RESUME

DR MUHAMMAD FARHAN UL HAQUE
Assistant Professor
School of Biological Sciences
University of the Punjab, Lahore
Phone: +92 333 6654656
Email: m.farhanuh@gmail.com ; mfarhan.sbs@pu.edu.pk

Biography

I am **molecular microbiologist and genomicist with almost eleven years of teaching and research experience in Europe, UK and USA.** My research interests involve microbial genetics, molecular microbial ecology, environmental biotechnology, microbial genomics and metagenomics. I have **pioneered several molecular tools involving genetic engineering and next generation genomic techniques** applicable to study the microbiology of various ecosystems (animals, plants, soil and water). During my research career, **I have published my research in high impact journals (current IF ~ 184)** and therefore I have been awarded with several **European and American awards and fellowships.** Currently, I am working as an Assistant Professor at the School of Biological Sciences, University of the Punjab Lahore since September 2019.

Fellowships and Awards

- **European Marie-Curie Seal of Excellence Award** (**two times**: 2018 and 2017)
- **Best Oral Presentation Award** at Southeast Asian regional symposium on microbial ecology – 2020
- **Travel grant** to attend Southeast Asian regional symposium on microbial ecology – 2020
- **FEMS travel grant** to attend the Molecular Microbial Ecology Group Meeting (MMEG 2018) at University of Swansea, UK
- **Travel grant** to attend the **Gordon Research Conference and Seminar**, Applied and Environmental Microbiology 2015 in USA
- **University of Michigan, Dow Sustainability Postdoctoral Fellowship** Award 2015
- **ARPAe Postdoctoral Fellow 2014 – 2016, University of Michigan**
- **Spotlight article** in the journal '*Applied & Environmental Microbiology'* (American Society for Microbiology)
- **PhD scholarship** (2009 – 2013) for studies in France
- **Master scholarship** (2008 – 2009) for studies in France
- **Merit scholarship for BSc-Honours** (2003 – 2006), University of Agriculture, Faisalabad, Pakistan
- **Merit scholarship** (2001 – 2002), Faisalabad board for higher secondary school education

Professional Experience

- **Assistant Professor (Sep 2019 – Present)**
  School of Biological Sciences, **University of the Punjab, Lahore, Pakistan**
  Teaching: Molecular Biology
  Research: microbial genetics, genomics and transcriptomics, molecular microbial ecology, environmental microbiology and biotechnology, metagenomics, DNA-SIP

- **Senior Research Associate (Feb 2017 – Sep 2019)**
  School of Environmental Sciences, **University of East Anglia, Norwich, England**
  Teaching: Environmental Microbiology (Practical)
  Main Projects completed:
    - Functional (meta)genomics and (meta)transcriptomics of bacteria
    - Survey of various environments to discover novel bacteria helpful in reducing greenhouse gases
    - Microbial metabolism of greenhouse gases (methane and short chain alkanes)
    - Methane mitigation in landfill cover soils

- **Postdoctoral research fellow (April 2014 – June 2016)**
  Department of Civil and Environmental Engineering, **University of Michigan, Ann Arbor, USA**
  Advisor: Prof. Jeremy D. Semrau
  Main Projects completed:
    - Study of genetic expressions in bacteria as impacted by various carbon sources and metals
    - Microbial metabolism of greenhouse gases (methane)
    - Genetic engineering of bacterial strains to convert methane into liquid biofuels.
    - Detoxification of mercury by methanotrophic bacteria

- **Graduate research assistant (Jan 2009 – Sep 2013)**
  Department of Microorganisms, Genomes and Environment, UMR-7156, CNRS-**University of Strasbourg**, **France**
  Advisor: Prof. Stéphane Vuilleumier
  Main Projects completed:
    - Design and construction of bacterial bioreporters to detect harmful substances in different environments
    - Bacterial degradation of volatile compounds (chloromethane, methanol)
    - Microbiology of plants and soils, Isolation & characterization of bacterial strains
    - Bioremediation of pesticides

Education

PhD (2013) Molecular and Cellular Biology
University of Strasbourg (France)
Thesis title: Investigations of the bacterial sink for plant emissions of chloromethane
Advisors: Prof. Stéphane Vuilleumier and Dr. Hubert Schaller

MPhil (2009) Biology, Geoscience and Environment
University of Montpellier II (France)
Thesis title: Function, structure and population dynamics of two diuron-degrading microbial consortia
Advisor: Prof. Benoit Jaillard and Prof. Stéphane Vuilleumier

BSc-Honours (2006) Agriculture with major in Soil and Environmental Sciences
University of Agriculture, Faisalabad (Pakistan); Research: Soil bacteriology

Skills

- Teaching at undergraduate and post-graduate level
- Scientific writing: research proposals for grant applications, research papers for peer reviewed journals and Book chapters
- Microbial genomics and genetics, transcriptomics and metagenomics
- Molecular biology techniques (e.g. extractions and manipulations of DNA & RNA, protein extraction, primer design, PCR, qPCR, qRT-PCR, SDS-PAGE, clone library construction and T-RFLP genotyping)
- Genetic engineering of bacterial strains, design and construction of gene expression systems, heterologous gene expression and enzyme assays, construction and characterization of knock-out and knock-in mutants
- DNA-Stable Isotope Probing (SIP) to identify active bacteria in different environments
- Next generation sequencing techniques (metagenomics, amplicon sequencing of various genes, whole genome sequencing)
- Fluorescence and confocal microscopy, image analysis
- Analytical techniques (in particular: gas chromatography and metal analyses)

Mentoring & Supervision of Researchers and Students

Students supervised

PhDs

- PhD student: Rabia Ejaz; SBS, University of the Punjab, Lahore (on-going)
- PhD student: Iqra Shahid; SBS, University of the Punjab, Lahore (on-going)
- PhD student: Sadia Mushtaq; SBS, University of the Punjab, Lahore (on-going)
- PhD student: Tabassum Yousaf; SBS, University of the Punjab, Lahore (on-going)

MPhils

- Mphil student: Fatima Saleem; SBS, University of the Punjab, Lahore (Graduated 2022)
- Mphil student: Hira Abid; SBS, University of the Punjab, Lahore (Graduated 2022)
- Mphil student: Hassan Ayaz; SBS, University of the Punjab, Lahore (Graduated 2022)
- Mphil student: Muhammad Saqib; SBS, University of the Punjab, Lahore (Graduated 2021)
- Mphil student: Fariha Riaz Ch; SBS, University of the Punjab, Lahore (Graduated 2021)
- Mphil student: Aqsa Nazir; SBS, University of the Punjab, Lahore (Graduated 2021)
- MPhil student: Rabia Ejaz; SBS, University of the Punjab, Lahore (Graduated 2020)

Students and Researchers Mentored

- Postdoc: Dr Juanli Yun; University of East Anglia, England (Sept 2017 to Sept 2018)
- PhD student: David Pearce; University of East Anglia, England (Graduated 2022)
- PhD student: Wenyu Gu; University of Michig an, Ann Arbor, USA (Graduated 2017)
- PhD student: Pauline Chaignaud; University of Strasbourg, France (Graduated 2016)
- PhD student: Bhagya Kalidass; University of Michigan, Ann Arbor, USA (Graduated 2015)
- Master student: Pauline Chaignaud; University of Strasbourg, France (Graduated 2012)
- Undergraduate student: Kirsty Nice; University of East Anglia, England (Graduated 2018)

Grants and fundings

- National Research Program for Universities 2021 (NRPU-2021) by Higher Education Commission, Pakistan (PKR 12.72 million)
- National Research Program for Universities 2020 (NRPU-2020) by Higher Education Commission, Pakistan (PKR 10.9 million)
- Dow sustainability fellow grant 2015 (USD 15000) at University of Michigan, USA
- Early Technology Discovery program grant 2016 at University of Michigan, USA
- Travel grant to attend Southeast Asian regional symposium on microbial ecology – 2020
- FEMS travel grant to attend the Molecular Microbial Ecology Group Meeting (MMEG 2018) at University of Swansea, UK
- Travel grant to attend the Gordon Research Conference and Seminar 2015 in USA

Professional Affiliation and Activities

- Member of the scientific panel of Punjab Food Authority (Pakistan)
- Editorial board member of 'International Journal of Bioremediation and Biodegradation'
- Member of ASM (American Society of Microbiology), and ISME (International Society for Microbial Ecology)
- Reviewer for the journals:
  Applied & Environmental Microbiology (IF= 4.08), *Applied Microbiology and Biotechnology* (IF = 3,53), *Frontiers in Microbiology* (IF = 4.076), Frontiers in Bioengineering and Biotechnology (IF = 3.64), *Letters in Applied Microbiology* (IF = 2.17), Environmental sustainability*, Science of the Total Environment* (IF = 6.55)

Participation in Environmental and Industrial Programs

- Worked on the project of **'Use of methanotrophs to convert methane into liquid biofuels (2014-16)' – Industrial partner GreenLight Biosciences Inc. USA**

- **Selected in the cohort of Dow Sustainability Fellows 2015**, outstanding scholars collaborating across disciplines and sectors to address and solve complex environmental sustainability challenges – The Graham Institute of Sustainability at The University of Michigan

- Participated in the **Early Technology Discovery Program to comprehend the initial process of commercialization of an innovation**, based on my research of the use of methanotrophs to commercially produce biopharmaceuticals – The University of Michigan TechTransfer and Center of Entrepreneurship

List of Scientific Publications and Communications

- 31 peer-reviewed scientific papers published **in international journals**
  Current Impact Factor > 184 (citations = 713 and h index = 16 on June 2022)
- 3 Book chapters (International)
- Participated in 24 international conferences and seminars in Europe, USA, UK and in Asia

(Please see attached the detailed list of publications)

List of Scientific Publications and Communications

a) <u>Publications in peer-reviewed journals; Current Impact Factor ~ 184</u>

1) **Farhan Ul Haque M,** Hernández M, Crombie AT, Murrell JC (2022) Identification of active gaseous-alkane degraders at natural gas seeps. ISME J doi.org/10.1038/s41396-022-01211-0 **(Impact Factor = 11.21)**

2) Yun J, Crombie AT, **Farhan Ul Haque M**, Cai Y, Zheng X, Wang J, Jia Z, Murrell JC, Wang Y and Du W (2021) Revealing the community and metabolic potential of active methanotrophs by targeted metagenomics in the Zoige wetland of the Tibetan Plateau. *Environmental Microbiology* **23**: 6520 **(Impact Factor = 5.47)**

3) Ali M, Walait S, **Farhan Ul Haque M (corresponding author),** Mukhtar S (2021) Antimicrobial activity of bacteria associated with the rhizosphere and phyllosphere of *Avena fatua* and *Brachiaria reptans*. *Environmental Science and Pollution Research* **28**: 68846 **(Impact Factor = 5.19)**

4) **Farhan Ul Haque M**, Bukhari SS, Ejaz R, Zaman F, Sreejith KR, Rashid N, Umer M, Shahzad N* **(2021)** A novel RdRp-based colorimetric RT-LAMP assay for rapid and sensitive detection of SARS-CoV-2 in clinical and sewage samples from Pakistan. *Virus Research* **302:** 198484 **(Impact Factor = 6.28)**

5) Fayyaz Ur Rehman M, Fariha C, Anwar A, Shahzad N, Ahmad M, Mukhtar S, **Farhan Ul Haque M (corresponding author),** (2021) Novel coronavirus disease (COVID-19) pandemic: A recent mini review. *Computational and Structural Biotechnology Journal* **19:** 612 **(Impact Factor = 6.15)**

6) **Farhan Ul Haque M (corresponding author),** Xu HJ, Murrell JC, Crombie AT (2020) Facultative methanotrophs–diversity, genetics, molecular ecology and biotechnological potential: a mini-review. *Microbiology* **166:** 894 **(Impact Factor = 2.95)**

7) Hussain I, Tasneem F, Gilani US, Arshad MI, **Farhan Ul Haque M,** Abbas Z, Umer M, Shahzad N (2020) Human BK and JC polyomaviruses: Molecular insights and prevalence in Asia. *Virus Research* **278:** 197860 **(Impact Factor = 6.28)**

8) Schwartz-Narbonne R, Schaeffer P, Hopmans EC, Schenesse M, Charlton EA, Jones DM, Damsté JSS, **Farhan Ul Haque M**, Jetten MSM, Lengger SK, Murrell JC, Normand P, Nuijten GHL, Talbot HM, Rush D (2020) A unique bacteriohopanetetrol stereoisomer of marine anammox. *Organic Geochemistry* 103999 **(Impact Factor = 3.62)**

9) Dawson RA, Larke-Mejía NL, Crombie AT, **Farhan Ul Haque M,** Murrell JC **(2020)** Isoprene oxidation by the Gram-negative model bacterium *Variovorax* sp. WS11. *Microorganisms* **8:** 349 **(Impact Factor = 4.92)**

10) **Farhan Ul Haque M (corresponding author),** Crombie AT, and Murrell JC **(2019)** Novel facultative *Methylocella* strains are active methane consumers at terrestrial natural gas seeps. *Microbiome* **7:** 134 **(Impact Factor = 16.83)**

11) Kox MAR, **Farhan Ul Haque M,** van Alen TA, Crombie AT, Jetten MSM, Op den Camp HJM, Dedysh SN, van Kessel MAHJ, Murrell JC **(2019)** Complete Genome Sequence of the aerobic facultative methanotroph *Methylocella tundrae* strain T4. *Microbiology Resource Announcement* **8:** e00286-19

12) Carrión O, Pratscher J, Richa K, Rostant WG, **Farhan Ul Haque M,** Murrell JC, Todd JD **(2019)** Methanethiol and Dimethylsulfide cycling in Stiffkey salt marsh. *Frontiers in Microbiology* **10:**1040 **(Impact Factor = 6.06)**

13) Carrión O, Larke-Mejia NL, Gibson L, **Farhan Ul Haque M,** Ramiro-Garcia J, McGenity TJ, Murrell JC **(2018)** Functional gene probing reveals the widespread distribution, diversity and abundance of isoprene-degrading bacteria in the environment. *Microbiome* **6:** 219 **(Impact Factor = 16.83)**

14) **Farhan Ul Haque M (corresponding author),** Crombie AT, Ensminger SA, Baciu C, and Murrell JC **(2018)** Facultative methanotrophs are abundant at terrestrial natural gas seeps. *Microbiome* **6:** 118. **(Impact Factor = 16.83)**

15) Wang J, Geng K, **Farhan Ul Haque M**, Crombie A, Street L, Wookey P, Ma K, Murrell JC, Pratscher J **(2018)** Draft genome sequence of *Methylocella silvestris* TVC, a facultative methanotroph isolated from permafrost. *Genome Announcements* **6:** e00040-18.

16) Lu X, Gu W, Zhao L, **Farhan Ul Haque M**, DiSpirito AA, Semrau JD and Gu B **(2017)** Methylmercury uptake and degradation by methanotrophs. *Science Advances* **3:** e1700041. **(Impact Factor = 14.95)**

17) **Farhan Ul Haque M,** Besaury L, Nadalig T, Bringel F, Mutterer J, Schaller H, Vuilleumier S **(2017)** Biomolecular evidence for correlated production and microbial consumption of chloromethane in the phyllosphere of *Arabidopsis thaliana*. *Scientific Reports* **7:** 17589. **(Impact Factor = 4.99)**

18) Bringel F, Postema CP, Mangenot S, Bibi-Triki S, Chaignaud P, **Farhan Ul Haque M,** Gruffaz C, Hermon L, Louhichi Y, Maucourt B, Muller EEL, Nadalig T, Lajus A, Rouy Z, Médigue C, Barbe V, Janssen DB & Vuilleumier S (2017) Genome sequence of the dichloromethane-degrading bacterium *Hyphomicrobium* sp. strain GJ21. *Genome Announcements* **5:** e00622-17.

19) Gu W, **Farhan Ul Haque M**, and Semrau JD **(2017)** Characterization of the role of copCD in copper uptake and the 'copper-switch' in *Methylosinus trichosporium* OB3b. *FEMS Microbiology Letters* **364:** fnw095. **(Impact Factor = 2.82)**

20) **Farhan Ul Haque M**, Gu W, Baral B, DiSpirito AA, and Semrau JD **(2017)** Carbon source regulation of gene expression in *Methylosinus trichosporium* OB3b. *Applied Microbiology and Biotechnology* **101:** 3871-379. **(Impact Factor = 5.56)**

21) Gu W***, Farhan Ul Haque M**** (**co-first author**) DiSpirito AA, and Semrau JD **(2016)** Uptake and effect of rare earth elements on gene expression in *Methylosinus trichosporium* OB3b. *FEMS Microbiology Letters* **363:** fnw129. **(Impact Factor = 2.82)**

22) Gu W, **Farhan Ul Haque M**, Baral B, Turpin E, Bandow N, Kremmer E, Flatley A, Zischka H, DiSpirito AA, and Semrau JD (**2016)** A TonB-dependent transporter is responsible for methanobactin uptake by *Methylosinus trichosporium* OB3b. *Applied & Environmental Microbiology* **82:**1917-1923. **(Impact Factor = 5.00)**

23) **Farhan Ul Haque M**, Gu W, DiSpirito AA, and Semrau JD (**2016)** Marker exchange mutagenesis of *mxaF* encoding for the large subunit of Mxa-methanol dehydrogenase in *Methylosinus trichosporium* OB3b. *Applied & Environmental Microbiology* **82:** 1549-1555. **(Impact Factor = 5.00)**

24) **Farhan Ul Haque M**, Kalidass B, Bandow N, Turpin EA, DiSpirito AA, and Semrau JD. (**2015)** Cerium regulates expression of alternative methanol dehydrogenases in *Methylosinus trichosporium* OB3b. *Applied & Environmental Microbiology* **81:** 7546-7552. **(Impact Factor = 5.00)**

25) Kalidass B, **Farhan Ul-Haque M**, Baral BS, DiSpirito AA, Semrau JD. **(2015)** Competition between metals for binding to methanobactin enables expression of soluble methane monooxygenase in the presence of copper. *Applied & Environmental Microbiology* **81:** 1024-1031. **(Impact Factor = 5.00)**

26) **Farhan Ul Haque M**, Kalidass B, Vorobev A, Baral BS, DiSpirito AA, and Semrau JD. **(2015)** Methanobactin from *Methylocystis* sp. strain SB2 affects gene expression and methane monooxygenase activity in *Methylosinus trichosporium* OB3b. *Applied & Environmental Microbiology* **81:** 2466-2473. **(Impact Factor = 5.00)**

27) **Farhan Ul Haque M**, Nadalig T, Bringel F, Vuilleumier S. **(2013)** A fluorescence-based bioreporter for the specific detection of methyl halides. *Applied & Environmental Microbiology* **21:** 6561-6567. **(Impact Factor = 5.00)**

28) Marx CJ, Bringel F, Chistoserdova L, Moulin L, **Farhan Ul Haque M,** Fleischman DE, Gruffaz C, Jourand P, Knief C, Lee M-C, Muller EEL, Nadalig T, Peyraud R, Roselli S, Russ L, Goodwin LA, Ivanova N, Kyrpides N, Lajus A, Land ML, Médigue C, Mikhailova N, Nolan M, Woyke T, Stolyar S, Vorholt JA, Vuilleumier S **(2012)** Complete genome sequences of six strains of the genus *Methylobacterium*. *Journal of Bacteriology* **194:** 4746-4748. **(Impact Factor = 3.47)**

29) Nadalig T**, Farhan Ul Haque M,** Roselli S, Schaller H, Bringel F, Vuilleumier S **(2011)** Detection and isolation of chloromethane-degrading bacteria from the *Arabidopsis thaliana* phyllosphere, and characterization of chloromethane utilisation genes. *FEMS Microbiology Ecology* **77:** 438-448. **(Impact Factor = 4.51)**

30) Vuilleumier S, Nadalig T, **Farhan Ul Haque M,** Magdelenat G, Lajus A, Roselli S, Muller EEL, Gruffaz C, Barbe V, Médigue C, Bringel F **(2011)** Complete genome sequence of the

chloromethane-degrading strain *Hyphomicrobium* sp. strain MC1. *Journal of Bacteriology* **193:** 5035-5036. **(Impact Factor = 3.47)**

31) Bois P, Huguenot D, Norini MP, **Farhan Ul Haque M,** Vuilleumier S, Lebeau T **(2011)** Herbicide degradation and copper complexation by bacterial mixed cultures from a vineyard stormwater basin. *Journal of Soils and Sediments* **11:** 860-873. **(Impact Factor = 3.53)**

b) Book Chapters

32) S Mukhtar, N Rashid, **Farhan Ul Haque M,** KA Malik (2022) Metagenomic approach for the isolation of novel extremophiles. In: Microbial extremozymes, Novel sources and industrial applications. Mohammed Kuddus (eds), pp. 55-66, Academic Press.

33) Shahzad N, Gilani US, Mahmood M, Tasneem F, **Farhan Ul Haque M,** Hussain I (2021) Ubiquitous Merkel cell polyomavirus: causative agent of the rare Merkel cell carcinoma. In: Human Viruses: Diseases, Treatments and Vaccines. Ahmad SI (eds), Springer, Cham.

34) Vuilleumier S, **Farhan Ul Haque M,** Gruffaz C, Besaury L (2017), Microbiological energy valorisation of grape marc. In: Innovations for sustainable biomass utilisation in the Upper Rhine region. Schumacher K, Fichtner W, Schultmann F (eds.), Produktion und Energie 18, pp. 95-103, KIT Scientific Publishing, Karlsruhe, Germany.

Conference Presentations

1) **Farhan Ul Haque M, (2022)** Invited participation in 'PIs Research Capacity building program' under Pak-UK Education Gateway Collaboration, Project of Higher Education Commission with the British Council. May 9 – 13, 2022, Lahore, Pakistan

2) **Farhan Ul Haque M, (2022)** Biological mitigation of greenhouse gas emissions from natural gas seeps. International Symposium on Green Chemistry and Sustainable Development. Institute of Chemistry, University of Sargodha, April 01, 2022, Sargodha, Pakistan

3) **Farhan Ul Haque M, (2021)** Participation in Technical Writing workshop. Organized at the Institute of Chemistry, University of Sargodha. November 4 – 5, 2021, Sargodha, Pakistan

4) **Farhan Ul Haque M, (2020)** Participation in 'Virtual workshop on EndNote and Mendeley'. Organized at the University of Sargodha. November 11, 2020, Sargodha, Pakistan

5) **Farhan Ul Haque M**. Participation in 'Hands-on virtual workshop on EndNote and Mendeley'. Organized by the University of Sargodha and UVAS. November 21, 2020, Sargodha, Pakistan

6) **Farhan Ul Haque M, (2020)** Participation in 'International Symposium on Recent Trends in Chemistry'. Inst. of Chemistry, University of Sargodha. December 8, 2020, Sargodha, Pakistan

7) **Farhan Ul Haque M, (2020)** Investigations of the bacterial sink for plant emissions of chloromethane. **Keynote speaker** at the International symposium at GC University Faisalabad, February 24 - 25, Faisalabad, Pakistan.

8) **Farhan Ul Haque M, (2020)** Bacterial mitigation of greenhouse gas emissions from natural gas seeps. **Best oral presentation award,** SARSME 2020, February 12 - 14, Pokhara, Nepal

9) **Farhan Ul Haque M, (2020)** Discovering novel microbes using next generation genomics techniques. **Guest speaker,** January 22, 2020, Forman Christian College University, Lahore Pakistan

10) **Farhan Ul Haque M, (2019)** Bacteria and next generation genomics to rescue us from climate change. Oral presentation at the International conference of Punjab University, November 6 - 8, Lahore, Pakistan

11) **Farhan Ul Haque M, (2019)** Bacterial mitigation of greenhouse gas emissions from natural gas seeps. *Biogeochemical Cycles and Climate Change Symposium*, June 26, 2019, UEA Norwich, UK

12) **Farhan Ul Haque M, (2019)** Bacterial mitigation of greenhouse gases released from natural gas seeps. Microbes in Norwich 2019, Norwich Research Park, February 2019, Norwich, UK

13) **Farhan Ul Haque M, (2018)** Microbiology of Natural Gas Seeps. Oral presentation at Molecular Microbial Ecology Group Meeting (MMEG 2018) University of Swansea, UK, December 2018, Swansea, UK

14) **Farhan Ul Haque M,** Colin Murrell (presenter) **(2018)** Life is a gas; naturally. Talk at Gordon Research Conference: Molecular Basis of Microbial One-Carbon Metabolism (GRC: C1 2018), July 29 - August 3, 2018, Newry, ME, USA

15) **Farhan Ul Haque M,** Andrew Crombie (presenter) **(2018)** Facultative methanotrophs are abundant at natural gas seeps. Poster at Gordon Research Conference: Molecular Basis of Microbial One-Carbon Metabolism (GRC: C1 2018), July 29 - August 3, 2018, Newry, ME, USA

16) **Farhan Ul Haque M (2017)** Facultative methanotrophs are abundant in natural gas seeps. Oral presentation at Molecular Microbial Ecology Group Meeting (MMEG 2017), University of Warwick, UK, December 2017, Coventry, UK

17) **Farhan Ul Haque M,** Gu W, Semrau JD **(2016)** Rare earth elements (REEs) regulate gene expression in methanotrophs. Poster presentation at Rackham Michigan Meeting: Unseen Partners-Manipulating Microbial Communities that Support Life on Earth, May 16-18, University of Michigan, Ann Arbor, MI, USA

18) **Farhan Ul Haque M,** Semrau JD **(2015)** Bioconversion of methane to liquid biofuels using methanotrophic bacteria. Oral presentation at Dow Sustainability Fellows Colloquia 2015-16, Graham Sustainability Institute, University of Michigan, Ann Arbor, USA.

19) **Farhan Ul Haque M,** Gu W, Semrau JD **(2015)** Is *mbnT* involved in the uptake of methanobactin? Poster presentation at Gordon research conference and Gordon research seminar for *Applied & Environmental Microbiology*, July 11-17, South Hadley, MA, USA

20) **Farhan Ul Haque M,** Semrau JD **(2015)** Highly productive cell-free bioconversion of methane to liquid biofuels. Oral presentation at ARPA-E REMOTE Program Meeting, Jan 20-22, San Diego, CA, USA.

21) **Farhan Ul Haque M,** Nadalig T, Schaller H, Bringel F, Vuilleumier S **(2012)** Development of a bioreporter assay for the detection of methyl halides. Poster presentation at ISME14 (14th International symposium on microbial ecology), August 19-24, Copenhagen, Denmark.

22) **Farhan Ul Haque M,** Nadalig T, Schaller H, Bringel F, Vuilleumier S **(2012)** Is there a bacterial sink for plant emissions of chloromethane? Poster presentation at the Gordon research conference 'The molecular basis of microbial one carbon metabolism', August 4-9, Bates College, Lewiston, Maine, USA.

23) **Farhan Ul Haque M,** Nadalig T, Schaller H, Bringel F, Vuilleumier S **(2012)** Is there a bacterial sink for plant emissions of chloromethane? Oral presentation at Séminaire de Microbiologie de Strasbourg 2012, March 15, Strasbourg, France.

24) **Farhan Ul Haque M,** Schaller H, Nadalig T, Bringel F, Vuilleumier S **(2011)** Towards detection and quantification of bacterial chloromethane utilization in the *Arabidopsis thaliana* phyllosphere. Poster at Forum Réalise, March 29, Strasbourg, France.