# DR. MEHBOOB AHMED

## PERSONAL INFORMATION

Father's Name: Ahmed Khan

Date of Birth: 15 April 1979

Place of Birth: Gujrat, Pakistan

NIC No.: 34203-1320943-7

Married (Two children)

Addresses:

Present Address

Tenured Associate Professor (HEC Approved PhD Supervisor # 17920)

Institute of Microbiology & Molecular Genetics

Quaid-e-Azam Campus University of the Punjab

Lahore-54590 Pakistan

Phone: +92-42-99233151 Ext 827

Mobile: +92-333 5831530

Permanent Address

Tehsil: Sarai Alamgir

District: Gujrat

Pakistan

**E-mail:** <u>mehboob.mmg@pu.edu.pk</u> <u>drmahmed@live.com</u>

URL: <a href="http://faculty.mehboob-ahmed.pu.edu.pk/">http://faculty.mehboob-ahmed.pu.edu.pk/</a>

## **EDUCATIONAL BACKGROUND**

Examination	Year	Subjects	Institution
PhD	2011	Microbiology & Molecular Genetics	Punjab University, Lahore
Masters (MSc)	2000	Botany	Punjab University, Lahore
B.Ed	2003	Bio, Chem	AIOU, Islamabad
Bachelors (BSc)	1998	Bot, Zool, Chem	Punjab University, Lahore
Intermediate (FSc)	1996	Pre-Medical	Federal Board, Islamabad
Metric (SSC)	1994	Science	Federal Board, Islamabad

### RESEARCH EXPERIENCES

PhD Thesis Title: Cyanobacterial Secondary Metabolites: Their Impact on Plant Growth and

Fertility Status of Soil.

MSc Thesis Title: Isolation and Characterization of Root Associated Bacteria Exhibiting

Antimicrobial Activity.



### RESEARCH INTERESTS

Isolation, Characterization and Culturing of Cyanobacteria

Algal Biotechnology

Cyanobacterial Secondary Metabolites

Exopolysaccharides from Cyanobacteria

Algal Biofuels

Molecular Genetics of Cyanobacteria

**Bioinformatics** 

Phylogenomic Studies; Drug Designing

## WORKING EXPERIENCES

- Worked as a Teacher in a Pakistan Overseas Academy, Kharian for more than three years.
- > Part-time Lecturer at Department of Microbiology and Molecular Genetics, University of the Punjab since 2006.
- Courses taught:

i.	Waste Water Treatment	MS / M.Phil / PhD
ii.	Laboratory Techniques	MS / M.Phil / PhD
;;;	Virology	DC Hong

iii. Virology BS Hons

**Bioinformatics** BS Hons / MSc / PhD iv.

**Biostatistics** BS Hons / MSc v.

vi. Recombinant DNA Technology **BS** Hons vii. **Probiotics BS** Hons viii. Genome Analysis and Genomics MS/MPhil

ix. **FTIR** PhD х. Microscopy and its related softwares PhD Advances in Microscope Technology **BS** Hons

- ➤ Member American Society for Microbiology (ASM), USA.
- ➤ Member Asia-Pacific Society for Applied Phycology
- Worked as Research Scholar at Department of Microbiology and Molecular Genetics, University of the Punjab (03-05-2010 – 20-04-2011).
- > Worked as Lecturer at Department of Microbiology and Molecular Genetics, University of the Punjab (21-04-2011 – 09-01-2012).
- ➤ Worked as Assistant Professor at Institute of Microbiology and Molecular Genetics, University of the Punjab (10-01-2012 – 02-05-2021).
- Member, Departmental Doctoral Program Committee
- ➤ Member, Departmental Security Committee
- ➤ Member, Departmental Admission Committee
- Departmental Focal Person, Prime Minister Laptop Distribution Scheme
- ➤ Member, Departmental Anti-Dengue Committee
- Member, HEC National Curriculum Revision Committee for Bioinformatics

## **AWARDS AND SCHOLARSHIPS**

- 1. Higher Education Scholarship under 5000 Indigenous Scholarship programme, Batch-II. (2005)
- 2. Higher Education Scholarship (IRSIP) for six months international studies in Netherlands, Department of Marine Microbiology, CEME, NIOO-KNAW, Netherlands. (2008)
- 3. HEC grant to present in The Sixth Princess Chulabhorn International Science Congress (PC-VI), Bangkok, Thailand (25-29 November, 2007)
- 4. Fellowship for the Collegium Ramazzini Satellite Workshop on "Occupational and Environmental Health in the Asia/Pacific Region", Chulabhorn Research Institute, Lak Si, Bangkok, Thailand. (30 November – 01 December, 2007)
- 5. Travel Grant to Present in ASLO Aquatic Sciences Meeting, By American Society of Limnology and Oceanography, Nice, France (25-30 January, 2009)
- 6. HEC Travel Grant to present in 9th International Phycological Congress By International Phycological Society, Tokyo, Japan (02-08 August, 2009)
- 7. International Phycological Society Young Researcher Grant to present in 9th International Phycological Congress By International Phycological Society, Tokyo, Japan (02-08 August, 2009)
- 8. Delivered Keynote Lecture in 9th International Phycological Congress By International Phycological Society, Tokyo, Japan (02-08 August, 2009)
- 9. HEC Travel Grant to present in 6th International Conference on Plant Tissue Culture & Biotechnology, Department of Botany, University of Dhaka, Dhaka, Bangladesh (3-5 December, 2010)
- 10. HEC Travel Grant to present in Conference on "IV International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld2011)" Malaga, Spain (14 - 16 September, 2011)
- 11. Punjab University Travel Grant to present in 6th Asian Pacific Phycological Forum (APPF 2011), Yeosu, Korea. (9-14, October 2011)
- 12. Delivered Invited Speaker Lecture in 6th Asian Pacific Phycological Forum (APPF 2011), Yeosu, Korea. (9-14, October 2011)
- 13. Punjab University Travel Grant to present in Conference on "V International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld2013)" Madrid, Spain (02 - 04 October, 2013)
- 14. ASM travel grant to present in 114<sup>th</sup> General Meeting of American Society for Microbiology, at Boston, Massachusetts, USA (18-20 May, 2014)

#### 15. HEC approved PhD supervisor for Life Sciences.

16. Erasmus Mundus Action 2, Experts Sustain, Academic Exchange Award, for one month stay, academic/research interaction at Department of Chemistry Angstrom -Microbial Chemistry, Uppsala University, Sweden (01 - 31 October 2015).

17. ASMCUE Leadership Grant for International Educators for ASM Conference For Undergraduate Educators (ASMCUE)" by American Society for Microbiology (ASM) at Bethesda, Maryland, USA 21-24 July 2016

## WORKSHOPS AND CONRFRENCES ORGANIZED

- 7<sup>th</sup> Plant Science Conference, Botany Department, Punjab University (14-16 November, 1. 2000)
- 2. 1<sup>st</sup> Symposium on Genomics, Proteomics, Metabolomics: Recent trends Biotechnology, Department of Microbiology and Molecular Genetics, Punjab University (22-23 October, 2007)
- 3. Proteomics Workshop: From Sample Preparation to Data Analysis, Department of Microbiology and Molecular Genetics, Punjab University (24-25 October, 2007)
- Seminar on "Microbial Resistant Paints", organized by Department of Microbiology and 4. Molecular Genetics, University of the Punjab, Lahore, in collaboration with Higher Education Commission of Pakistan (17 April, 2008)
- 5. Volunteer in ASLO Aquatic Sciences Meeting, By American Society of Limnology and Oceanography, Nice, France (25-30 January, 2009)
- Symposium on Modern Biotechnology: A Resource for Sustainable Development, 6. Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore. (04 July, 2009)
- 7. Workshop on Molecular Heamatology, Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore, Pakistan (09 February, 2010)
- 8. Symposium on Current Agro Biotechnology and Transgenic Plants, Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore. (21 June, 2010)
- 9. Workshop on "Fluorescent Microscopy: Introduction and Applications" University of the Punjab, Lahore (24 September, 2011)
- Workshop on "Impact of Higher Education in the Social Adjustment of Women in 10. Islamic Perspectives in Pakistan" by IER, Kohat University of Science & Technology in collaboration with Higher Education Commission of Pakistan at IER, University of the Punjab, Lahore (30 November, 2012)
- 11. Conference on Bio-Physicochemical Basis for Techno-preneurship organized by Department of Microbiology and Molecular Genetics (MMG) and Institute of Business Administration University of the Punjab, Lahore. (02 - 03 April, 2013)
- 12. One day training session on "Introduction and Efficient Use of National Digital Library" in Department of Microbiology and Molecular Genetics, University of the Punjab. (13 December, 2013)
- One day training session on "Making Sense from Sequence" in Department of 13. Microbiology and Molecular Genetics, University of the Punjab. (25 January, 2014)
- 14. One day training session on "Introduction and Use of EndNote®" in Department of Microbiology and Molecular Genetics, University of the Punjab. (20 February, 2014)

- 15. One day training session on "Scientific Writing: Guidelines, Issues and Solutions" in Department of Microbiology and Molecular Genetics, University of the Punjab. (27 March, 2014)
- 16. Workshop on Biosafety and Risk Assessment, organized by Biosafety and Bio-resource Committee, University of the Punjab, Lahore (19 April, 2014)
- Symposium on "Emerging issues of multidrug resistance: A Threat to the Globe", 17. Department of Microbiology and Molecular Genetics, The University of Punjab, Lahore (2<sup>nd</sup> October, 2014)
- 10<sup>th</sup> Biennial International Conference of Pakistan Society for Microbiology, Department 18. of Microbiology and Molecular Genetics, The University of Punjab, Lahore (25 – 28 March, 2015)
- 19. One day Symposium on Diversity In Microbiology: A Crosstalk, Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore in collaboration with American Society for Microbiology (ASM) and ORIC, University of the Punjab, Lahore (17 December 2015)
- Conducted Training Session on EndNote® for Faculty members in University of the 20. Punjab, Lahore (12 January, 2016)
- 21. Organized One Day Workshop On "Dual Use Research of Concern" jointly organized by the Department of Microbiology and Molecular Genetics, University of the Punjab and The Health Security Partners (18th July, 2016)
- 22. Organized a one day training session on "Basic Statistical Analysis" in Department of Microbiology and Molecular Genetics, University of the Punjab. (09 February, 2017)
- 23. Organized a two days' workshop on "Restriction Mapping and RFLP: In-vitro and Insilico" in Department of Microbiology and Molecular Genetics, University of the Punjab. (23-24 February, 2017)
- 24. Organized Symposium on Awareness on HIV/AIDS organized by University of the Punjab in collaboration with Punjab Aids Control Program (30 March 2017)
- Organized Symposium on Neurodegenerative disorders in Department of Microbiology 25. and Molecular Genetics, University of the Punjab. (23 September 2017)
- 26. Organized one day Awareness Seminar on Technology Development Fund (TDF), in collaboration with Higher Education Commission, Pakistan. (26 October 2017)
- 27. Organized Conference on Microbiology and Molecular Genetics (MMG2018), by Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore in collaboration with Superior University, Lahore (07 – 09 February, 2018)

## WORKSHOPS AND CONRFRENCES ATTENDED

- Attended 7<sup>th</sup> Plant Science Conference, Botany Department, Punjab University (14-16 1. November, 2000)
- Attended 26<sup>th</sup> Zoological Congress, Zoology Department, Punjab University (04-06 2. April, 2006)
- Attended BC-HEC Radioimmunoassay Workshop, Sheikh Zayed Hospital, Lahore (15-3. 18 May, 2006)
- 4. Participated in the HEC-BC Workshop on "Logframe and Proposal Writing" at Awari Hotel Lahore (27 May, 2006)
- 5. Attended Two weeks workshop on Biostatistics & Research Methodology, King Edward Medical University, Lahore (24 July – 5 August, 2006)
- Acted as Mentor in Provincial Science Olympiad, organized by the Ministry of Education 6. and Science Education (Punjab) in collaboration with intel-corporation Pvt. Ltd. (2006)
- Attended 1st International Conference on Assessing Quality in Higher Education, IQTM, 7. University of the Punjab, Lahore (11-13 December, 2006)
- 8. Attended US-Pakistan International Workshop on Molecular biology: A tool for the future, Department of Microbiology, Jinnah University for Women, Karachi, Pakistan (23-24 March, 2007)
- Oral Presentation in 1st Symposium on Genomics, Proteomics, Metabolomics: Recent 9. trends in Biotechnology, Department of Microbiology and Molecular Genetics, Punjab University (22-23 October, 2007)
- 10. Attended Proteomics Workshop: From Sample Preparation to Data Analysis, Department of Microbiology and Molecular Genetics, Punjab University (24-25 October, 2007)
- 11. Attended Seminar on "Commercialization of Biotechnology Products", Lahore chambers of Commerce and Industry, National Commission On Biotechnology, Islamabad (30 October, 2007)
- 12. Attended Seminar on "Transmission Electron Microscopy (EFTEM) analysis", by Mr. Klaus Teufel, Nanotechnology Consulting Company, Germany jointly organized by Carl Zeiss SMT- Nanotechnology system Division and Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore (October, 2007)
- 13. Acted as Mentor in Provincial Science Olympiad, organized by the Ministry of Education and Science Education (Punjab) in collaboration with Intel-corporation Pvt. Ltd. (November, 2007)
- **14.** Presented in The Sixth Princess Chulabhorn International Science Congress (PC-VI), Bangkok, Thailand (25-29 November, 2007)
- **15.** Attended Collegium Ramazzini Satellite Workshop on "Occupational and Environmental Health in the Asia/Pacific Region", Chulabhorn Research Institute, Lak Si, Bangkok, Thailand. (30 November – 01 December, 2007)

- Attended International Conference on Recent Advances In Agriculture Biotechnology, 16. Islamabad, Pakistan (18-19 March, 2008)
- 17. Attended Seminar on Waste Disposal "Laboratory Waste Management", organized by Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore, in collaboration with Shalimar Hospital, Lahore (01 February, 2008)
- Presented in Seminar on "Microbial Resistant Paints", organized by Department of 18. Microbiology and Molecular Genetics, University of the Punjab, Lahore, in collaboration with Higher Education Commission of Pakistan (17 April, 2008)
- 19. Presented in National Bio-Forum 2008, Centre of Excellence in Molecular Biology (CEMB) Punjab University, Lahore, Pakistan (25-28 March, 2008)
- 20. Attended NIOO days- Lunteren, Netherlands (17-18, September, 2008)
- Attended Symposia "Plants insects microbes: An ecological dance for three", 21. WICC, Wageningen, The Netherlands (November, 2008)
- Presented in ASLO Aquatic Sciences Meeting, By American Society of Limnology 22. and Oceanography, Nice, France (25-30 January, 2009)
- 23. Presented in International Symposium on "Future Trends in Molecular Biological Research & its Applications in Agriculture and Health", Centre of Excellence in Molecular Biology (CEMB) Punjab University, Lahore, Pakistan (25-28 March, 2009)
- 24. Acted as Judge in exhibition of research project poster presentation, in Provincial Science Olympiad, organized by the Ministry of Education and Science Education (Punjab) in collaboration with intel-corporation Pvt. Ltd. (March, 2009)
- 25. Attended International Workshop on Membrane Technology for Waste Water Reclamation and Reuse, National University for Science and Technology, Islamabad (13-14 May, 2009)
- 26. Presented in Conference on "Development and Commercialization of Biotechnology Products", By National Commission on Biotechnology, Islamabad at National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad (19-20 June, 2009)
- 27. Attended Symposium on Modern Biotechnology: A Resource for Sustainable Development, Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore (04 July, 2009)
- Presented in 9th International Phycological Congress By International Phycological 28. Society, Tokyo, Japan (02-08 August, 2009)
- 29. Presented in International Thematic Workshop on Advances in Bioinoculant/Biopecticide Production, Formulation and Application, By COMSTECH-HEC and COMSATS Institute for Information Technology, COMSTECH Secretariat, Islamabad (20-22 October, 2009)
- 30. Presented in Workshop on Molecular Heamatology, Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore, Pakistan (09 February, 2010)
- 31. Attended Biotechnology Lahore Cluster Meeting, FC College (Charted University), Lahore (15 March, 2010)

- Attended Conference on "Bioinformatics: Opening New Frontiers In Molecular Biology 32. Research", Institute of Biochemistry and Biotechnology, University of Veterinary and Animal Sciences, Lahore (14-15 May, 2010)
- 33. Attended Training Session of Journals Management Information System, Institute of Quality and Technology Management, University of the Punjab, Lahore (May, 2010)
- Attended Symposium on Current Agro Biotechnology and Transgenic Plants, 34. Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore. (21 June, 2010)
- Attended National Conference on "Animal Forensics: DNA Fingerprinting", Institute of 35. Biochemistry and Biotechnology, University of Veterinary and Animal Sciences, Lahore (21-22 September, 2010)
- Attended "National Biotechnology Exhibition and Seminars 2010", Institute of 36. Biochemistry and Biotechnology, University of Veterinary and Animal Sciences, Lahore (20-21 October, 2010)
- **37.** Presented in 6th International Conference on Plant Tissue Culture & Biotechnology, Department of Botany, University of Dhaka, Dhaka, Bangladesh (3-5 December, 2010)
- Attended 11th National Meeting of Plant Scientists (NMPS) and 2nd International 38. Conference of Plant Scientists (ICPS-2011) by Pakistan Botanical Society, GC University, Lahore, (22- 24 February, 2011)
- Attended Workshop on "Computational Resources for Protein Modeling" by Institute of 39. Biochemistry and Biotechnology and Higher Education Commission, University of the Punjab, Lahore (14-18 March, 2011)
- 40. Attended International Workshop on Frontiers in Molecular Biology & Biotechnology, By COMSTECH, COMSTECH Secretariat, Islamabad (28-30 March, 2011)
- Presented in 1<sup>st</sup> National Phycological Conference, GC University, Lahore (30-31 March, 41. 2011)
- Attended Training Workshop on "Turnitin Anti-Plagiarism Software" by Punjab 42. University Library (14 April, 2011)
- 43. Attended Seminar on "Organizational Intelligence" held in the Al-Raazi Hall, Punjab University Centre for Undergraduate Studies (13 June, 2011)
- Deliver Lecture on "A Glimpse on the Exciting World of Cyanobacteria" in Queen Mary 44. College, Lahore (16 June, 2011)
- 45. Attended International Workshop on Frontiers in Green Technology, By COMSTECH, COMSTECH Secretariat, Islamabad (28-30 June, 2011)
- 46. Attended and Presented in Faculty Orientation Programe 2011, Institute of Administrative Sciences, University of the Punjab, Lahore (05 - 08 July, 2011)
- 47. Presented in International Conference on "Prospects and Challenges to Sustainable Agriculture", University of Azad Jammu & Kashmir, Rawalakot, AJKU. (14 - 16 July, 2011)

- **48.** Presented in Conference on "IV International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld2011)" Malaga, Spain (14 -**16 September, 2011)**
- 49. Seminar on "Dengue Fever" University of the Punjab, Lahore (21 September, 2011).
- 50. Attended Lecture on "Granulomatous Diseases of Nose" organized by Department of Microbiology & Molecular Genetics, University of the Punjab, Lahore (26 September, 2011).
- 51. Presented in Workshop on "Fluorescent Microscopy: Introduction and Applications" University of the Punjab, Lahore (24 September, 2011).
- Presented in 6th Asian Pacific Phycological Forum (APPF 2011), Yeosu, Korea. (9-**52.** 14, October 2011)
- Attended Five days In Service Faculty Training Program by Department of Microbiology 53. & Molecular Genetics (MMG), University of the Punjab, Lahore and Learning Innovation Division (LID), Higher Education Commission (HEC) Pakistan (18 - 22 October, 2011)
- 54. Acted as Judge in exhibition of research project poster presentation, in Provincial Science Olympiad, organized by the Ministry of Education and Science Education (Punjab) in collaboration with Intel-corporation Pvt. Ltd. (December, 2011)
- Attended Computational Biology and Bioinformatics Workshop (C2BW), organized by 55. the Department of Biology, School of Science and Engineering, LUMS, Lahore (09 – 13 January, 2012).
- 56. Attended Training Workshop on "Computer Forensics", NCRD, (MoP&TT) Islamabad, Pakistan (14 - 16 May, 2012)
- 57. Presented in SAARC Regional Conference on "New Frontiers in Agricultural Genomics and Biotechnology", hosted by NIGAB at Marriott Hotel Islamabad (05-07 June, 2012)
- Attended and participated in one day workshop entitled "Invention to Innovation 58. Summit-2012" in the University of the Punjab, Lahore, organized by IRP, ORIC and PSF (18 June, 2012)
- 59. Presented in Conference on "Agriculture and Food Security Issues in Global Environmental Perspectives", by Faculty of Agriculture Rawalakot, The University of Poonch, Rawalakot (11-13 July, 2012)
- Presented in Workshop on "Algal Collection & Recent Taxonomy Of Chlorophycota", 60. by Department of Botany, GC University Lahore (25-26 September, 2012)
- 61. Presented in Second National Phycological Conference, Department of Botany, University of Karachi, Karachi (15-17 October, 2012)
- Attended Workshop on "Impact of Higher Education in the Social Adjustment of Women 62. in Islamic Perspectives in Pakistan" by IER, Kohat University of Science & Technology in collaboration with Higher Education Commission of Pakistan at IER, University of the Punjab, Lahore (30 November, 2012)

- 63. Acted as Judge in exhibition of research project poster presentation, in Provincial Science Olympiad, organized by the Ministry of Education and Science Education (Punjab) in collaboration with Intel-corporation Pvt. Ltd. (09 December, 2012)
- Presented in "9th International Conference of Pakistan Society for Microbiology" at 64. Department of Microbiology, The University of Karachi, Karachi (28-31 January, 2013)
- Attended Five days 2<sup>nd</sup> In Service Faculty Training Program by Department of 65. Microbiology & Molecular Genetics (MMG), University of the Punjab, Lahore and Learning Innovation Division (LID), Higher Education Commission (HEC) Pakistan (04 – 08 February, 2013)
- 66. Attended Bio-Physicochemical Basis for Techno-preneurship organized by Department of Microbiology and Molecular Genetics (MMG) and Institute of Business Administration University of the Punjab, Lahore. (02 - 03 April, 2013)
- Attended and Presented in Invention to Innovation Summit 2013 organized by PU's 67. Office of Research Innovations and Commercialization, Ministry of Science and Technology, Pakistan Science Foundation and Institute of Research Promotion (IRP). (09 - 10 April, 2013)
- 68. Attended "International Workshop on Bioinformatics Tools in Structural Biology" Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Sciences, University of Karachi, Karachi. (26-28 August, 2013)
- 69. Attended workshop on "Hands-on Training-Fourier Transform Infrared Spectroscopy" held at Interdisciplinary Research Centre in Biomedical Materials, COMSATS Institute of Information Technology (CIIT), Lahore. (05 September, 2013)
- 70. Presented in Conference on "V International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld2013)" Madrid, Spain (02 -04 October, 2013)
- Attended "2<sup>nd</sup> Annual Computational Science/Biology Conference" held at International 71. Islamic University, Islamabad. (20 – 25 October, 2013)
- 72. Acted as Judge in exhibition of research project poster presentation, in Provincial Science Olympiad, organized by the Ministry of Education and Science Education (Punjab) in collaboration with Intel-corporation Pvt. Ltd. (07 November, 2013)
- Presented in 11th Biennial Conference "Molecular Biosciences Challenges and 73. Opportunities" by The Pakistan Society for Biochemistry and Molecular Biology, held at School of Biological Sciences, The University of the Punjab, Lahore. (25-28 November, 2013)
- Attended "Workshop on Enzyme Immunoassays" held at National Health Research 74. Complex, Shaikh Zayad Medical Complex, Lahore. (10 – 12 December, 2013)
- 75. Organized a one day training session on "Introduction and Efficient Use of National Digital Library" in Department of Microbiology and Molecular Genetics, University of the Punjab. (13 December, 2013)
- Organized a one day training session on "Making Sense from Sequence" in Department 76. of Microbiology and Molecular Genetics, University of the Punjab. (25 January, 2014)

- Organized a one day training session on "Introduction and Use of EndNote®" in 77. Department of Microbiology and Molecular Genetics, University of the Punjab. (20 February, 2014)
- 78. Presented in Seminar on Transgenic Plants and the Antimicrobial Potential of Crops, organized by American Society of Microbiology in collaboration with Department of Botany, Lahore College for Women University, Lahore. (25 February, 2014)
- Attended "34th Zoological Congress of Pakistan" held at Bahauddin Zakariya University, 79. Multan. (25 - 27 February, 2014)
- Presented in 15<sup>th</sup> International Congress of Soil Science, organized by Soil Science 80. Society of Pakistan (SSSP) at National Agriculture Research Council, Islamabad. (18 – 20 March, 2014)
- 81. Organized a one day training session on "Scientific Writing: Guidelines, Issues and Solutions" in Department of Microbiology and Molecular Genetics, University of the Punjab. (27 March, 2014)
- 82. Attended Training Workshop on CHNS Instrument, organized by Office of Research Innovation & Commercialization (ORIC) in Collaboration with School of Physical Sciences at University of the Punjab, Lahore. (03 – 04 April, 2014)
- 83. Attended Workshop on Biosafety and Risk Assessment, organized by Biosafety and Bioresource Committee, University of the Punjab, Lahore (19 April, 2014)
- 84. Presented in "Shameel Memorial Seminar on Algal Resources", Institute of Marine Sciences, The University of Karachi, Karachi (6-7 May, 2014)
- 85. Attended workshop on Culture of Responsibility, organized by American Society for Microbiology, at Boston, Massachusetts, USA (17 May, 2014)
- Presented in 114th General Meeting of American Society for Microbiology, at 86. Boston, Massachusetts, USA (18-20 May, 2014)
- Attended seminar on "Soil Health Reclamation Approaches", by College of Earth & 87. Environmental Sciences (CEES), University of the Punjab, Lahore (11 June, 2014)
- Attended Workshop on "Remote Sensing & GIS Applications in Forestry", National 88. Center for Remote Sensing and Geo-Informatics (NCRG), SUPARCO, Karachi (18-22 August, 2014)
- Presented in "9th European Workshop on the Molecular Biology of Cyanobacteria" **89.** at the Royal Netherlands Institute for Sea Research (NIOZ), Texel, Netherlands (7-**11 September, 2014**)
- 90. Attended Symposium on "Emerging issues of multidrug resistance: A Threat to the Globe", Department of Microbiology and Molecular Genetics, The University of Punjab, Lahore (2<sup>nd</sup> October, 2014)
- Attended One-Day Workshop on "Advances in Bioinformatics in the Post Genomic Era" 91. organized by National center for Bioinformatics (NCB) Quaid-I-Azam University, Islamabad (6<sup>th</sup> November 2014)

- Attended 2<sup>nd</sup> International Conference on "Biotechnology for Sustainable Development", 92. By Institute of Industrial Biotechnology, GC University, Lahore- (26-28 November, 2014)
- 93. Presented in "ASM-IIDRL Silver Jubilee Symposium on "Immunogenomics, Vaccinology and Infectious Disease Challenges", Marriot Hotel, Karachi (27-28 November, 2014)
- 94. Attended International Workshop on "Bioinformatics: Ensembl Database Mining and Whole Genome Sequencing Analyses", By COMSTECH, COMSTECH Secretariat, Islamabad (16-18 December, 2014)
- Attended Five days Indigenous On-campus Training Program by University of the 95. Punjab, Lahore and Higher Education Commission (HEC) Pakistan (22 – 26 December, 2014)
- 96. Presented in two day pre-conference workshop on "Parasitology and its Immunological Aspects", Department of Microbiology and Molecular Genetics, The University of Punjab, Lahore (13 - 14 February, 2015)
- Organized 10<sup>th</sup> Biennial International Conference of Pakistan Society for Microbiology, 97. Department of Microbiology and Molecular Genetics, The University of Punjab, Lahore (25 - 28 March, 2015)
- 98. Presented in Second Annual Scientific Symposium of Mohtarma Benazir Bhutto Shaheed Medical College, Mirpur AJ&K (17 – 19 April, 2015)
- 99. Presented in Two-days Training and Symposium on "Bioinformatics as a Tool for Biological Studies", Department of Zoology, University of Azad Jammu and Kashmir, Muzaffarabad, AJ&K (27 - 28 May, 2015)
- 100. Conducted Training Session on Turnitin® Anti Plagiarism Tool for Faculty members and PhD Scholars in The Women University Multan, Multan (12 June, 2015)
- Delivered Lecture on "Bioinformatics: Role in Identifying Organisms" in The Women 101. University Multan, Multan (12 June, 2015)
- Attended Biosafety Awareness Workshop by Pakistan Biological Safety Association 102. (PBSA) in collaboration with the Fogarty International Center (FIC) of the US National Institutes of Health, Pakistan Academy of Sciences (PAS) and International Council for the Life Sciences (ICLS), Pakistan Academy of Sciences, Islamabad (27 – 29 August, 2015)
- **103.** Attended Swedish Consortium for Artificial Photosynthesis meeting, Department of Chemistry, Royal Institute of Technology (KTH), Stockholm, Sweden (06 October 2015)
- 104. Delivered lecture in One Day Workshop on Graphpad Prism, Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore (24 November 2015)
- 105. One day Symposium on Diversity In Microbiology: A Crosstalk, Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore in collaboration

- with American Society for Microbiology (ASM) and ORIC, University of the Punjab, Lahore (17 December 2015)
- Conducted Training Session on Turnitin® Anti Plagiarism Tool, EndNote® and SPSS for 106. Faculty members in The Women University Multan, Multan (06 January, 2016)
- Conducted Training Session on EndNote® for Faculty members in University of the 107. Punjab, Lahore (12 January, 2016)
- 108. Presented in 5th International and 14th National conference of Botany organized by Pakistan Botanical Society at University of Karachi, Karachi (15-18 January 2016)
- 109. Attended Workshop on Research /Academic writing in Forman Christian College (FC University) (22 April, 2016)
- Presented in the European Networks Conference on Algal and Plant Photosynthesis **110.** (ENCAPP 2016), organized by University of Copenhagen at Qawra, Malta (26-29 **April 2016**)
- 111. Attended Two Days Workshop on Patent & Research Paper Writing at Nathia Gali, organized by Peshawar University (29th May to 01st June 2016)
- 112. Attended One Day Workshop On "Dual Use Research of Concern" jointly organized by the Department of Microbiology and Molecular Genetics, University of the Punjab and The Health Security Partners (18th July, 2016)
- 113. Attended National Workshop on "Organic Food and Health: Avenues of Innovation and Entrepreneurship", organized by Pakistan Council for Science and Technology at University of Management and Technology, Lahore. (29 August 2016)
- Delivered lecture on deliver talk on "Algal Biotechnology: Possibilities and Challenges" at 114. Department of Biology, SBA School of Science and Engineering, LUMS, Lahore Pakistan
- Attended ASM Conference for Undergraduate Educators (ASMCUE)" being 115. organized by American Society for Microbiology (ASM) at Bethesda, Maryland, **USA (21-24 July 2016)**
- Attended Seminar on World's AIDS Day 2016 organized by Punjab Aids Control 116. Program (1<sup>st</sup> December 2016)
- 117. Presented in "American Society for Cell Biology Meeting 2016 (ASCB2016)" at San Francisco, USA (03 to 07 December 2016)
- Attended seminar on World Quality day, Quality Enhancement Cell, University of the 118. Punjab, Lahore (8 February 2017)
- Presented in 3<sup>rd</sup> International conference on Biotechnology Challenges and Opportunities 119. in Pakistan, organized by University of South Asia, Lahore (8-9 February 2017)
- 120. Organized one day training session on "Basic Statistical Analysis" in Department of Microbiology and Molecular Genetics, University of the Punjab. (09 February, 2017)
- 121. Organized a two days' workshop on "Restriction Mapping and RFLP: In-vitro and Insilico" in Department of Microbiology and Molecular Genetics, University of the Punjab. (23-24 February, 2017)
- 122. Organized Symposium on Awareness on HIV/AIDS organized by University of the Punjab in collaboration with Punjab Aids Control Program (30 March 2017)

- Organized Symposium on Neurodegenerative disorders in Department of Microbiology 123. and Molecular Genetics, University of the Punjab. (23 September 2017)
- 124. Attended 1<sup>st</sup> International Conference on "Conventional and Modern Approaches in Plant Sciences (CMAPS2017)" organized by Department of Botany, University of the Punjab, Lahore (27-29 November 2017)
- 125. Attended Training Workshop on FTIR, XRD and LUMOS FTIR Microscope organized by Department of Physics, Allama Iqbal Open University, Islamabad (7-9 December 2017)
- Presented in International Conference on Solid State Physics (ICSSP) organized by 126. Centre for Solid State Physics, University of the Punjab, Lahore (11-14 December 2017)
- Attended 1st International Conference on Advances in Drug Discovery and Development 127. (ICAD3) at NARC organized by Abdul Wali Khan University, Mardan in collaboration with National Agriculture Research Council, Islamabad (3-5 January 2018)
- Presented in 28th Annual International conference on Family Medicine-"FAMILYCON-128. 2018" by Academy of Family Physicians Lahore Pakistan at Pearl Continental Hotel Lahore. (13th - 15th January 2018)
- 129. Organized Conference on Microbiology and Molecular Genetics (MMG2018), by Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore in collaboration with Superior University, Lahore (07 – 09 February, 2018)
- 130. Attended BioPrism: A Laboratory Safety Training Initiative "Advanced Biological Risk Mitigation", organized by Pakistan Biological Safety Association (PBSA), Behavioral Based Improvement Solutions (B-BIS) and Fogarty International Center, National Institutes of Health, USA in Islamabad (March 25-29, 2018)
- Organized training workshop on Research Methodology in the Women University 131. Multan, Multan (May 10-11, 2018)
- **132.** Invited speaker talk in "International Meeting on Microbial Lipids and Other Bioactive Compounds (IMB2018)", Zibo, China (August 22 - 25, 2018)
- 133. Attended RSC 1st International Conference on Medicinal Chemistry & Drug Discovery, Islamabad, Pakistan (October 18-19, 2018)
- 134. Attended 2nd International Conference on Plant Sciences (ICPS-2018) organized by Department of Botany, Government College University, Lahore (December 05-07, 2018)
- **135.** Presented in "34th Symposium of the Malaysian Society for Microbiology 2018 (MSM2018)", Penang, Malaysia (December 07-10, 2018)
- 136. Invited talk in the short Course on Cancer Biology organized by Hormone Lab and University of the Punjab, Lahore (12-14 February 2019)
- 137. Presented in 29th Annual International conference on Family Medicine-"FAMILYCON-2019" by Academy of Family Physicians Lahore Pakistan at Pearl Continental Hotel Lahore. (28-31st March 2019)
- Invited Talk in workshop on Approaching and Managing Funded Research Projects for 138. faculty members of the University organized by Punjab University Office of Research Innovation and Commercialization (ORIC) (18 June 2019)
- Presented in the First International Conference on Recent innovations in Molecular 139. Sciences, organized by University of the Punjab, Lahore (6-8 November 2019)

- **140.** Attended international conference on "Innovative Biological and Public Health Research (IBPHR-2019)", organized by Zoology Department, GC University Lahore (13-14 November 2019)
- 141. Presented in "7th International Bahçeşehir University (BAU) Drug Design Congress", Istanbul, Turkey (December 19-21, 2019)
- National Conference on Entrepreneurship Avenues 142. in Biological Sciences (NCEB) organized by Lahore Garrison University, Lahore (January 6-8, 2020)

## PUBLICATIONS (JCR<sub>2019</sub>IF 51.894)

- 1. Ahmed, M., Stal, L. J. and Hasnain, S. 2010. Association of Non-Heterocystous Cyanobacteria with Crop Plants. Plant and Soil, 336: 363-375. (doi: 10.1007/s11104-010-0488-x) (Impact factor: 3.299).
- Ahmed, M., Stal, L. J. and Hasnain, S. 2011. DTAF: An Efficient Probe to Study 2. Cyanobacterial-Plant Interaction Using Confocal Laser Scanning Microscopy (CLSM). Journal of Industrial Microbiology & Biotechnology, 38: 249-255. (doi: 10.1007/s10295-010-0820-8) (Impact factor: 2.824).
- Ahmed, M., Stal, L. J. and Hasnain, S. 2010. Production of Indole-3-Acetic Acid by the 3. Cyanobacterium Arthrospira platensis Strain MMG-9. Journal of Microbiology and Biotechnology, 20(9): 1259–1265. (doi: 10.4014/jmb.1004.04033) (Impact factor: 1.992).
- 4. Ismail-Ben Ali, A., El Bour, M., Ktari, L., Bolhuis, H., Ahmed, M. Boudabbous, A. and Stal, L.J. 2012. Jania rubens associated bacteria: molecular identification and Journal of Applied Phycology, 24: antimicrobial activity. 525-534 (doi: 10.1007/s10811-011-9758-0) (Impact factor: 3.016).
- 5. Sarwar, S., Ahmed, M. and Hasnain, S. 2012. Phylogenomic analysis of polyketide synthase genes in actinomycetes: structural analysis of KS domains and modules of polyketide synthases. International Journal of Computational Biology and Drug Design, **5(2):** 89-110
- 6. Sarwar, S., Sohail, M. and Ahmed, M. 2013. Recent trends in antibiotics susceptibility pattern of *Pseudomonas* sp. isolated from clinical samples of Punjab, Pakistan. Latin American Journal of Pharmacy, 32(8): 1244-1248 (Impact factor: 0.240).
- 7. **Ahmed, M.,** Stal, L. J. and Hasnain, S. 2014. The morphology and bioactivity of the rice field cyanobacterium Leptolyngbya. Revista de Biología Tropical, 62(3): 1251-1260 (Impact factor: 0.446).
- 8. Ahmed, M., Moerdijk, T., Wijnholads, A., Stal, L. J. and Hasnain, S. 2014. Isolation, characterization and localization of exo-polysaccharides from cyanobacterium Arthrospira platensis Strain MMG-9. European Journal of Phycology **49(2)**: 143-150 (doi: 10.1080/09670262.2014.895048) (Impact factor: 2.756).
- 9. Ahmed, M., Stal, L. J. and Hasnain, S. 2014. Biofilm formation and indole-3-acetic acid production by two rhizospheric unicellular cyanobacteria. Journal of Microbiology

- and Biotechnology 24(8): 1015-1025 (doi: 10.4014/jmb.1310.10099) (Impact factor: 1.992).
- 10. Ismail-Ben Ali, A., Salah K. B. H., Ahmed, M., Mastouri M., Bouraoui A. and Aouni M. (2014) Antibacterial and antifungal activities of the brown alga Zonaria tournefortii (J.V. Lamouroux). Allelopathy Journal 34(8): 143-154 (Impact factor: 1.275).
- 11. Rasool, H. A. and Ahmed, M. 2015. Designing second generation anti-alzheimer compounds as inhibitors of human acetylcholinesterase: Computational screening of synthetic molecules and dietary phytochemicals. PLoS ONE 10(9): e0136509 (doi: 10.1371/journal.pone.0136509) (Impact factor: 2.740).
- 12. Ismail, A., Ktari, L., Ahmed, M., Bolhuis, H., Boudabbous, A., Stal, L.J., Cretoiu, M.S., El Bour, M. 2016. Antimicrobial activities of epiphytic bacteria associated of the brown alga Padina pavonica. **Frontiers** in Microbiology doi: 10.3389/fmicb.2016.01072 (Impact factor: 4.235).
- 13. Saba, Andreasen R, Li Y, Rehman Y, Ahmed M, Meyer RL, Sabri AN. 2018. Prospective role of indigenous Exiguobacterium profundum PT2 in arsenic biotransformation and biosorption by planktonic cultures and biofilms. Journal of Applied Microbiology 124(2): 431-443 doi: 10.1111/jam.13636. (Impact factor: 3.066).
- 14. A. Ismail, L. Ktari, M. Ahmed, H. Bolhuis, Balkiss Bouhaouala-Zahar, L. J. Stal, A. Boudabbous and M. El Bour. 2018. Heterotrophic bacteria associated with the green alga Ulva rigida: identification and antimicrobial potential. Journal of Applied Phycology, **30(5)**: 2883–2899 (doi: 10.1007/s10811-018-1454-x) (Impact factor: 3.016).
- 15. Moqeet Hai, A., Ahmed, M., Afzal, A., Jabbar, A., & Faheem, S. 2019. Characterization and antibacterial property of Kapok fibers treated with chitosan/AgCl-TiO2 colloid. The Journal of The Textile Institute, 110(1): 100–104 (doi: 10.1080/00405000.2018. 1466629) (Impact factor: 1.239).
- 16. Junaid, S., Khanna, N., Lindblad, P. and Ahmed, M. 2019. Multifacet Biofuel Production by Microalgal isolates from Pakistan. Biofuels, Bioproducts & Biorefining-Biofpr, 13(05):1187-1201 (doi: 10.1002/bbb.2009) (Impact factor: 4.528).
- Saba, Y, Rehman Y, Ahmed M, Sabri AN. 2019. Potential role of bacterial 17. extracellular polymeric substances as biosorbent material for arsenic bioremediation. Bioremediation Journal, 23(2): 72-81 (doi:10.1080/10889868.2019.1602107) (Impact factor: 1.724).
- Khalid, A. and Ahmed, M. 2019. Risk assessment of FLT3 and PAX5 variants in B-18. acute lymphoblastic leukemia: a case - control study in a Pakistani cohort. PeerJ, 7: e7195 (doi: 10.7717/peerj.7195) (Impact factor: 2.379).
- 19. Shahzadi, S.K., Qadir, M.A., Mahmood, N., Ahmed, M. 2020. Pegylation and cell based bioassay of human interferon-α2b along its docking studies and effect on plasma half-life. Protein & Peptide Letters, 27(3): 219-224 (doi: 10.2174/09298665266661910 14124026) (Impact factor: 1.156).

- 20. A. Ismail, L. Ktari, M. Ahmed, R. Mraouna, I., Hmani, A. Boudabbous, and M. El Bour. 2020. Padina pavonica and Jania rubens associated bacteria: biodiversity and antibacterial potential. Advances in Science, Technology and Innovation, Springer Nature Switzerland (Accepted)
- Riaz, S., Ahmed, M. and Hasnain, S. 2020. Virtual screening of antitumour 21. phytochemical against peroxisome proliferators activated receptor proteins PPARs. Pakistan 33(1): 379-383 Journal of Pharmaceutical Sciences, (doi: 10.36721/PJPS.2020.33.1.SUP.379-383.1) (Impact factor: 0.562).
- 22. Singh, G.C., Ahmed, M., Zaid, M. and Hasnain, S. 2020. Biochemical, serological, and genetic aspects related to gene HLA-DQB1 and its association with type 1 diabetes mellitus (T1DM). Molecular Genetics & Genomic Medicine, 8(5): e1147 (doi: 10.1002/mgg3.1147) (**Impact factor: 1.995**).
- 23. Amat-ur-Rasool, H.; Symes, F.; Tooth, D.; Schaffert, L.-N.; Elmorsy, E.; Ahmed, M.; Hasnain, S.; Carter, W.G. 2020. Potential nutraceutical properties of leaves from several 1556. (doi:10.3390/ commonly cultivated plants. Biomolecules 2020, 10, biom10111556) (Impact factor: 4.082).
- 24. Amat-ur-Rasool, H.; Ahmed, M.; Hasnain, S.; Carter, W.G. 2021. Anti-cholinergic combination drug therapy as a next-generation treatment for Alzheimer's disease. Brain Sciences 2021, 11, 184. (doi:10.3390/brainsci11020184) (Impact factor: 3.332).

## **SKILLS**

Microsoft Office 2000, 2003, 2007, 2010, Inpage Urdu, Windows, SPSS, EndNote, Prism, Molecular docking

### STUDENTS SUPERVISED

	Name	Session	Topic
			Ph.D.
1.	Sara Janiad	2013-18	Indigenous Cyanobacteria and Microalgae as Source of Biofuel
2.	Saba	2013-18	Role of Biofilm Forming Bacteria in Transformation of Arsenic
3.	Ammara Khalid*	2014-19	Molecular Studies of Leukemia in Pakistani Population: In-silico and In-vitro Analysis of Antileukemic Molecules
4.	Gur Charn Singh*	2014-19	Genetic Analysis of Brain Derived Neurotrophic Factor (BDNF) and Neurotrophin-3 (NT-3) in Malignant and Non-Malignant Brain Cancer
5.	Sana Riaz	2015-19	Biochemical and Molecular Characterization of Potential Anticancer Phytochemicals: In-silico and In-vitro Study
6.	Hafsa Amat Ur Rasool	2015-20	Preclinical Studies of Acetylcholinesterase Inhibitors: A Common Treatment to Various Neuronal Disorders
7.	Maryam Fakhar*	2015-20	In silico and in vitro analysis of Herbal Bioactive Compounds as Therapeutic Agents against Metallo-β lactamase producing Pseudomonas

8.	Uzma Batool*	2017-22	Identification, Quantification and Comparative Analysis of Cyanotoxins from Drinking
9.	Zunaira Batool*	2018-23	Water Reservoirs  Neuroprotective Effect of Phytochemicals against Acetylcholinesterase: Pharmaco-therapeutic Intervention of
			Alzheimer's disease
			MS/MPhil
1.	Jawaria Khawar	2010-12	In silico Screening of Bioactive Compounds as Drugs against Shigella Toxin
2.	Anam Aslam	2010-12	Computational analysis of putative Metallothioneins and Metallohistins from different organisms
3.	Sara Junaid	2011-13	Isolation, Characterization and Selection for Potential Biodiesel Producing Microalgae
4.	Zara Ahmad	2012-14	Cyanobacterial Molybdenum-Nitrogenase: Insights into Phylogenetic and Structure-Function Relationships
5.	Gur Charn Singh	2012-14	Computational Analysis of SNPs in CYP2D6 region and its Association with Population
6.	Waheed Murad	2013-15	Antimicrobial and Cytotoxic potential of Cyanobacteria
6. 7.	Kaneez Fatima	2013-15	Dairy Probiotics: Analysis of Their Microbiological and Functional Aspects
8.	Abdul Rehman	2013-15	In-Vitro & In-Silico Assessment of Natural Compounds Against Bacteria Isolated from Peptic Ulcer
9.	Shaista Nosheen	2014-16	Exploring the Potential of Microalgae for UV Protectants and Bioplastic Production
10.	Umbreen Shabbir	2014-16	Drug, Vaccine and siRNA Designing: A Tri-facet Computational Approach Against Ebola Virus
11.	Hania Beig	2014-16	Urease Inhibition by Herbal Extracts in Proteus mirabilis: In vitro and In silico Study
12.	Sana Shabbir Malik	2015-17	SNP and Phylogenetic Analysis of pro Gene in HIV Samples from Pakistan
13.	Fatima Perveiz	2015-17	Antioxidant Activity of Cyanobacteria and Its Role in Age Deceleration in Mice
14.	Javeria Yasin	2015-17	Evolutionary History and Molecular Epidemiology of HIV pol Gene and In-Silico Screening Phytochemicals Against it
15.	Zunaira Batool	2016-18	Potential of Flavonoids and Alkaloids as ERa inhibitor to prevent Breast Cancer: In Silico and In Vitro studies
16.	Misha	2016-18	Synergistic activity of plant extracts and antibiotics on beta-lactam- resistant bacteria: In silico and in vitro study
17.	Rabia Khalid	2017-19	Assessing GSK3 enzyme inhibiting phytochemicals as possible treatment of Alzheimer
18.	Syeda Sania	2018-20	Efficacy of phytochemicals as photosynthesis inhibitors in microalgae: In-silico and in-vitro studies
19.	Rohma Anwar	2018-20	Larvicidal activity of phytochemical against arthropodic vectors (Aedes aegypti & Tribolium castenenum): In-silico and in-vitro studies
20.	Raina Rashid	2018-20	Assessing potential of cyanobacteria to alleviate salt stress in rice plants
21.	Zainab Ali	2018-20	Phylogenetic Analysis of Low Density Lipoprotein Receptor (LDLR) Among Different Mammals
22.	Amina Javid*	2019-21	
23.	Waheed Ali*	2019-21	

			M.Sc.
1.	Sara Junaid	2008-10	Growth Performance Analysis of Sunflower and Beans Inoculated with Auxin Producing Bacillus strains
2.	Sahar Mahmood	2008-10	Impact of Auxin Producing Pseudomonas spp. on the growth of Triticum aestivum and Helianthus annuus
3.	Samreen Sarwar	2009-11	Phylogenomic analysis of polyketide synthase genes, structural analysis of KS domains and modules of polyketide synthases
4.	Sheeren Gul	2009-11	Comparative Analysis of nif Genes in some Indigenous Filamentous Cyanobacteria
5.	Zara Ahmad	2010-12	Computational Analysis of Monoamine oxidase A (MAOA): A Genetic Determinant of Aggression and Impulsivity
6.	Areeb Iqbal	2010-12	In Silico Analysis of Acquisition of Methicillin Resistance in Staphylococcus aureus
7.	Hadia Amjad	2011-13	In-Silico Search for Effective Catalytic Inhibitors of Human Telomerase
8.	Shaista Nosheen	2012-14	Analysis of UV protective compounds from cyanobacterial isolates
9.	Asma Zafar	2012-14	Impact of oil-bearing cyanobacteria on oil yield of Brassica & canola
10.	Javaria Yasin	2012-14	Evaluating pesticide remediation by cyanobacteria using gold- nanoparticles
11.	Sana Shabbir Malik	2013-15	In-silico screening of phytochemicals as dengue virus E protein inhibitors
12.	Iqra Khalid	2013-15	Seasonal variation modelling of cyanobacteria and microalgae in Punjab University
13.	Arisha	2014-16	A Seasonal Study of Cyanobacterial Biodeterioration of Archaeological Sites in Lahore
14.	Sibgha Fiaz	2014-16	In silico Screening for Xanthine Oxidase Inhibitors to reduce Uric Acid Level
15.	Syeda Sania	2015-17	Bacteria Induced Antibacterial Activity of Cyanobacteria
16.	Rohma Anwar	2016-18	Larvicidal activity of cyanobacteria/microalgae against Aedes aegypti
17.	Amtul Raqeeb	2017-19	Screening herbal Vacuolar ATPase inhibitors as anti-yeast compounds: In-silico and in-vitro studies
18.	Muhammad Adil	2018-20	In-silico screening of phytochemicals as Bruton's tyrosine kinase (BTK) inhibitors to cure rheumatoid arthritis
19.	Faiz-ul-Nisa*	2019-21	
			B.S.
1.	Aisha Akram	2008-12	Evolutionary Studies of Thiamine Diphosphate Dependent Enzymes (IPDC/PDC) from Different Domains of Life
2.	Fatima Ameer	2008-12	Optimization of Yogurt Starter Cultures, their Preservation and Bacteriocin Production Potential
3.	Anum Shafi	2008-12	SNPs Analysis of HLA Region and their Haplotype Studies
4.	Hafsa Amat ur Rasul	2009-13	Screening for Potent Anti-Alzheimer Drug: A Comparative In-silico Study of Synthetic Molecules and Dietary Phytochemicals as Inhibitors of Homo sapiens Acetylcholinesterase (hAChE)
5.	Komal Yasmin Malik	2009-13	In-Silico Designing a Fusion Protein to Combat Obesity via Inhibition of SOCS3
6.	Umarah Shehzad	2009-13	In-Silico Screening of Possible Dopamine Inhibitors to Treat Schizophrenia
7.	Anum Fatima	2010-14	Phytotoxic effects of cyanobacteria on nutritionally important plants and evaluation of their oxidative stress

## Dr Mehboob Ahmed | Bio-data

8.	Fatima Pervaiz	2010-14	Cyanobacterial vitamins and auxins: their production and impact on rice
9.	Rabail Razi	2011-15	Screening for SNP's based phytochemical antihypertensives: A step towards personalized natural medicines
10.	Rushda Tariq	2012-16	In silico Screening for Antiepileptic phytochemicals Targeting GABA <sub>A</sub> Receptor
11.	Sheeza Ali	2012-16	In silico Drug Designing for Hypercholesterolemia by Using Phytochemicals as Inhibitors of HMGR Enzyme
12.	Sania Akram	2013-17	In Silico Screening of Phytochemicals as Agonists of ADRB2 to treat Asthma
13.	Zainab Aslam	2013-17	Computational Screening of Phytochemicals as PDE4 Inhibitors for Psoriasis Treatment
14.	Fatima Bajwa	2014-18	Genus specific interaction between cyanobacteria and spices plants
15.	Kinza Asif	2015-19	Searching MDM2 inhibitors for Multiple Myeloma: An in-silico investigation of anti-tumor phytochemicals
16.	Zahra Rehman	2016-20	Targeting antibiotic resistance through phytochemicals: An in-silico and in-vitro approach
-			

**Internees guided: 20** 

\* In progress

## **TECHNIQUES**

- ➤ Isolation, Identification and Culturing of Cyanobacteria
- ➤ Basic and advance techniques in recombinant DNA technology (PCR, Cloning, Sequencing etc.)
- ➤ Basic and advance microscopy (Light, Fluorescent, Confocal laser scanning etc.)
- **>** Bioinformatics
- > In silico dug designing
- Genomics

Urdu

English

Punjabi

## RESEARCH PROJECTS

- ➤ University of the Punjab Research Grant (2011-12) Rs 125,000/- entitled "Analysis of Polyketide Synthase Genes from Actinomycetes and their Structural Comparison" (Completed and Published)
- ➤ University of the Punjab Research Grant (2012-13) Rs 150,000/- entitled "Isolation, Characterization and Fatty Acids Production Potential of Indigenous Cyanobacterial Isolates"
- ➤ University of the Punjab Research Grant (2013-14) Rs 150,000/- entitled "Optimizing Conditions for the Biodiesel Production from Microalgae"

# Dr Mehboob Ahmed | Bio-data

- ➤ University of the Punjab Research Grant (2014-15) Rs 150,000/- entitled "Using Oil Producing Cyanobacteria to Enhance Yield of Oil Producing Plants"
- University of the Punjab Research Grant (2015-16) Rs 150,000/- entitled "Potential of Bioactive compounds from Cyanobacteria"
- > HEC SRGP (164) Rs 448,500/- entitled "UV Protectants from Cyanobacteria and their Efficiency"
- ➤ MPhil Project of Punjab National Aids Program
- > HEC Research Project under National Research Program for Universities (NRPU) (2017-20) Rs 6,035,324/- entitled "Assessment of Cyanobacterial Toxins in Reservoirs and Drinking Water Facilities Throughout Pakistan"
- ➤ University of the Punjab Research Grant (2017-18) Rs 150,000/- entitled "Studies of Cyanobacterial Biodeterioration of Archeological Sites in Lahore"
- > HEC Research Project under National Research Program for Universities (NRPU) (2018-21) Rs 6,047,020/- entitled "Preclinical Studies of Acetylcholinesterase Inhibitors: A Common Treatment to Various Neuronal Disorders"
- ➤ University of the Punjab Research Grant (2019-20) Rs 150,000/- entitled "Screening of Indigenous Microalgae for Anti-Diabetes Activities"

### **COUNTRIES VISITED**

Thailand	Netherlands	Germany	Belgium	France
Monaco	Japan	Bangladesh	South Korea	Spain
UAE (Dubai, Abu Dl	nabi, Sharjah)	USA	Sweden	Denmark
Finland	Malta	Turkey	Saudi Arabia	China
Malaysia				

### REFRENCES

#### PROF. DR. SHAHIDA HASNAIN

HEC National Distinguished Professor, **Professor Emeritus** Institute of Microbiology and Molecular Genetics, University of the Punjab Lahore-54590 Pakistan

genetic@brain.net.pk, Email: shahida.mmg@pu.edu.pk

#### PROF. DR. LUCAS J. STAL

NIOZ Royal Netherlands Institute for Sea Research Department of Marine Microbiology and Biogeochemistry and Utrecht University

and University of Amsterdam, IBED Department of Freshwater and Marine Ecology

P.O.Box 94248, 1090 GE Amsterdam, The Netherlands

Phone: +31 20 5256021 Fax: +31 20 5257832 Cell: +31 6 51821096

E-mail: 1.j.stal@uva.nl; lucas.stal@nioz.nl;

lucas.j.stal@gmail.com