant *Acinetobacter baumannii* isolates in Pakistan (2017)
4. **MH605335.1**, Isolation, and molecular identification of multi-drug resistant *Acinetobacter baumannii* clinical isolates from Pakistan (2018)
5. **KY305421.1**, Molecular Characterization of Multi-Drug Resistant *Escherichia coli* Clinical Isolates (2016)
6. **KY305432.1**, Molecular Characterization of Multi-Drug Resistant *Salmonella enterica* Clinical Isolates (2016)
7. **KY347702.1**, Isolation and Characterization of *Staphylococcus haemolyticus* clinical isolate (2016)
8. **KP126901.1**, An attempt towards elucidating the diversity of culturable lactic acid bacteria in fresh water *Labeo rohita* and *Cirrhinus mrigala* in Pakistan (2014)
9. **KP126902.1**, An attempt towards elucidating the diversity of culturable lactic acid bacteria in fresh water *Labeo rohita* and *Cirrhinus mrigala* in Pakistan (2014)
10. **KP126903.1**, An attempt towards elucidating the diversity of culturable lactic acid bacteria in fresh water *Labeo rohita* and *Cirrhinus mrigala* in Pakistan (2014)

11. **KP126904.1**, An attempt towards elucidating the diversity of culturable lactic acid bacteria in fresh water *Labeo rohita* and *Cirrhinus mrigala* in Pakistan (2014)
12. **KP126905.1**, An attempt towards elucidating the diversity of culturable lactic acid bacteria in fresh water *Labeo rohita* and *Cirrhinus mrigala* in Pakistan (2014)
13. **KP126906.1**, An attempt towards elucidating the diversity of culturable lactic acid bacteria in fresh water *Labeo rohita* and *Cirrhinus mrigala* in Pakistan (2014)

Editorial Assignments:

Academic Editor	Transboundary and Emerging Diseases (IF: 4.521)
Academic Editor	Biomed Research International (IF: 3.246)
Academic Editor	Canadian Journal of Infectious Diseases and Medical Microbiology (IF: 2.585)
Academic Editor	International Journal of Microbiology (IF: 3.4)
Academic Editor	PLoS One (IF: 3.752)
Associate Editor	Frontiers in Endocrinology (IF: 6.055)
Associate Editor	Frontiers in Medicine (IF: 5.058)
Associate Editor	Frontiers in Microbiology (IF: 6.064)
Review Editor	Frontiers in Bioengineering and Biotechnology (IF: 6.064)
Review Editor	Frontiers in Environmental Science (IF: 5.411)
Review Editor	Frontiers in Nutrition (IF: 6.590)
Guest Editor	Applied Sciences (IF: 2.838)
Guest Editor	Water (IF: 3.530)
Advisory Board Member	Heliyon (IF: 3.4)
Editorial Board Member	BMC Microbiology (IF: 4.465)
Editorial Board Member	Progress in Immunology
Editorial Board Member	International Archives of Medicine
Editorial Board Member	International Journal of Psychiatric and Mental Health
Assistant Editor:	Pakistan Journal of Medical & Biological Sciences
Co-Editor:	Annual magazine "Technologia" at Institute of Nursing & Health Sciences, Sheikh Zayed Hospital, Lahore, Pakistan (2005)

Reviewer Assignments:

Grants Reviewer (National & International)

- Graduate Women in Science (GWIS) National Fellowship Program (2021 -2022), USA
- Grant proposals under National Research Program for Universities (NRPU) funded by Higher Education Commission (HEC), Pakistan
- Grant proposals under Grand Challenge Fund (GCF) funded by Higher Education Commission (HEC), Pakistan

- Grant proposals under CPEC-Collaborative Research Grant funded by Higher Education Commission (HEC), Pakistan

Ad-Hoc Reviewer for International Peer Reviewed Journals/Conferences

• Annals of Oncology	(IF: 7.040)
• Molecules	(IF: 4.412)
• Briefings in Bioinformatics	(IF: 8.399)
• Dose-Response	(IF: 2.658)
• Experimental and Therapeutic Medicine	(IF: 2.447)
• Frontiers in Microbiology	(IF: 5.640)
• Genomics	(IF: 2.386)
• Natural Product Research	(IF: 1.928)
• Pharmaceutical Biology	(IF: 1.241)
• Brazilian Archives of Biology and Technology	(IF: 0.452)
• Cancer Letters	(IF: 5.016)
• Pakistan Journal of Zoology	(IF: 0.404)
• Journal of International Medical Research	(IF: 1.431)
• Jundishapur Journal of Microbiology	(IF: 0.655)
• African Health Sciences	(IF: 0.642)
• Current Medical Imaging Reviews	(IF: 0.613)
• Biomedicine & Pharmacotherapy	(IF: 2.759)
• Journal of Clinical Laboratory Analysis	(IF: 1.521)
• Saudi Journal of Biological Sciences	(IF: 2.820)
• Saudi Pharmaceutical Journal	(IF: 2.302)
• Iranian Journal of Biotechnology	(IF: 0.338)
• Expert Opinion on Investigational Drugs	(IF: 3.883)
• Iranian Journal of Biotechnology	(IF: 0.338)
• Journal of Drug Delivery Science and Technology	(IF: 2.606)
• Journal of Cancer Research and Clinical Oncology	(IF: 3.656)
• Microbial Drug Resistance	(IF: 2.397)
• Journal of Pediatric Infectious Diseases	(IF: 0.197)
• Environmental Science and Pollution Research	(IF: 2.914)
• BMC Microbiology	(IF: 3.287)
• Infection and Drug Resistance	(IF: 2.984)
• Canadian Journal of Infectious Diseases and Medical Microbiology	(IF: 1.520)
• Chemico-Biological Interactions	(IF: 3.723)
• Diabetes, Metabolic Syndrome and Obesity Targets and Therapy	(IF: 3.319)
• Journal of Herbal Medicine	(IF: 2.221)
• Frontiers in Medicine	(IF: 3.9)
• Biochemical Engineering Journal	(IF: 3.978)
• Biotechnology and Applied Biochemistry	(IF: 2.431)
• PLOS One	(IF: 2.74)
• Process Biochemistry	(IF: 2.952)
• Libyan Journal of Medicine	(IF: 1.333)
• Microbial Ecology	(IF: 4.552)
• Journal of International Medical Research	(IF: 1.671)
• Veterinaria Italiana	(IF: 1.101)
• Journal of King Saud University – Science	(IF: 4.011)
• Processes-MDPI	(IF: 3.352)
• Archives of Microbiology	(IF: 2.667)

- Expert Review of Anti-infective Therapy (IF: 5.854)
- Journal of Molecular Structure (IF: 3.841)
- Medicina-MDPI (IF: 2.948)
- Frontiers in Public Health (IF: 6.461)
- Frontiers in Oncology (IF: 6.244)
- Journal of Applied Microbiology (IF: 3.772)
- Applied Sciences-MDPI (IF: 2.679)
- Infection, Genetics and Evolution (IF: 3.342)
- Biology-MDPI (IF: 5.079)
- Experimental and Therapeutic Medicine (IF: 2.751)
- Antibiotics-MDPI (IF: 5.222)
- Heliyon (IF: 3.776)
- Pakistan Veterinary Journal (IF: 1.803)
- Tropical Medicine and Infectious Disease (IF: 3.711)
- Polymers-MDPI (IF: 4.967)
- Biomed Research International (IF: 3.246)
- Vaccines (IF: 4.961)
- Current Pharmaceutical Design (IF: 3.310)
- Ecotoxicology and Environmental Safety (IF: 7.129)
- Children-MDPI (IF: 2.835)
- Journal of Visualized Experiments (IF: 1.424)
- Membranes-MDPI (IF: 4.562)
- Brazilian Journal of Biology
- Pharmacognosy Research
- The Lancet Regional Health
- Asian Journal of Agriculture and Biology
- Pakistan Journal of Biochemistry and Biotechnology
- Journal of Dow University of Health Sciences
- European Medical Journal
- GERMS
- Pure and Applied Biology
- Journal of Microbiology, Biotechnology and Food Sciences
- Advancements in Life Sciences
- Journal of Advances in Biology & Biotechnology
- Punjab University Journal of Zoology
- International Journal of Biomedical Science (IJBS)
- International Journal of Plant Biology & Research
- World Applied Science Journal
- 3rd International Conference on Biomedical Engineering and Biotechnology (ICBEB 2014), Beijing, China
- 4th International Conference on Biomedical Engineering and Biotechnology (ICBEB 2015), Beijing, China
- International Conference on Chemical, Food, Biological and Medical Sciences (CFBMS-16), Abu Dhabi, UAE

Administrative Responsibilities:

1. **Teacher Incharge** (Jan 26, 2017, to July 23, 2017)
College of Allied Health Professionals, Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan

2. **Assistant Director Training and Development**, Directorate of Training and Development Government College University, Faisalabad, Pakistan **(September 23, 2022, to Date)**
3. **Incharge**, PCR Section, Central Hi-Tech Laboratory, Government College University, Faisalabad, Pakistan **(March 01, 2021, to Date)**
4. **Focal Person, Affiliated Colleges** for Medical Laboratory Technology (MLT) Program, College of Allied Health Professionals, Government College University, Faisalabad, Pakistan

Certificates:

- **Certificate of Quality Management** **(January 2005 – June 2005)**
Institute of Quality & Technology Management,
University of Punjab, Lahore, Pakistan

Appreciation Certificates/Letters

- Certificate of Appreciation by Directorate of Students Affairs, Government College University Faisalabad for “Excellent Performance in Maintaining Discipline during 9th Convocation”
- Certificate of Appreciation by Office of Research, Innovation & Commercialization, Government College University Faisalabad in recognition of Remarkable Scientific Achievements in the Year (2016-17)
- Best Student Award from Department of Microbiology, Government College University, Faisalabad, Pakistan for the Year 2018.

Scholarships / Awards:

- **TWAS Fellowship for Research and Advanced Training (06 Months)** funded by The World Academy of Science (TWAS) at Institute of Antibiotics, Huashan Hospital, Fudan University, Shanghai, China.
- **Graduate (PhD) Scholarship** from College of Medicine, Inje University, Busan, South Korea
- **Graduate (PhD) Research Scholarship** for PhD in Biomedical Sciences from University Brunei Darussalam, Brunei Darussalam.
- **Merit scholarship in M. Phil.** from Quaid-i-Azam University, Islamabad, Pakistan
- **1st Position in B. Sc. Medical Laboratory Technology** from Institute of Nursing and Health Sciences, Sheikh Zayed Hospital, University of the Punjab, Lahore, Pakistan

Consultative Roles:

1. **Member, Board of Faculty**, Faculty of Life Sciences, Government College University, Faisalabad, Pakistan
2. **Member, Board of Faculty**, Faculty of Rehabilitation and Allied Health Sciences (FRAHS) Riphah International University for the program of Medical Laboratory Technology
3. **Member, Board of Studies**, Riphah College of Rehabilitation and Allied Health Sciences (RCRAHS) Faisalabad Campus for the Bachelor of Science in Medical Lab Technology, Bachelor of Science in Food Science and Technology (BS-FST), Bachelor of Science in Operation Theatre Technology (BS-OTT), Master of Science in Human Nutrition and Dietetics (MS-HND) and Master of Science in Food Science and Technology (MS-FST) Programs.

4. **Member, Board of Studies**, Department of Biomedical Laboratory Sciences. School of Health Sciences, University of Management and Technology, Lahore.
5. **Selection Board Member (Subject Expert)**, Riphah College of Rehabilitation and Allied Health Sciences, Riphah Faisalabad Campus, Faisalabad, Pakistan
6. **Member of Board of Studies**, Doctor of Optometry, Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan
7. **Member of Board of Studies**, BS Medical Laboratory Technology (MLT) at College of Allied Health Professionals, Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan
8. **Member of Board of Studies**, BS Radiography & Imaging Technology (RIT), College of Allied Health Professionals, Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan
9. **Member of Board of Studies**, BS Operation Theatre Technology (OTT), College of Allied Health Professionals, Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan
10. **Member of Board of Studies**, Master of Public Health (MPH), College of Allied Health Professionals, Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan
11. **Focal Person** for MPhil/PhD Programs Self Review (2020) from department of Microbiology, Government College University Faisalabad, Pakistan
12. **Student Advisor**, College of Allied Health Professionals, Government College University Faisalabad, Pakistan
13. **In-charge**: Admission Committee, College of Allied Health Professionals, Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan (2016)
14. **Member**: Admission Committee, Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan (2014 and 2015)
15. **Member**: Purchase Committee, Department of Biosciences, University of Wah, Wah Cantt, Pakistan
16. **Member**: Discipline Committee, Department of Biosciences, University of Wah, Wah Cantt, Pakistan
17. **Convener**, Purchase Committee for HEC-NRPU Project (5679/Punjab/NRPU/R&D/HEC/2016) in College of Allied Health Professionals, Government College University Faisalabad, Pakistan
18. **Convener**, Inspection Committee for HEC-NRPU Project (5679/Punjab/NRPU/R&D/HEC/2016) in College of Allied Health Professionals, Government College University Faisalabad, Pakistan
19. **Coordinator (Sports & Extracurricular Activities)** at College of Allied Health Professionals, Government College University Faisalabad, Pakistan
20. **Internship Focal Person** at College of Allied Health Professionals, Government College University Faisalabad, Pakistan
21. **Member, Cleanliness and Discipline Committee** at College of Allied Health Professionals, Government College University Faisalabad, Pakistan
22. **Member, Book Purchase Committee** at College of Allied Health Professionals, Government College University Faisalabad, Pakistan
23. **Member, Admission Committee** at Department of Microbiology, Government College University, Faisalabad, Pakistan

Examiner (Internal and External)

1. **External Examiner** for evaluation of MPhil dissertations at Department of Biotechnology, University of Okara, Okara, Pakistan
2. **External Examiner** for evaluation of MPhil dissertations at Department of Biochemistry, University of Agriculture, Faisalabad, Pakistan
3. **External Examiner** for evaluation of MPhil dissertations at Institute of Microbiology, University of Agriculture, Faisalabad, Pakistan
4. **External Examiner** for evaluation of MPhil and BS dissertations at Department of Microbiology and Molecular Genetics, The Women University, Multan, Pakistan
5. **Paper Setter (PhD Compressive Examination)**, at Department of Microbiology, Government College University, Faisalabad, Pakistan
6. **Evaluator (PhD Compressive Examination)**, at Department of Microbiology, Government College University, Faisalabad, Pakistan
7. **Internal Examiner (PhD Thesis Defence)** at Department of Microbiology, Government College University, Faisalabad, Pakistan
8. **Practical Examiner (Affiliated Colleges)**, Government College University, Faisalabad, Pakistan
9. **Member, Internship Evaluation Committee**, for BS Microbiology (8th Semester) at Department of Microbiology, Government College University, Faisalabad, Pakistan

Community Services:

- Actively Participated in **Flood Relief Medical Camps** (September 2014) from Directorate of Medical Sciences, Government College University, Faisalabad, Pakistan
- Served as **Medical Technologist** at Karachi University-Hazara University (KU-HU) Microbiology Diagnostic Laboratory, **Saudi Field Hospital Mansehra, Pakistan** from February 3-11, 2005 during Pakistan's Earthquake 2005.
- Organized the **Blood Donation Camp** at Government College University Faisalabad on April 14, 2016, in collaboration with Shaukat Khanum Memorial Cancer Hospital & Research Centre, Lahore, Pakistan

Languages:

- | | |
|-----------|----------------|
| • English | Fluent |
| • Urdu | Native |
| • Punjabi | Native |
| • Arabic | Basic speaking |

Personal Details:

Father Name:	Muhammad Khurshid
Date of Birth:	18-04-1983
Marital Status:	Married
CNIC number:	36603-1454607-9
Passport number:	AS4126073

References:

1. **Prof. Dr. Muhammad Hidayat Rasool** (PhD Supervisor-I)
Director
Institute of Microbiology, Government College University, Faisalabad, Pakistan
Phone: +92-3017102378, Email: drmhraasool@gcuf.edu.pk
2. **Prof. Dr. Usman Ali Ashfaq** (PhD Supervisor-II)
Professor
Department of Bioinformatics & Biotechnology, Government College University, Faisalabad, Pakistan
Phone: +92-0331-4728790, Email: ashfaqua@gcuf.edu.pk
3. **Prof. Dr. Minggu Wang**
Director
Institute of Antibiotics, Huashan Hospital, Fudan University, Shanghai, China
Phone: +86-21-52888181, Email: mgwang@fudan.edu.cn
4. **Prof. Dr. Shahana Urooj Kazmi**
Vice Chancellor, Women University Swabi, Swabi, Khyber Pakhtunkhwa, Pakistan
Phone: +92-3028248268, Email: shahanaurooj@yahoo.com
5. **Dr. Fazli Rabbi Awan**
Deputy Chief Scientist
National Institute for Biotechnology & Genetic Engineering (NIBGE), Faisalabad, Pakistan
Phone: +92-3344117448, Email: awan.fr@gmail.com
6. **Dr. Bilal Aslam**
Associate Professor (Tenured)
Institute of Microbiology, Government College University, Faisalabad, Pakistan
Phone: +92-3007471091, Email: drbilalaslaml@gcuf.edu.pk