

# 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  
**Passport No.:** HK1159432  
**Marital Status:** Married (Two children)  
**Addresses:**

### Present Address

**Assistant Professor (HEC Approved PhD Supervisor)**

Department of Microbiology & Molecular Genetics  
Quaid-e-Azam Campus  
University of the Punjab  
Lahore-54590  
Pakistan

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### Permanent Address

Vill: Bhowanj  
Tehsil: Sarai Alamgir  
District: Gujrat  
Pakistan

**E-mail:** [mehboob.mmg@pu.edu.pk](mailto:mehboob.mmg@pu.edu.pk) [drmahmed@live.com](mailto:drmahmed@live.com)

**URL:** <http://faculty.mehboob-ahmed.pu.edu.pk/>



## 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
iii. Virology	BS Hons
iv. Bioinformatics	BS Hons / MSc / PhD
v. Biostatistics	BS Hons / MSc
vi. Recombinant DNA Technology	BS Hons
vii. Probiotics	BS Hons
viii. Genome Analysis and Genomics	MS/MPhil
ix. FTIR	PhD
x. Microscopy and its related softwares	PhD
xi. 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).
- Working as Assistant Professor at Department of Microbiology and Molecular Genetics, University of the Punjab (10-01-2012 – to date).
- 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 CONFRENCES ORGANIZED

1. 7<sup>th</sup> Plant Science Conference, Botany Department, Punjab University (14-16 November, 2000)
2. 1<sup>st</sup> Symposium on Genomics, Proteomics, Metabolomics: Recent trends in 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)
4. Seminar on “Microbial Resistant Paints”, organized by Department of Microbiology and 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)**
6. Symposium on Modern Biotechnology: *A Resource for Sustainable Development*, 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)
10. Workshop on “Impact of Higher Education in the Social Adjustment of Women 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)
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)

13. One day training session on “Making Sense from Sequence” in Department of 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)
17. 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)
18. 10<sup>th</sup> Biennial International Conference of Pakistan Society for Microbiology, Department 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)
20. Conducted Training Session on EndNote® for Faculty members in University of the 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)

## WORKSHOPS AND CONFRENCES ATTENDED

1. Attended 7<sup>th</sup> Plant Science Conference, Botany Department, Punjab University (14-16 November, 2000)
2. Attended 26<sup>th</sup> Zoological Congress, Zoology Department, Punjab University (04-06 April, 2006)
3. Attended BC-HEC Radioimmunoassay Workshop, Sheikh Zayed Hospital, Lahore (15-18 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)
6. Acted as Mentor in Provincial Science Olympiad, organized by the Ministry of Education and Science Education (Punjab) in collaboration with intel-corporation Pvt. Ltd. (2006 )
7. Attended 1<sup>st</sup> International Conference on Assessing Quality in Higher Education, IQTM, 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)
9. Oral Presentation in 1<sup>st</sup> Symposium on Genomics, Proteomics, Metabolomics: Recent 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)**
16. Attended International Conference on Recent Advances In Agriculture Biotechnology, 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)
18. Presented in Seminar on “Microbial Resistant Paints”, organized by Department of 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)**
21. **Attended Symposia “Plants - insects - microbes: An ecological dance for three”, WICC, Wageningen, The Netherlands (November, 2008)**
22. **Presented in ASLO Aquatic Sciences Meeting, By American Society of Limnology 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)
28. **Presented in 9<sup>th</sup> International Phycological Congress By International Phycological Society, Tokyo, Japan (02-08 August, 2009)**
29. Presented in International Thematic Workshop on Advances in Bioinoculant/Biopesticide 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 Hematology, Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore, Pakistan (09 February, 2010)
31. Attended Biotechnology Lahore Cluster Meeting, FC College (Chartered University), Lahore (15 March, 2010)
32. Attended Conference on “Bioinformatics: Opening New Frontiers In Molecular Biology 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)
34. Attended Symposium on Current Agro Biotechnology and Transgenic Plants, Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore. (21 June, 2010)
35. Attended National Conference on “Animal Forensics: DNA Fingerprinting”, Institute of Biochemistry and Biotechnology, University of Veterinary and Animal Sciences, Lahore (21-22 September, 2010)
36. Attended “National Biotechnology Exhibition and Seminars 2010”, Institute of Biochemistry and Biotechnology, University of Veterinary and Animal Sciences, Lahore (20-21 October, 2010)
37. **Presented in 6<sup>th</sup> International Conference on Plant Tissue Culture & Biotechnology, Department of Botany, University of Dhaka, Dhaka, Bangladesh (3-5 December, 2010)**

38. Attended 11<sup>th</sup> National Meeting of Plant Scientists (NMPS) and 2<sup>nd</sup> International Conference of Plant Scientists (ICPS-2011) by Pakistan Botanical Society, GC University, Lahore, (22- 24 February, 2011)
39. Attended Workshop on “Computational Resources for Protein Modeling” by Institute of 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)
41. Presented in 1<sup>st</sup> National Phycological Conference, GC University, Lahore (30-31 March, 2011)
42. Attended Training Workshop on “Turnitin Anti-Plagiarism Software” by Punjab 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)
44. Deliver Lecture on “A Glimpse on the Exciting World of Cyanobacteria” in Queen Mary 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).
- 52. Presented in 6th Asian Pacific Phycological Forum (APPF 2011), Yeosu, Korea. (9-14, October 2011)**
53. Attended Five days In Service Faculty Training Program by Department of Microbiology & 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)



55. Attended Computational Biology and Bioinformatics Workshop (C2BW), organized by 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)
58. Attended and participated in one day workshop entitled “Invention to Innovation 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)
60. Presented in Workshop on “Algal Collection & Recent Taxonomy Of Chlorophycota”, 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)
62. Attended Workshop on “Impact of Higher Education in the Social Adjustment of Women 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)
64. Presented in “9<sup>th</sup> International Conference of Pakistan Society for Microbiology” at Department of Microbiology, The University of Karachi, Karachi (28-31 January, 2013)
65. Attended Five days 2<sup>nd</sup> In Service Faculty Training Program by Department of 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)
67. Attended and Presented in Invention to Innovation Summit 2013 organized by PU’s 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)**
71. Attended “2<sup>nd</sup> Annual Computational Science/Biology Conference” held at International 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)
73. Presented in 11<sup>th</sup> Biennial Conference "Molecular Biosciences - Challenges and 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)
74. Attended “Workshop on Enzyme Immunoassays” held at National Health Research 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)
76. Organized a one day training session on “Making Sense from Sequence” in Department of Microbiology and Molecular Genetics, University of the Punjab. (25 January, 2014)
77. Organized a one day training session on “Introduction and Use of EndNote®” in 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)
79. Attended “34<sup>th</sup> Zoological Congress of Pakistan” held at Bahauddin Zakariya University, Multan. (25 – 27 February, 2014)
80. Presented in 15<sup>th</sup> International Congress of Soil Science, organized by Soil Science 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 Bio-resource 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)**
- 86. Presented in 114<sup>th</sup> General Meeting of American Society for Microbiology, at Boston, Massachusetts, USA (18-20 May, 2014)**
87. Attended seminar on “Soil Health Reclamation Approaches”, by College of Earth & Environmental Sciences (CEES), University of the Punjab, Lahore (11 June, 2014)
88. Attended Workshop on “Remote Sensing & GIS Applications in Forestry”, National Center for Remote Sensing and Geo-Informatics (NCRG), SUPARCO, Karachi (18-22 August, 2014)
- 89. Presented in “9<sup>th</sup> European Workshop on the Molecular Biology of Cyanobacteria” 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)
91. Attended One-Day Workshop on “Advances in Bioinformatics in the Post Genomic Era” organized by National center for Bioinformatics (NCB) Quaid-I-Azam University, Islamabad (6<sup>th</sup> November 2014)
92. Attended 2<sup>nd</sup> International Conference on “Biotechnology for Sustainable Development”, 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)
95. Attended Five days Indigenous On-campus Training Program by University of the 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)
97. Organized 10<sup>th</sup> Biennial International Conference of Pakistan Society for Microbiology, 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)
101. Delivered Lecture on “Bioinformatics: Role in Identifying Organisms” in The Women University Multan, Multan (12 June, 2015)
102. Attended Biosafety Awareness Workshop by Pakistan Biological Safety Association (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)
106. Conducted Training Session on Turnitin® Anti Plagiarism Tool, EndNote® and SPSS for Faculty members in The Women University Multan, Multan (06 January, 2016)
107. Conducted Training Session on EndNote® for Faculty members in University of the 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)
110. **Presented in the European Networks Conference on Algal and Plant Photosynthesis (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)

114. **Attended ASM Conference for Undergraduate Educators (ASMCUE) being organized by American Society for Microbiology (ASM) at Bethesda, Maryland, USA (21-24 July 2016)**
115. Attended Seminar on World's AIDS Day 2016 organized by Punjab Aids Control Program (1<sup>st</sup> December 2016)
116. **Presented in “American Society for Cell Biology Meeting 2016 (ASCB2016)” at San Francisco, USA (03 to 07 December 2016)**

## PUBLICATIONS (IF 22.24)

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: 2.952**). 2.96
2. **Ahmed, M.**, Stal, L. J. and Hasnain, S. 2011. DTAF: An Efficient Probe to Study 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: 2.439**). 2.745
3. **Ahmed, M.**, Stal, L. J. and Hasnain, S. 2010. Production of Indole-3-Acetic Acid by the Cyanobacterium *Arthrospira platensis* Strain MMG-9. *Journal of Microbiology and Biotechnology*, **20(9)**: 1259–1265. (doi: 10.4014/jmb.1004.04033) (**Impact factor: 1.525**). 1.685
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 antimicrobial activity. *Journal of Applied Phycology*, **24**: 525-534 (doi: 10.1007/s10811-011-9758-0) (**Impact factor: 2.559**). 2.372
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: 0.372**). 0.329
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: 0.524**). 0.441
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: 1.912**). 2.205

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: 1.525**). 1.685
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: 0.523**). **0.533**
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: 3.234**) **3.057**
12. Amel Ben Ali Ismail, Monia El Bour EL Bour, Leila Trabelsi Ktari, Mehboob Ahmed, Henk Bolhuis, Abdellatif Chihi Boudabous, Lucas Stal, Mariana, Silvia Cretoiu. (2016). Antimicrobial activities of epiphytic bacteria associated of the brown alga *Padina pavonica*. *Frontiers in Microbiology* doi: 10.3389/fmicb.2016.01072 (**Impact factor: 4.165**)
13. **Ahmed, M.**, Stal, L. J. and Hasnain, S. 2013. Isolation, Characterization and comparison of exo-polysaccharides from rhizospheric cyanobacterial isolates. (*In process*)
14. **Ahmed, M.**, Stal, L. J. and Hasnain, S. 2013. Cyanobacterization: An Efficient Method of Soil Conditioning. (*In process*)

## SEQUENCES SUBMITTED TO GENE BANK

1. gi|226844846|gb|FJ839352.1| *Leptolyngbya* sp. MMG-1 16S ribosomal RNA gene, partial sequence
2. gi|226844847|gb|FJ839353.1| *Oscillatoria* sp. MMG-2 16S ribosomal RNA gene, partial sequence
3. gi|226844848|gb|FJ839354.1| *Oscillatoria* sp. MMG-3 16S ribosomal RNA gene, partial sequence
4. gi|226844849|gb|FJ839355.1| *Phormidium* sp. MMG-4 16S ribosomal RNA gene, partial sequence
5. gi|226844850|gb|FJ839356.1| *Chroococciopsis* sp. MMG-5 16S ribosomal RNA gene, partial sequence
6. gi|226844851|gb|FJ839357.1| *Chroococciopsis* sp. MMG-6 16S ribosomal RNA gene, partial sequence
7. gi|226844852|gb|FJ839358.1| *Synechocystis* sp. MMG-7 16S ribosomal RNA gene, partial sequence
8. gi|226844853|gb|FJ839359.1| *Synechocystis* sp. MMG-8 16S ribosomal RNA gene, partial sequence
9. gi|226844854|gb|FJ839360.1| *Arthrospira platensis* MMG-9 16S ribosomal RNA gene, partial sequence
10. gi|262071615|gb|GU056206.1| *Leptolyngbya* sp. MMG-1 dinitrogen reductase (*nifH*) gene, partial cds
11. gi|262071617|gb|GU056207.1| *Oscillatoria* sp. MMG-2 dinitrogen reductase (*nifH*) gene, partial cds
12. gi|262071619|gb|GU056208.1| *Chroococciopsis* sp. MMG-5 dinitrogen reductase (*nifH*) gene, partial cds
13. gi|262071621|gb|GU056209.1| *Chroococciopsis* sp. MMG-6 dinitrogen reductase (*nifH*) gene, partial cds

## SKILLS

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

## STUDENTS SUPERVISED

Name	Session	Topic	
<b>Ph.D.</b>			
1.	Sara Junaid	2013-18	Indigenous Cyanobacteria and Microalgae as Source of Biofuel
2.	Saba	2013-18	Role of Biofilm Forming Bacteria in Transformation of Arsenic
3.	Nabiha Mansoor	2013-18	Isolation and Characterization of Selenium Tolerant Microbes with Potential of Producing Biofilms and Bioremediation of Toxic Selenium Ions
4.	Ammara Khalid	2014-19	Molecular Studies of Leukemia in Pakistani Population: In-silico and In-vitro Analysis of Antileukemic Molecules
5.	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
6.	Wagiha Talib	2014-19	Screening for Anti-Quorum Sensing Compounds Against Medically Important Microorganisms
7.	Sana Riaz	2015-19	Biochemical and Molecular Characterization of Potential Anticancer Phytochemicals: In-silico and In-vitro Study
8.	Hafsa Amat Ur Rasool	2015-20	In process
<b>MS/MPhil</b>			
1.	Jawaria Khawar	2010-12	<i>In silico Screening of Bioactive Compounds as Drugs against Shigella Toxin</i>
2.	Anam Aslam	2010-12	<i>Computational analysis of putative Metallothioneins and Metallothistins from different organisms</i>
3.	Sara Junaid	2011-13	<i>Isolation, Characterization and Selection for Potential Biodiesel Producing Microalgae (Chlorophytes and Cyanophytes) from Different Habitats</i>
4.	Zara Ahmad	2012-14	<i>Cyanobacterial Molybdenum-Nitrogenase: Insights into Phylogenetic and Structure-Function Relationships</i>
5.	Gur Charn Singh	2012-14	<i>Computational Analysis of SNPs in CYP2D6 region and its Association with Population</i>
6.	Waheed Murad	2013-15	<i>Antimicrobial and Cytotoxic potential of Cyanobacteria</i>
7.	Kaneez Fatima	2013-15	<i>Dairy Probiotics: Analysis of Their Microbiological and Functional Aspects</i>
8.	Abdul Rehman	2013-15	<i>In-Vitro &amp; In-Silico Assessment of Natural Compounds Against Bacteria Isolated from Peptic Ulcer</i>
9.	Shaista Nosheen	2014-16	<i>Exploring the Potential of Microalgae for UV Protectants and Bioplastic Production</i>

10.	Umbreen Shabbir	2014-16	<i>Drug, Vaccine and siRNA Designing: A Tri-facet Computational Approach Against Ebola Virus</i>
11.	Hania Beig	2014-16	<i>Urease Inhibition by Herbal Extracts in Proteus mirabilis: In vitro and In silico Study</i>
12.	Sana Shabbir Malik	2015-17	In process
13.	Fatima Perveiz	2015-17	In process
14.	Javeria Yasin	2015-17	In process
<b>M.Sc.</b>			
1.	Sara Junaid	2008-10	<i>Growth Performance Analysis of Sunflower and Beans Inoculated with Auxin Producing Bacillus strains</i>
2.	Sahar Mahmood	2008-10	<i>Impact of Auxin Producing Pseudomonas spp. on the growth of Triticum aestivum and Helianthus annuus</i>
3.	Samreen Sarwar	2009-11	<i>Phylogenomic analysis of polyketide synthase genes, structural analysis of KS domains and modules of polyketide synthases</i>
4.	Sheeren Gul	2009-11	<i>Comparative Analysis of nif Genes in some Indigenous Filamentous Cyanobacteria</i>
5.	Zara Ahmad	2010-12	<i>Computational Analysis of Monoamine oxidase A (MAOA): A Genetic Determinant of Aggression and Impulsivity</i>
6.	Areeb Iqbal	2010-12	<i>In Silico Analysis of Acquisition of Methicillin Resistance in Staphylococcus aureus</i>
7.	Hadia Amjad	2011-13	<i>In-Silico Search for Effective Catalytic Inhibitors of Human Telomerase</i>
8.	Shaista Nosheen	2012-14	<i>Analysis of UV protective compounds from cyanobacterial isolates</i>
9.	Asma Zafar	2012-14	<i>Impact of oil bearing cyanobacteria on oil yield of Brassica &amp; canola</i>
10.	Javaria Yasin	2012-14	<i>Evaluating pesticide remediation by cyanobacteria using gold-nanoparticles</i>
11.	Sana Shabbir Malik	2013-15	<i>In-silico screening of phytochemicals as dengue virus E protein inhibitors</i>
12.	Iqra Khalid	2013-15	<i>Seasonal variation modelling of cyanobacteria and microalgae in Punjab University</i>
13.	Arisha	2014-16	<i>A Seasonal Study of Cyanobacterial Biodeterioration of Archaeological Sites in Lahore</i>
14.	Sibgha Fiaz	2014-16	<i>In silico Screening for Xanthine Oxidase Inhibitors to reduce Uric Acid Level</i>
15.	Syeda Sania	2015-17	In process
<b>B.S.</b>			
1.	Aisha Akram	2008-12	<i>Evolutionary Studies of Thiamine Diphosphate Dependent Enzymes (IPDC/PDC) from Different Domains of Life</i>



2.	Fatima Ameer	2008-12	<i>Optimization of Yogurt Starter Cultures, their Preservation and Bacteriocin Production Potential</i>
3.	Anum Shafi	2008-12	<i>SNPs Analysis of HLA Region and their Haplotype Studies</i>
4.	Hafsa Amat ur Rasul	2009-13	<i>Screening for Potent Anti-Alzheimer Drug: A Comparative In-silico Study of Synthetic Molecules and Dietary Phytochemicals as Inhibitors of Homo sapiens Acetylcholinesterase (hAChE)</i>
5.	Komal Yasmin Malik	2009-13	<i>In-Silico Designing a Fusion Protein to Combat Obesity via Inhibition of SOCS3</i>
6.	Umarah Shehzad	2009-13	<i>In-Silico Screening of Possible Dopamine Inhibitors to Treat Schizophrenia</i>
7.	Anum Fatima	2010-14	<i>Phytotoxic effects of cyanobacteria on nutritionally important plants and evaluation of their oxidative stress</i>
8.	Fatima Pervaiz	2010-14	<i>Cyanobacterial vitamins and auxins: their production and impact on rice</i>
9.	Rabail Razi	2011-15	<i>Screening for SNP's based phytochemical antihypertensives: A step towards personalized natural medicines</i>
10.	Rushda Tariq	2012-16	<i>In silico Screening for Antiepileptic phytochemicals Targeting GABA<sub>A</sub> Receptor</i>
11.	Sheeza Ali	2012-16	<i>In silico Drug Designing for Hypercholesterolemia by Using Phytochemicals as Inhibitors of HMGR Enzyme</i>
12.	Sania Akram	2013-17	In process
13.	Zainab Aslam	2013-17	In process

**Internees guided: 16**

## 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

## LANGUAGES

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”
- University of the Punjab Research Grant (2014-15) Rs 150,000/- entitled “Using Oil Producing Cyanobacteria to Enhance Yield of Oil Producing Plants”
- HEC SRGP (164) Rs 448,500/- entitled “UV Protectants from Cyanobacteria and their Efficiency”
- MPhil Project of Punjab National Aids Program

## COUNTRIES VISITED

Thailand	Netherlands	Germany	Belgium	France
Monaco	Japan	Bangladesh	South Korea	Spain
UAE (Dubai, Abu Dhabi, Sharjah)		USA	Sweden	Denmark
Finland	Malta	Turkey		

## REFERENCES

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