

CURRICULUM VITAE

JIZHONG ZHOU
(AS OF 11-24-2019)

Business Address:

George Lynn Cross Research Professor, Department of Microbiology and Plant
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EDUCATION:

BS	1978-1981	Plant Pathology & Entomology , Hunan Agricultural University, Changsha, China
MS	1982-1984	Mathematical Ecology , Hunan Agricultural University, Changsha, China, Advisor: Prof. Changmin Chen Thesis: Mathematical modeling and simulation of predator-prey systems in agro-ecosystems
Ph.D. Candidate	1986-1988	Systems Ecology , Eco-Environmental Research Center, Chinese Academy of Sciences, Beijing China Advisor: Prof. Shijun Ma (Academician) Thesis: Ecological engineering, simulation and prediction of agroecosystem.
Ph.D.	1990-1993	Molecular Biology , Washington State University, Pullman, WA Advisor: Prof Andris Kleinhofs Thesis: Molecular evolution of plant nitrate reductases
Postdoc	1993-1995	Microbial ecology , Center for Microbial Ecology, Michigan State University, East Lansing, MI, Advisor, James M. Tiedje
	1996-1997	Microbial ecology , Alexander Hollaender Distinguished Postdoctoral Fellow, Environmental Sciences Division, Oak Ridge National Laboratory, Mentor, Anthony V. Palumbo

PROFESSIONAL EXPERIENCE

2014-Present	<u>George Lynn Cross Research Professor</u> , Department of Microbiology and Plant Biology, University of Oklahoma, Norman, OK
2005-present	<u>Director</u> of the Institute for Environmental Genomics (IEG), University of Oklahoma, Norman, OK

2015-present Professor, School of Civil Engineering and Environmental Sciences, University of Oklahoma, Norman, OK

2005-present Presidential Professor, Department of Microbiology and Plant Biology, University of Oklahoma, Norman, OK

2006-present Senior Visiting Scientist, Lawrence Berkeley National Laboratory (LBL), Berkeley, CA

2017-Present Adjunct National Chair Professor, School of Environment, Tsinghua University, Beijing, China

2009-2016 Adjunct Professor, School of Environment, Tsinghua University, Beijing, China

2015-2017 Visiting Professor, Nanyang Environment and Water Research Institute (NEWRI), Nanyang Technology University, Singapore (2 months/year for 2 years)

2013-2015 Visiting Professor, Department of Civil and Environmental Engineering, Stanford University

2013-2014 Visiting Professor, Department of Civil and Environmental Engineering, University of California, Berkeley (Sabbatical leave)

2013-2014 Visiting Investigator, Department of Global Ecology, Carnegie Institution for Science, Stanford, CA (Sabbatical leave)

2003-2005 Distinguished R&D Staff Scientist, Environmental Sciences Division, ORNL

2004-2005 Member of Science Council, Biological and Environmental Sciences Directorate, ORNL

2002-2004 Science Leader for Environmental Genomics Program, Biological and Environmental Sciences Directorate, ORNL

2001-2002 Senior Staff Scientist, Environmental Sciences Division, ORNL

2000-2001 Science Team Leader for Microbial Genomics and Ecology, Environmental Sciences Division, ORNL

1997-2000 Staff Scientist, Environmental Sciences Division, ORNL

1996-1997 Alexander Hollaender Distinguished Postdoctoral Fellow, Environmental Sciences Division, ORNL

1993-1995 Research Associate, Laboratory of Dr. James M. Tiedje, NSF Center for Microbial Ecology, Michigan State University, East Lansing, MI. Bioreactor Subgroup Leader of the Community Analysis Group

1990-1993 Graduate Research and Teaching Assistant, Laboratory of Dr. Andris Kleinhofs, Department of Genetics and Cell Biology, Washington State University, Pullman, WA

1989 Graduate Research and Teaching Assistant, Laboratory of Dr. Alan Berryman, Department of Entomology, Washington State University, Pullman, WA

1988 Visiting Scientist, Department of Biological Sciences, University of Calgary, Calgary, Alberta, Canada

1986-1988 Research Associate, Eco-Environmental Research Center, Chinese Academy of Sciences, Beijing, China

1985-1986 Lecturer in the Department of Plant Pathology and Entomology, Hunan Agricultural University, Changsha, China

1982-1984 Teaching and Research Assistant, Department of Plant Pathology and Entomology, Hunan Agricultural University, Changsha, China

TEACHING EXPERIENCE

- 2005-present Advanced topics on environmental genomics
- 2004 A joint course on molecular techniques for microbial ecology for graduate and senior undergraduate students. University of Puerto Rico, Mayaguez, Puerto Rico.
- 1993-1995 Trained 8 graduate and undergraduate students on molecular techniques, computer sequence analyses and related software, Michigan State University
- 1992 General Genetics for senior undergraduate students, Laboratory Teaching Assistant, Washington State University
- 1985-1986 Lecturer, Hunan Agricultural University, Changsha, China
Courses taught:
Mathematical Ecology for graduate students
General Ecology for senior undergraduate students
Agricultural Pathology and Entomology for junior undergraduate students
- 1982-1984 General Biology, Laboratory Teaching Assistant, Hunan Agricultural University
General Entomology, Laboratory Teaching Assistant
General Plant Pathology, Laboratory Teaching Assistant

MAJOR PROFESSIONAL SERVICES

- 2019 Member of Review Panel for NSF Environmental Engineering Program
- 2017 Member of Review Panel for Science Foundation Ireland
- 2017-present Member of Review Panel for Hydrosphere Microbiology Program, Chinese National Science Foundation
- 2016-2017 Committee Member for the National Academies of Sciences, Engineering, and Medicine study on the Microbiomes of the Built Environment: From Research to Application.
- 2014-present Member of Advisory Committee, CAS Key Laboratory, Center for Eco-Environmental Sciences (RCEES), Chinese Academy of Sciences.
- 2014-present Member of Steering Committee, NASA Systems Biology/Omics Initiative, NASA, Wash DC
- 2013-2016 Member of ASM International Board's Committee on Global Engagement (CGE).
- 2012-2017 Member of the Advisory Committee for State Key Laboratory of Oral Disease, Sichun University, China
- 2011-2014 Member of Local Organizing Committee, The 15th International Symposium on Microbial Ecology (ISME-15)
- 2011-present Member of Environmental Microbiology Committee, Public and Scientific Affairs Board, ASM
- 2011-2015 Member of Selection Committee, William A. Hinton Research Training Award, ASM
- 2010 Member of the Review Panel, Key National Lab on Microbiology, Shandong University, Jinan, China
- 2010-2015 Member of Advisory Committee, NSF PIRE Project to University of Nevada, Las Vegas.
- 2009-2014 Founding Chair, Board of Directors, the Overseas Chinese Society for Microbiology (Sino_Micro)

2009 Member of the Review Panel, DOE Early Career Research Program on Genomics and Systems Microbiology

2009 Member of Advisory Committee, Max-Planck Institute Partner (MPI) Group Between Germany and China

2009-2013 Member, Oklahoma EPSCoR Bioenergy Executive Committee

2009-2012 Member, Nominations Committee for the Promega Biotechnology Award, American Academy of Microbiology, American Society of Microbiology

2008-2012 Member of Steering Committee, International Soil Metagenomics Consortium.

2008-2013 Member of Advisory Committee, Water Research Foundation, Denver, CO

2008 Member of the review panel for NIEHS program on Development and Application of Nanotechnology-based Tools to Understand Mechanisms of Bioremediation.

2008 Member of the review panel for NSF-USDA Microbial Observatories program.

2007 Honorary Chair for the 3rd Annual Meeting of Microbial Ecology, Chinese Society of Ecology

2007-2012 Member of Academic Committee, Qingdao Institute of Biomass Energy and Bioprocessing Technology (QIBEBT), Chinese Academy of Sciences, Qingdao, Shandong, China

2007-2009 Member of Advisory Committee for the Norman Campus Vice President for Research (AC/VPR), University of Oklahoma

2007-2010 Member of the Oklahoma Bioenergy Center Board appointed by Oklahoma Governor

2007 Advisory member of preparing the roadmap for Oklahoma Bioenergy Center

2007 Member of VPR Task Forces on Centers, Institutes and Consortia, University of Oklahoma

2007 Member of the review panel for Genomics:GTL, New Genomic Strategies and Technologies for Studying Complex Microbial Communities and Validating Genomic Annotations

2006-2009 Member of ASM International Committee - Task Force on China

2006-2007 Member of National Key Microbial Program Panel, Chinese National Science Foundation

2005 Reviewer for 2005 State Natural Science Award of the People's Republic of China (The highest achievement award for science and technology in China)

2004-present US Ambassador for International Society of Microbial Ecology.

2004 Member of the review panel for DOE Joint Genome Institute Community Sequencing (CSP) program.

2003 Member of the review panel for NSF the Frontiers in Biological Research (FIBR) program.

2003-2006 Specially Invited Oversea Reviewer of Scientific Programs of National Natural Science Foundation of China.

2001-2007 Member of Scientific Advisory Committee on Molecular Environmental studies, Scientific Committee on Problems of the Environment (SCOPE), International Council of Scientific Union (ICSU)

2001 Panel member for preparing the roadmap for Genomes to Life program, US Department of Energy, in charge of writing Goal 3 on community genomics.

2001 Member of the Advisory Committee for Functional Genomics Initiative, Netherlands Institute of Ecology, The Netherlands

- 2000-2006 Associate Director for the Committee of Microbial Ecology, Chinese Society of Ecology
- 2000-2003 Member of Academic Advisory Committee, Northeastern Forestry University, Harbin, P. R. China
- 1998 Member of the review panel for DOE NABIR Biotransformation and Biodegradation Element
- 1994-1995 Member of seminar committee, NSF Center for Microbial Ecology, Michigan State University
- 1990-2000 Scientific Advisory Committee for the Department of System Ecology, Eco-Environmental Research Center, Chinese Academy of Sciences
- 1986-1988 Member of Scientific Advisory Committee of the Population Control Program in the Center for National Agricultural Research and Development, State Council, PRC
- 1986-1991 Director of the Ecological Association of Chinese Young Scientists

JOURNAL EDITOR

- 2017-present Senior Editor for ISME J, the prime journal in microbial ecology, Ranked top 1 in non-review ecology journals, #3 in non-review microbiological journals.
- 2014-present Section Editor for Microbial Ecology and Evolution, BMC Microbiology
- 2009-2019 Senior Editor for mBio®, An ASM flagship integrated Journal.
- 2003-2013 Editor, Applied and Environmental Microbiology, The American Society for Microbiology.
- 2011 Editor, Analytical Biotech 2012 Section in Current Opinion in Biotechnology (COBIOT)
- 2008 Guest Associate Editor for PLoS Computational Biology

MEMBER OF EDITORIAL BOARD OF JOURNALS

- 2008-2014 Environmental Microbiology and Environmental Microbiology Reports
- 2013-present Member of Faculty 1000
- 2007-present Chinese Journal of Biotechnology
- 2006-present The ISME Journal
- 2001-2003 The American Society for Microbiology, Applied and Environmental Microbiology.
- 2001-2007 Omics: A Journal of Integrative Biology.
- 2001-present Acta Ecologia Sinica.

PROFESSIONAL MEMBERSHIPS

Association of Environmental Engineering and Science Professors
 American Society for Microbiology
 International Society for Microbial Ecology
 American Association for the Advancement of Sciences
 Society of Industrial Microbiology
 American Chemical Society

Ecological Society of America
International Water Association
American Geological Union

AWARDS AND HONORS

- 2019 Most highly cited researcher (H-index > 100) according to their Google Scholar Citations (<http://www.webometrics.info/en/hlargerthan100>).
- 2019 World's most cited researcher (99% percentile) across all science & engineering fields among 7M scientists (<https://doi.org/10.1371/journal.pbio.3000384>), ranked at top 75 of >55K environmental scientists worldwide.
- 2018-2019 Highly cited Researcher for 2018 worldwide (<https://hcr.clarivate.com/>) at Cross Field.
- 2019 2019 ASM Award for Environmental Research (for recognizing an outstanding scientist with distinguished research achievements in microbial ecology and environmental microbiology) (<https://www.asm.org/Academy/Award-Winners>)
- 2018 Fellow of Ecological Society of America
- 2017 National Chair Professor, Tsinghua University
- 2016-2017 Hood Fellowships Awards, The University of Auckland, New Zealand
- 2017 Panel member for Career Development Award, Science Foundation Ireland
- 2016 Patent Award, University of Oklahoma
- 2015 The Ernest Orlando Lawrence Award in Biological and Environmental Sciences in 2014 (U.S Department of Energy's highest scientific award established by President Dwight Eisenhower in 1959); Congressional records (E1092, July 21, 2015).
- 2015 One of the 11 Outstanding One-Thousand Talent Scholars by Chinese Government
- 2014-present George Lynn Cross Research Professor (the most prestigious honor for OU faculty)
- 2013 OU VPR Research Award for Exceptional Achievements in Research and Creative Activity
- 2013 Cruise Lectures to five institutions and ASM Annual Meeting Under the Visiting Speaker Program (VSP) organized by Australian Society for Microbiology (<http://www.theasm.org.au/visiting-speakers-program-2013>).
- 2012 OU VPR Award for Outstanding Research Impact
- 2010-2013 One-Thousand Talent Scholar (Class B, the highest honor awarded by Chinese Government for oversea Chinese Scientists).
- 2010 Innovator of the year, recognizing Oklahoma's best new products and services by The Journal Record
- 2009 Outstanding Asian American for the Asia Society of Oklahoma
- 2009 Specially Invited Oversea Chinese American Scientist by the State Government for witnessing the Grand Parade in Tian Anmen Square for celebrating 60th Anniversary of China. The delegation was received by Chinese Former Chinese President Jindiao Hu and Former Premier Jiabao Wen.
- 2008 Fellow of American Association for the Advancement of Science.

- 2007-present Honorary Director for Chinese Association of Microbial Ecology (CAME)
- 2007-2010 Oversea Changjiang Scholar (One of the greatest awards for Oversea Chinese professionals), Chinese Ministry of Education.
- 2005 Federal Laboratory Consortium (Southeast) award for Excellence in Technology Transfer
- 2005 Fellow of American Academy of Microbiology
- 2004 Member of Interview Panel by Chinese Central TV as the only representative of overseas Chinese Scientists for memorizing Mr. Xiaoping Deng (Chinese Leader) for 100 year of birth for his education reform in China in 1977.
- 2004 Outstanding Oversea Young Scientist (Highest award for overseas young scientist), Chinese National Science Foundation
- 2003 Superior Performance Award, Oak Ridge National Laboratory
- 2002 Superior Performance Award, Oak Ridge National Laboratory
- 2001 Presidential Early Career Award for Scientists and Engineers in 2001 from the President of the United State of America (The highest honor for young scientists and engineers)
- 2001 DOE Office of Science's 2001 Early Career Award for Scientists and Engineers.
- 2001 Significant Event Award, Oak Ridge National Laboratory
- 2001 Research Accomplishment Award, Oak Ridge National Laboratory
- 2001 Superior Performance Award, Oak Ridge National Laboratory
- 2001 Environmental Sciences Division Distinguished Scientific Achievement Award, Oak Ridge National Laboratory
- 2000 Superior Performance Award, Oak Ridge National Laboratory
- 1999 Superior Performance Award, Oak Ridge National Laboratory
- 1999 Most Valuable Player Award, Oak Ridge National Laboratory
- 1998 Superior Performance Award, Oak Ridge National Laboratory
- 1998 Research Accomplishment Award, Oak Ridge National Laboratory
- 1996 Alexander Hollaender Distinguished Postdoctoral Fellow
- 1993 First prize from Hunan Science and Technology Committee for the project of integrated pest management of rice, Co-PI
- 1988 Distinguished Young Scientist Fellowship from Chinese Academy of Sciences
- 1987 Excellent scientific paper award from the Science and Technology Association of Hunan Province
- 1979 Excellent Student Award from Hunan Agricultural University

OTHER HONORIFIC APPOINTMENTS:

- 2018 Guest Professor, Shandong University
- 2012-2017 Guest Professor, One hundred talent scholar, Sichun University
- 2011-present Guest Professor, Harbin Institute of Technology, Harbin, China
- 2010 Guest Professor, Zhongshan University, Guangzhou, China
- 2009-present Guest Professor, Minjiang Scholar, Xiamen University, Xiamen, China
- 2008-2012 Distinguished Scholar, Qingdao Institute of Biomass Energy and Bioprocessing Technology (QIBEBT), Chinese Academy of Sciences, Qingdao, Shandong, China.

2007	Guest Professor, Institute of Microbiology, Chinese Academy of Sciences, Beijing, China.
2007	Guest Professor, Shanghai Institute of Plant Physiology, Chinese Academy of Sciences, Shanghai, China.
2005-2008	Shenhua Distinguished Professor, Central South University, Changsha, China (Highest honor in the university).
2000	Guest Professor, Zhejiang University, Hangzhou, China
1998-present	Guest Professor, Eco-Environmental Research Center, Chinese Academy of Sciences, Beijing, China
1998	Guest Professor, Northeastern Forestry University, Harbin, China
1997-present	Guest Professor, Hunan Agricultural University, Changsha, China

FELLOWSHIP AND CONSORTIUM ESTABLISHED

Dr. Zhou established a Fellowship (“Jizhong Zhou-Xiaoya Shi Award”) at the School of Environment, Tsinghua University, with main purposes to recognize excellent graduate students in microbial ecology, environmental science and engineering at Tsinghua University, promote international collaboration between US and China, and and “Jizhong Zhou Award on Microbial Ecology for Outstanding Middle Career Microbial Ecologists” across China. Similar Fellowship has been established at OU for graduate students in Arts & Sciences, Environmental Engineering, and Computer Sciences. Dr. Zhou also initiated the establishment of Global Water Microbiome Consortium (GWMC) as a platform to facilitate international collaboration and communication on research and education on global water microbiome studies.

AWARDS OF STUDENTS, POSTDOCTORALS AND VISITORS:

- Yunfeng Yang, Outstanding Young Scientist from Chinese National Foundation, 2018
- Meiyong Xu, Wanren Plan Scholar, 2017
- Haichun Gao, Wanren Plan Scholar, 2017
- Zhili He, Qianren Scholar, Zhongshan University, 2016
- Yuting Liang, Excellent Young Scientist, Chinese National Science Foundation, 2016
- Yuting Liang, Outstanding Young Scientist, Jiangsu Province, 2016
- Fengping Wang, Distinguished Young Scientist from Chinese National Foundation, 2015
- Hongchen Jiang, Excellent Young Scientist, Chinese National Science Foundation, 2014
- Meiyong Xu, Excellent Young Scientist, Chinese National Science Foundation, 2014
- Zhenmei Lu, Excellent Young Scientist, Chinese National Science Foundation, 2014
- Lei Cheng, Excellent Young Scientist, Chinese National Science Foundation, 2014
- Ye Deng, 100 Scholar, Chinese Academy of Sciences, 2014
- Lei Cheng, Young 1000 Scholar Program, 2013
- Aijie Wang, Changjiang Scholar, Ministry of Education, 2011
- Aijie Wang, Outstanding Young Scientist from Chinese National Foundation, 2011
- Dongru Qiu, 100 Scholar, Chinese Academy of Sciences, 2011
- Yunfeng Yang, Distinguished Professor, Tsinghua University, 2010
- Aihua Liu, 100 Scholar, Chinese Academy of Sciences, 2010
- Helong Jiang, 100 Scholar, Chinese Academy of Sciences, 2009

- Haichun Gao, Distinguished Professor, Zhejiang University, 2007

PUBLICATIONS

Published/in press (Citations ~ 30,000, H-index, **91** based on Web of Science; Google Scholar Citations >40,500, H-index, **106** based on Google Scholar); **(a)** 2018, 2019 Global highly cited researcher in Cross-field based on numbers of top 1% highly cited publications by Web of Science. <https://hcr.clarivate.com/>; **(b)** World's most cited researcher (>99.8% percentile) of ~7 millions scientists across all science and engineering fields (176 subfields of 22 fields) by a composite metric based on the Scopus database from Elsevier (<https://doi.org/10.1371/journal.pbio.3000384>). **(c)** Most highly cited researcher (H-index > 100) according to their Google Scholar Citations

133 papers published in Nature indexed journals, such as *Science* (4), *Nature Climate Change* (3), *PNAS* (10), *Nature Communication* (4), *Ecology Letters* (2), *The ISME Journal* by Nature Publishing Group (43) (The top one journal in microbial ecology), *Environmental Science & Technology* (22), *Water Research* (10), and *Geochimica et Cosmochimica Acta* (2), and other prestigious journals, e.g., *Nature Ecology and Evolution* (2), *Nature Microbiology* (1), *Nature Review in Microbiology* (2), *Nature Plants* (1), *Microbiology and Molecular Biology Reviews* (1), *mBio* (16), *Ecology* (1), and *Global Change Biology* (9).

In press/revision.

1. Nuccio, E., E. Starr, U. Karaoz, E. Brodie, **J.-Z. Zhou**, S. Tringe, R. Malmstrom, T. Woyke, J. Banfield, M. Firestone, and J. Pett-Ridge. 2020. Niche differentiation is spatially and temporally regulated in the rhizosphere. *ISME J*, in press
2. Wang, P., S. Li, X. Yang, **J.-Z. Zhou**, W. Shu, and L. Jiang. 2019. Mechanisms of soil bacterial and fungal community assembly differ among and within islands. *Environ. Microbiol.*, in press
3. Wang, J., P. Legendre, J. Soininen, C.-F. Yeh, E. Graham, J. Stegen, E. O. Casamayor, **J.-Z. Zhou**, J. Shen, and F. Pan. 2019. Temperature drives local contributions to beta diversity in mountain streams: Stochastic and deterministic processes. *Glob. Ecol. & Biogeograp.*, in press.
4. Yang, S., Q. Zheng, Y. Yang, M. Yuan, X. Ma, N. R. Chiariello, K. M. Docherty, C. B. Field, J. L. M. Gutknecht, B. A. Hungate, A. Niboyet, X. Le Roux, and **J.-Z. Zhou**. 2019. Fire affects the taxonomic and functional composition of soil microbial communities, with cascading effects on grassland ecosystem functioning. **Glob. Chang. Biol.**, doi.org/10.1111/gcb.14852
5. Wu, L., X. Shan, S. Chen, Q. Zhang, Q. Qi, Z. Qin, H. Yin, **J.-Z. Zhou**, Q. He, and Y. Yang. 2019. Progressive microbial community networks with incremental organic loading rates underlie higher anaerobic digestion performance. **mSystems**. In press.

Published

6. Zhang, B., D. Ning, Y. Yang, J.D. Van Nostrand, **J.-Z. Zhou**, and X. Wen. 2020. Biodegradability of wastewater determines microbial assembly mechanisms in full-scale wastewater treatment plants. **Wat Res.** 169:115276. doi.org/10.1016/j.watres.2019.115276.
7. Huang R.L., S.P. McGrath, P.R. Hirsch, I.M. Clark, J. Storkey, L.Y. Wu, **J.-Z. Zhou**, and Y. Liang. 2019. Plant-microbe networks in soil are weakened by century-long use of inorganic fertilizers. **Microbial Biotechnol.** 12:1464-1475.
8. Escalas, A., L. Hale, J. W. Voordeckers, Y. Yang, M. K. Firestone, L. Alvarez-Cohen, and **J.-Z. Zhou**. 2019. Microbial Functional Diversity: From Concepts to Applications. **Ecology and Evolution**, 9:12000-12016. doi.org/10.1002/ece3.5670.
9. Zhang, Q., M. Wang, X. Ma, Q. Gao, T. Wang, X. Shi, **J.-Z. Zhou**, J. Zuo, and Y. Yang 2019., High variations of methanogenic microorganisms drive full-scale anaerobic digestion process, **Environment International.** 126: 543-551
10. Hale, L., W. Feng, H. Yin, X. Guo, X. Zhou, R. Bracho, E. Pegoraro, C. R. Penton, L. Wu, J. Cole, K. T. Konstantinidis, Y. Luo, J. M. Tiedje, E. A. G. Schuur, and **J.-Z. Zhou**. 2019. Tundra Microbial Community Taxa and Traits Predict Decomposition Parameters of Stable, Old Soil Organic Carbon. **ISME J**, 13:2901-2915.
11. Song, D., X. Chen, M. Xu, R. Hai, A. Zhou, R. Tian, J. D. Van Nostrand, M. L. Kemper, J. Guo, G. Sun, and **J.-Z. Zhou**. 2019. Evolution of *Sphingobium hydrophobicum* C1T in Electronic Waste Contaminated River Sediment. **Frontiers in Microbiology**, 10:2263. doi: 10.3389/fmicb.2019.02263.
12. Dai, J., Y. Liu, S. Liu, S. Li, N. Gao, J. Wang, **J.-Z. Zhou**, and D. Qiu. 2019. Differential gene content and gene expression for bacterial evolution and speciation of *Shewanella* in terms of biosynthesis of heme and heme-requiring proteins. **BMC Microbiol.** 19:173 doi.org/10.1186/s12866-019-1549-9
13. Tian, J., A.J. Dungait, X. Lu, Y. Yang, I.P. Hartley, W. Zhang, J. Mo. G. Yu, **J.-Z. Zhou**, and Y. Kuzyakov. 2019. Long-term nitrogen addition modifies microbial composition and functions for slow carbon cycling and increased sequestration in tropical forest soil. **Glob Change Biol.** 25:3267-3281.
14. Zhu, C.M., J.Y. Zhang, R. Guan, L. Hale, N. Chen, M. Li, Z.H. Lu, Q.Y. Ge, Y.F. Yang, **J.-Z. Zhou**, and T. Chen. 2019. Alternate succession of aggregate-forming cyanobacterial genera correlated with their attached bacteria by co-pathways. **Sci Total Environ.** 688:867-879.
15. Wakelin, S., P. Maclean, V. Cave, **J.-Z. Zhou**, G.A. Grelet, and D. Whitehead. 2019. Characterising the soil ecosystem phenotype associated with relatively low nitrate-N concentrations. **Appl Soil Sci.** 142:189-198.
16. Zhao, M., B. Sun, L. Wu, F. Wang, C. Wen, M. Wang, Y. Liang, L. Hale, **J.-Z. Zhou**, and Y. Yang. 2019. Dissimilar responses of fungal and bacterial communities to soil transplantation simulating abrupt climate changes. **Mol Eco**, 28:1842-1856.Doi:10.1111/mec.15053.
17. Gao, Q., Y. Yang, J. Feng, R. Tian, X. Guo, D. Ning, L. Hale, M. Wang, J. Cheng, L. Wu, M. Zhao, J. Zhao, L. Wu, Y. Qin, Q. Qi, Y. Liang, B. Sun, H. Chu, and **J.-Z. Zhou**. 2019, The spatial scale-dependency of diazotrophic and bacterial community assembly in paddy soil. **Glob Ecol Biogeography**, 28:1093-1105.
18. Xia, X., Y. Wang, Y. Yang, T. Luo, J. D. Van Nostrand, **J.-Z. Zhou**, N. Jiao, and R. Zhang. 2019. Ocean acidification regulates the activity, community structure and functional

- potential of heterotrophic bacterioplankton in an oligotrophic gyre. **Journal of Geophysical Research: Biogeosciences**: 124:1001-1017., doi.org/10.1029/2018JG004707
19. Johnston, E. R., J. K. Hatt, Z. He, L. Wu, X. Guo; Y. Luo, E. A. G Schuur, J. M. Tiedje, **J.-Z. Zhou**, and K. T. Konstantinidis. 2019. Responses of tundra soil microbial communities to half a decade of experimental *in-situ* warming at two critical depths. **Proc. Nat. Acad. Sci.**, 116:15096-15105.
 20. Zhao, J., G. Gao, **J.-Z. Zhou**, M. Wang, Y. Liang, B. Sun, H. Chu, and Y. Yang. 2019. The scale dependence of fungal community distribution in paddy soil driven by stochastic and deterministic processes. **Fungal Ecology**. 42: 100856.
 21. Zelaya, A. J., A. E. Parker, K. L. Bailey, P. Zhang, J. D. Van Nostrand, D. Ning, D. A. Elias, **J.-Z. Zhou**, T. C Hazen, A. P. Arkin, and M. W. Fields. 2019. High spatiotemporal variability of bacterial diversity over short time scales with unique hydrochemical associations within a shallow aquifer. **Water Research**. 164: 114917.
 22. Day, L.A., K. B De León, M. L. Kempfer, **J.-Z. Zhou**, and J. D. Wall. 2019. Complete Genome Sequence of *Desulfovibrio desulfuricans* IC1, a Sulfonate-Respiring Anaerobe. **Microbiology resource announcements**. 8: e00456-19.
 23. Buzzard, V., S. T. Michaletz, Y. Deng, Z. He, D. Ning, L. Shen, Q. Tu, J. Van Nostrand, J. W. Voordeckers, J. Wang, M. D. Weiser, M. Kaspari, R. B. Waide, **J.-Z. Zhou**, and B. J. Enquist. 2019. Continental scale structuring of forest and soil diversity via functional traits. **Nature Ecol. & Evol.**, **3**, 1298–1308.
 24. Ning, D. Y. Deng, J. M. Tiedje, and **J.-Z. Zhou**. 2019. A General Framework for Quantitatively Assessing Ecological Stochasticity. **Proc. Nat. Acad. Sci.**, 116: 16893-16898.
 25. Wu*, L., D. Ning*, B. Zhang*, Y. Li, P. Zhang, X. Shan, Q. Zhang, M. R. Brown, Z. Li, J. D. Van Nostrand, F. Ling, N. Xiao, Y. Zhang, J. Vierheilig, G. F. Wells, Y. Yang, Y. Deng, Q. Tu, A. Wang, Global Water Microbiome Consortium (*includes: D. Acevedo, M. Agullo-Barcelo, G. L. Andersen, J. C. de Araujo, K. F. Boehnke, P. Bond, C. B. Bott, P. Bovio, R. K. Brewster, F. Bux, A. Cabezas, L. Cabrol, S. Chen, C. Etchebehere, A. Ford, D. Frigon, J. S. Gómez, J. S. Griffin, A. Z. Gu, M. Habagil, L. Hale, S. D. Hardeman, M. Harmon, H. Horn, Z. Hu, S. Jauffur, D. R. Johnson, A. Keucken, S. Kumari, C. D. Leal, L. A. Lebrun, J. Lee, M. Lee, Z. M. P. Lee, M. Li, X. Li, Y. Liu, R. G. Luthy, L. C. Mendonça-Hagler, F. G. R. de Menezes, A. J. Meyers, A. Mohebbi, A. Noyola, A. Oehmen, A. Palmer, P. Parameswaran, J. Park, D. Patsch, V. Reginatto, F. L. de los Reyes, S. Rossetti, J. Sidhu, W. T. Sloan, K. Smith, O. V. de Sousa, K. Stephens, R. Tian, N. B. Tooker, D. De los Cobos Vasconcelos, S. Wakelin, B. Wang, J. E. Weaver, S. West, P. Wilmes, S.-G. Woo, J.-H. Wu, L. Wu, C. Xi, M. Xu, T. Yan, M. Yang, M. Young, H. Yue, Q. Zhang, W. Zhang, Y. Zhang, H. Zhou*), T. Zhang, Z. He, J. Keller, P. H. Nielsen, P. J. J. Alvarez, C. S. Criddle, M. Wagner, J. M. Tiedje, Q. He, T. P. Curtis, D. A. Stahl, L. Alvarez-Cohen, B. E. Rittmann, X. Wen, **J.-Z. Zhou**. 2019. Global diversity and biogeography of bacterial communities in wastewater treatment plants. **Nature Microbiology** 4:1183–1195. doi:10.1038/s41564-019-0426-5. (*Equal contribution)
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PATENTS & PATENT APPLICATIONS

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2. **Zhou, J.-Z.**, L. Wu, and X. Liu. 2010. Method for analyzing microbial communities. US Patent No. 7,759,057 (<https://www.google.com/patents/US7759057>).
3. **Zhou, J.-Z.**, D. Qiu, Z. He, M. Xie. Methods of producing protoporphyrinix and bacterial mutants therefor. US Patent No. WO2014144329 A2 (<https://www.google.com/patents/WO2014144329A2?cl=en>).

PROJECTS

Currently funded projects

1. Cross-Kingdom Interactions: the Foundation for Nutrient Cycling in Grassland Soils. Department of Energy, Co-PI with Mary Firestone et al, **\$340K** for J. Zhou (October 1, 2019 - September 30, 2022)
2. iSENTRY: An integrated Microfluidics-enabled system for phenotypic detection of biothreat agents. Department of Defense, DARPA program, Co-PI with James Samuel, Arum Han and Paul de Figueiredo etc., **\$880K for J. Zhou** (December 1, 2018 to November 30, 2022).
3. Multi-scale analysis of microbe-climate interactions in greenhouse gas emissions from grasslands and croplands with livestock and manure use. Department of Agriculture, Co-PI with Xiangming Xiao et al, \$3M, **~\$360K for J. Zhou** (March 1, 2016 – February 28, 2020).
4. Establishment to senescence: plant-microbe and microbe-microbe interactions mediate switchgrass sustainability, Department of Energy, Co-PI with Mary Firestone et al, ~\$15M, **\$2500K** for J. Zhou (October 1, 2015 - September 30, 2020)
5. Directing traffic in the rhizosphere: how phage and fauna shape the flow and fate of root carbon through microbial pathways, Department of Energy, Co-PI with Mary Firestone et al, **\$570K** for J. Zhou (October 1, 2016 - September 30, 2020)
6. From Genomes to Ecosystems: Systems-Level Mechanistic Understanding of Microbial Stress Responses at Chromium Contaminated Sites. Department of Energy. PI, **\$3,500K** (Oct 1, 2017-September 30, 2022) (This project is changed from previous VIMSS project (2002-2007) to LBL SFA, i.e. ENIGMA- Ecosystems and Networks Integrated with Genes and Molecular Assemblies. Paul Adams and Adam Arkin are the Program Directors.)

Accomplished projects

1. From Structure to Functions: Metagenomics-Enabled Predictive Understanding of Soil Microbial Feedbacks to Climate Change, Department of Energy, PI (Zhou, Tiedje, Schuur, Luo, Konstantinidis) **\$3,595K** (October 1, 2013 - September 30, 2019) (OU's portion: \$2,069K).
2. Microbial biogeography of soil communities in paddy fields. PI, Chinese NSF, ¥3.6M (October 1, 2014 - September 30, 2019)
3. Plant Stimulation of Soil Microbial Community Succession: How Sequential Expression Mediates Soil Carbon Stabilization and Turnover, Department of Energy, Co-PI with Mary Firestone et al, **\$620K** for J. Zhou (October 1, 2013 - September 30, 2017)
4. Experimental Macroecology: Effects of Temperature on Biodiversity. NSF Macrosystems Biology, Co-PI with James Brown, Mike Kaspari, Brian Enquist, et al (\$4.5M in total, **\$1.8M** for J. Zhou) (July 1, 2011 to June 30, 2016).
5. The Fund for Foreign Scholars in University Research and Teaching Programs supported by The Ministry of Education of China and The State Administration of Foreign Experts Affairs of China, ¥10M Chinese yuan (equivalent to ~\$770K) (January 1, 2007--- December 31, 2016) (This has been funded by Chinese Government to support research activity within China)
6. Development of Microarrays-based Metagenomics Technology for Monitoring Sulfate-Reducing Bacteria in Subsurface Environments. PI, DOE STTR/SBIR Phase II, **\$750K** (June 19, 2011- March 18, 2014)

7. Development of Novel Random Network Theory-Based Approaches to Identify Network Interactions Among Nitrifying Bacteria. PI, DOE STTR/SBIR Phase I, **\$750K** (June 19, 2011-March 18, 2014)
8. HuMiChip to detect and characterize the human microbiome. Co-PI with He. OCAST, **\$300K** (February 1, 2011 to January 31, 2014)
9. From Community Structure to Functions: Metagenomics-Enabled Predictive Understanding of Temperature Sensitivity of Soil Carbon Decomposition to Climate Warming, Department of Energy, PI (Zhou, Tiedje, Schuur, Luo, Konstantinidis) **\$3M** (July 1, 2010 - June 30, 2014) (OU's portion: \$1,946K).
10. Plant Stimulation of Soil Microbial Community Succession: How Sequential Expression Mediates Soil Carbon Stabilization and Turnover, Department of Energy, Co-PI with Mary Firestone et al, **\$0.5M** for J. Zhou (July 1, 2010 - June 30, 2014)
11. Center for Advanced Microbial Ecology, Tsinghua University, Beijing, China, ¥6M Chinese (Yuan equivalent to ~\$940K) (January 1, 2011 December 30, 2013). (This has been funded by Chinese Government to support research activity within China)
12. Oklahoma EPSCoR Research Infrastructure Improvement Plan, Building Oklahoma's Leadership Role in Cellulosic Bioenergy. NSF EPSCoR Program (\$8.7M in total), PI with Ray Huhnke (Director) et al, **\$2,117K** for J. Zhou (Oct 1, 2008-Dec 30, 2013) Integrated genome-based studies of Shewanella ecophysiology. DOE Genomics:GTL program (\$15M) PI with J. Fredrickson (Director), K. Nealson, J.M Tiedje, and et al.), **\$1000K** for J. Zhou (October 1, 2006– September 30, 2009). DOE Genomics:GTL program, October 1, 2006– March 30, 2012.
13. Rapid Deduction of Stress Response Pathways in Metal and Radionuclide Reducing Bacteria Phase 2: Molecular Determinants of Community Activity, Stability and Ecology (MDCASE) (ESPP 2), DOE Genomics:GTL Program (\$35M in total), PI with Adam Arkins (Director), Terry Hazen, Judy Wall, David Stahl, et al, **\$4,000K** (October 1, 2007 – September 30, 2012)
14. Metagenomics-enabled understanding of the functions and activities of microbial communities at ERSP Field Research Center at Oak Ridge, TN. Co-PI with Tiedje and Marsh. DOE NABIR program, ~ \$1500 K (October 1, 2006 – March 30, 2012), **\$750K** for J. Zhou.
15. MO: A Genomics-enabled FACE Microbial Observatory: Changes in Microbial Diversity and Functions in responding to elevated CO₂, Nitrogen Deposition and Plant Diversity. NSF-USDA Microbial Observatories Program, PI with Zhili He, **\$866K** (July 1, 2007 – August 13, 2012).
16. Trajectories of microbial community function in response to accelerated remediation of subsurface metal contaminants. Co-PI with Mary Firestone et al. DOE ERSP program, ~ \$1350 K (October 1, 2007 – May 30, 2012), **\$210K** for J. Zhou.
17. Microbial Enhanced Hydrocarbon Recovery (MEHR) Systems Biology Program. Energy BioSciences Institute, Co-PI with Hazen et al, \$600K for J. Zhou (Oct 1, 2008 – Sept 30, 2012).
18. Isolation and characterization of novel microbial catalysts for direct fermentation of lignocellulose to ethanol. PI with Liyou Wu, Zhili He, Oklahoma Bioenergy Center, **\$400K** (February 1, 2008, January 31, 2011)
19. Multiscale Investigations on the Rates and Mechanisms of Targeted Immobilization and Natural Attenuation of Metal, Radionuclide and Co-Contaminants in the Subsurface. Co-PI with Jardine, Watson, Criddle, Gu et al. \$15M, (October 1, 2006 --- September 30, 2011), **\$150K** for Zhou.

20. Genomics-enabled understanding of microbial interactions and regulatory networks of microbial consortia for efficient cellulosic ethanol production. Co-PI with Zhili He, Liyou Wu et al, Oklahoma Bioenergy Center, **\$830K** (February 1, 2008, January 31, 2011)
21. Linking community structure to functions: Metagenomic analysis of Feedstock-Related Microbial Communities using GeoChip and Pyrosequencing. Co-PI with Liyou Wu, Zhili He, Yiqi Luo, Oklahoma Bioenergy Center, **\$1,030K** (February 1, 2008, January 31, 2011)
22. Whole genome DNA arrays for bacterial identification and detection, Co-PI with Wu et al. OCAST, \$300K (February 1, 2008 to January 31, 2011)
23. Characterization of an H₂ Producing Biological System operating at 1 nM H₂ Concentration. Co-PI with Krumholtz et al (\$900K in total). DOE BES, **\$250K** for J. Zhou (Oct 1, 2008-Sept 30, 2011)
24. Extending Knowledge of Anaerobic Hydrocarbon Metabolism: Linking Metabolism, Functional Gene Molecular Markers and the GeoChip. ConoPhilipps, Co-PI with Joseph Suflita et a (\$2 M in total), \$ \$403K for J. Zhou (Oct 1, 2008 –December 30, 2010)
25. Development of Microarrays-based Metagenomics Technology for Monitoring Sulfate-Reducing Bacteria in Subsurface Environments. PI, DOE STTR/SBIR Phase I, \$100K (June 19, 2010- March 18, 2011)
26. Development of Novel Random Network Theory-Based Approaches to Identify Network Interactions Among Nitrifying Bacteria. PI, DOE STTR/SBIR Phase I, \$100K (June 19, 2010- March 18, 2011)
27. Institute for Environmental Genomics, PI with Z.L. He, **\$200K** (January 1, 2008 --- December 31, 2010).
28. The Joint BioEnergy Institute (JBEI) (\$125M in total), \$400K for J. Zhou (October 1, 2007 – September 30, 2012).
29. Development of Comprehensive Functional Gene Arrays for Microbial Community Analysis, Co-PI with He. OCAST, \$300K (October 1, 2006 to Sept 30, 2009)
30. Microarray analysis and functional assays to assess microbial ecology and disease suppression in soils under organic or sustainable management. Co-PI with Louws and Hu, USDA, \$160K (October 1, 2006 ---September 30, 2008)
31. Development of microbial consortia for efficient ethanol production from plant biomass, PI, Department of Energy, Oklahoma, \$200K (April 1, 2007 --- March 31, 2009)
32. Special award for Oversea Young Scientist, ¥120K Chinese Yuan (July 1, 2004 --- June 30, 2007). (This was funded by Chinese Government to support research activities within China)
33. Identification of Molecular and Cellular Responses of *Desulfovibrio vulgaris* Biofilms under Culture Conditions Relevant to Field Conditions for Bioreduction of Heavy Metals, Co-PI with Matthew Fields, Judy Wall, DOE ERSP Program, \$300K (October 1, 2005 to Sept 30, 2008).
34. Deduction and analysis of the interacting stress response pathways of metal/radionuclide-reducing bacteria, DOE Genomics:GTL Program, PI with Adam Arkins (Director), Terry Hazen, Judy Wall, David Stahl, et al (\$30M in total), \$5,010K for J. Zhou (July 1, 2002 – September 30, 2007).
35. Molecular Approaches to Understanding C and N Dynamics and their Role in the Global Carbon Cycle. Co-PI, with Tiedje, Devol, and Massol-Deya, DOE Biotechnological Investigations — Ocean Margin Program. ~ \$1,500 K (October 1, 2003 – September 30, 2006). \$600K for J. Zhou.

36. Towards Understanding Population Dynamics of Metal and Radionuclide Reducers at Field Remediation Sites. Co-PI with Tiedje and Treves. DOE NABIR program, ~ \$900 K (October 1, 2003 – September 30, 2006), \$450K for J. Zhou.
37. Development and Use of Integrated Microarray-based Genomic Technologies for Assessing Microbial Community Composition and Dynamics. PI, DOE NABIR program, ~ \$900 K (October 1, 2003 – September 30, 2006).
38. Elucidating the Molecular Basis of Chromium(VI) Reduction by *Shewanella oneidensis* MR-1 and Resistance to Metal Toxicity Using Integrated Biochemical, Proteomic, and Comparative Genomics Approaches. Co-PI with Thompson and Hettich. DOE NABIR program, ~ \$820 K (October 1, 2003 – September 30, 2006).
39. Integrated analysis of protein complexes and regulatory networks involved in anaerobic energy metabolism of *Shewanella oneidensis* MR-1, PI, with Larimer, Nealson, Thompson, et al., DOE Microbial Cell Project, \$4,500K (October 1, 2001– September 30, 2006).
40. Field-scale evaluation of biostimulation for remediation of uranium-contaminated groundwater at a proposed NABIR Field research center in Oak Ridge TN, Co-PI, with Criddle, Jardine, Kitanidis, Hopkins. DOE NABIR program, ~ \$3,250 K (October 1, 2000 – September 30, 2004). \$540K for J. Zhou.
41. Center for research on enhancing carbon sequestration in terrestrial ecosystems (Co-PI, with Jacobs et al.) (\$10M in total), \$900K for J. Zhou (October 1, 1999 – September 30, 2005).
42. The *Rhodopseudomonas palustris* Microbial Cell Project, Co-PI, with Tabita, Thompson, et al., DOE Microbial Cell Project (\$2.1M in total), \$150K for J. Zhou (October 1, 2001– September 30, 2006).
43. The dynamics of cellular stress responses in *Deinococcus radiodurans*, Co-PI, with Mike Daly et al., DOE Microbial Cell Project (\$900K in total), \$240K (October 1, 2001– September 30, 2004).
44. Microbially mediated immobilization of contaminants through in situ biostimulation: Scale up of EMSP project 55267, Co-PI with Jardine and Brooks, DOE EM Science Program, \$1,427K (October 1, 2000 – September 30, 2004). \$140K for J. Zhou.
45. Use of DNA Microarrays for Understanding the Genetic and Metabolic Regulation of Carbon Dioxide Fixation and Hydrogen Production in *Rhodopseudomonas palustris*. Co-PI with Harwood and Thompson. DOE Microbial Genome Program (\$1.8M in total), \$750K for J. Zhou (October 1, 2001– September 30, 2004).
46. Gene Expression Profiles in *Nitrosomonas europaea*, an Obligate Chemolitho- autotroph. Co-PI with Arp and Klotz, DOE Microbial Genome Program, \$600K for J. Zhou (October 1, 2001– September 30, 2004).
47. Genomic Characterization of Belowground Ecosystem Responses to Climate Change. Co-PI with DiFazio, Fields, et al., ORNL Laboratory Directed Development and Research Program, \$545K (October 1, 2002– September 30, 2004).
48. Community-Wide Analysis of Unique Sequences and Functions from Uncultured Microorganisms, Co-PI with Fields, ORNL Laboratory Directed Development and Research Program, \$500K, (October 1, 2001– September 30, 2003).
49. Coupling process and microbial community studies to understand the mechanisms controlling carbon preservation and nitrogen loss in marine sediments. Co-PI, with Tiedje, Devol, Massol-Deya and Palumbo, DOE Biotechnological Investigations — Ocean Margin Program. ~ \$1,650 K (October 1, 2000 – September 30, 2003). \$600K for J. Zhou.

50. Understanding the roles of spatial isolation and carbon in microbial community structure dynamics, and activity for bioremediation, Co-PI with Tiedje and Treves. DOE NABIR program, ~ \$1,250 K (October 1, 2000 – September 30, 2003), \$650K for J. Zhou.
51. Development and use of 16S rRNA gene-based oligonucleotide microarrays for Assessing Microbial Community Composition and Dynamics. PI with Thompson, Hurt, Xu and Xu, DOE NABIR program, ~ \$1,200 K (October 1, 2000 – September 30, 2003). \$900K for J. Zhou.
52. Enhancing carbon sequestration and reclamation of degraded lands with fossil fuel combustion byproducts, Co-PI with Palumbo et al., DOE Fossil Energy Program, ~1,100K (October 1, 2000 – September 30, 2003).
53. Computational structure characterization of metal-reduction proteins in microbe, Co-PI with Ying Xu, Dong Xu et al., DOE Experimental and Computational Structural Biology, ~ \$1,100K (October 1, 2000 – September 30, 2003).
54. *Shewanella putrefaciens*: Regulation of the genes and proteins involved in metal reduction pathways, Co-PI with Carol Giometti, DOE NABIR Program, \$210K (October 1, 1999 – September 30, 2002).
55. Linking genomics to cellular responses and mechanisms for radiation resistance in *Deinococcus radiodurans*, PI, with Hettich, Burlage, Beliaev, and Thompson, Laboratory Directed Research and Development Program, Oak Ridge National Laboratory, \$867K (October 1, 2000 – September 30, 2002).
56. Development of microchip-based detection methods: a high throughput microbial detection tool for bioremediation and carbon sequestration. PI, Seed Money Program, Oak Ridge National Laboratory, 100K (February 1, 2000 – September 30, 2001).
57. Exploring whole genome sequence information for defining the functions of unknown genes and regulatory networks in dissimilatory metal reduction pathways. PI, with Nealson and Tiedje, DOE Microbial Genome Program, \$1,350K (October 1, 1998 – September 30, 2001).
58. Noncompetitive diversity patterns in soils: their causes and implications. Co-PI with Tiedje, O'Neill and Palumbo, DOE NABIR program, ~ \$1,100 K (October 1, 97 – September 30, 2000)
59. Linking process and population studies to understand the nitrogen loss mechanisms of Pacific Northwest marine sediments. Co-PI with Tiedje, Devol, Massol-Deya and Palumbo, DOE Biotechnological Investigations — Ocean Margin Program. ~ \$1,300 K (October 1, 1997 – September 30, 2000).
60. Rapid gene probe for microorganisms monitoring by novel MS approaches. Co-PI with W. Chen, DOE NABIR program, ~ \$800 K (October 1, 1999 – September 30, 2002).
61. Isolation of Proteins Involved in Metal Reduction from *Shewanella oneidensis* MR-1 with Mass Spectrometry, LDRD Program, Oak Ridge National Laboratory, \$50K (March 1, 2000 – September 30, 2000)
62. Development and testing of molecular probes that distinguish effective TCE-cooxidizers from ineffective TCE-cooxidizers: a potential tool for site assessment and management. Co-PI with Tiedje, Department of Defense, \$150K (September 1, 1996 to September 1, 1998).
63. Enzymes from extremophiles in bioremediation and bioprocessing. Co-PI with Woodward and Palumbo et al., Oak Ridge National Laboratory, ~ \$800K (September 1, 1996 to August 31, 1998).

64. Development of gene probes for nitrate reductase in environmental media: a tool to evaluate nitrogen retention in watersheds. Co-PI with Mulholland and Garten, Oak Ridge National Laboratory, 92K (January 1, 1998 to December 30, 1998).

Finished genome sequencing projects:

1. Genomic Sequencing of Multiple Species of Class Clostridia Relevant to the Production of Bioethanol from Cellulosic Feedstocks. 2006. (PI with Hemme, He et al). The genome will be sequenced by DOE Joint Genome Institute.
2. Sequencing *Clostridium cellulolyticum* to advance understanding plant biomass degradation and energy production, 2005. (Qing He, and J.-Z. Zhou). The genome will be sequenced by DOE Joint Genome Institute.
3. Genome sequencing of multiple *Anaeromyxobacter* species: comparative genomics for insight into the ecophysiology, genetics and evolution of metal-reducing and halo-respiring bacteria. 2005. (Robert A. Sanford, Matthew W. Fields, Frank E. Löffler, John R. Kirby, J.-Z. Zhou, James K. Fredrickson, and Alexander S. Beliaev). Three genomes will be sequenced by DOE Joint Genome Institute.
4. Genome-level understanding of the diversity and structure of a groundwater microbial community in the NABIR Research Field Research Center. 2004. (Zhou, PI, Fields, co-PI). The entire community with about 20 species in highly contaminated site will be sequenced by DOE Joint Genome Institute in 2005.
5. Whole-genome sequence determination of novel, extremophilic, metal-reducing bacteria important to bioremediation and energy production. 2003. (Fields, Zhou). 3 gram-positive extremophilic iron-reducing bacteria isolated at ORNL are under sequencing.
6. Sequence multiple strains of *Shewanella* to advance understanding their metal-reducing physiology and ecological potential. 2004. (Fredrickson, Nealson, DiChristina, Tiedje, Zhou et al.). 16 *Shewanella* strains are under sequencing by JGI. Two of these strains were isolated at ORNL.

CONFERENCE AND SYMPOSIUM ORGANIZATION

- | | |
|------|---|
| 2019 | Organizer for the workshop on scientific writing, the Annual Meeting on Microbial ecology, October 30, 2019 |
| 2019 | Honorary Chair for the Annual Meeting on Microbial ecology, and The 1 st International Forum for Advanced Microbial Ecology (iFAME), Oct 28-31, 2019, Beijing |
| 2018 | Panel member of the Roundtable Session, The unculturable majority: Recent progress, knowledge gaps and challenges in cultivating environmental microorganisms. ISME-17, Leipzig, Germany, August 13, 2018 |
| 2017 | Chair for the Annual Meeting on Microbial ecology, and The 2 nd Jim Tiedje International Symposium on Microbial Genomics and Ecology, Oct 20-23, 2017, Beijing |
| 2017 | Chairperson for the Symposium, Microbial Feedbacks to Climate Change: Current Status, Challenges and Future Perspectives, ASM Microbe 2017, June 1–5, 2017, New Orleans, LA |

- 2016 Chair for Workshop on Wastewater Microbiomes: Current Status, Challenges and Opportunities. In IWA-MEWE-2016, Copenhagen, Demark, September 5, 2016.
- 2016 Chair for the Roundtable Session on Microbial Feedbacks to Climate Change: Current Status, Challenges and Future Perspectives, ISME-16, Montreal, Canada, August 22, 2016
- 2012 Chair for the Roundtable Session on Microbial Network Ecology: Deciphering complex interactions in microbial communities, ISME-14, Copenhagen, Denmark, August 20, 2012
- 2011-2014 Member of Local Organizing Committee, The 15th International Symposium on Microbial Ecology
- 2011 Co-Organizer, The 1st Jim Tiedje International Symposium on Microbial Genomics and Ecology, East Lansing, Michigan State University, October 28-30, 2011
- 2010 Member of the Advisory Committee for The 18th International Conference on Microbial Genomes, September 12-16, 2010, Lake Arrowhead, CA
- 2010 Member of the organizing committee for the Roundtable Session on TerraGenome at The 13th International Symposium on Microbial Ecology, Seattle, WA, August 22-27, 2010.
- 2010 Organizer and Chair for the Roundtable Session on High Throughput MetaGenomic Technologies for Complex Microbial Community Analysis at The 13th International Symposium on Microbial Ecology, Seattle, WA, August 22-27, 2010.
- 2009 Member of the Advisory Committee for The 17th International Conference on Microbial Genomes, October 11-15, 2009, Rocky Gap State Park, MD
- 2009 Chairperson for the Symposium, High Throughput Genomics Technologies for Complex Microbial Community Analysis, The 109th General Meeting of American Society for Microbiology, May 17–21, 2009, Philadelphia, PA.
- 2008 Co-organizer for ASM-CSM (Chinese Society of Microbiology) Joint Workshop on Environmental Microbiology and Bioenergy, November 8, 2008, Haikou, China.
- 2008 Member of the Advisory Committee for The 16th International Conference on Microbial Genomes, September 14-18, 2008, Lake Arrowhead, CA
- 2008 Chair and Organizer, The 4th SCOPE (The Scientific Committee on Problems of the Environment, International Council of Scientific Union) Workshop on Microbial Environmental Genomics, Changsha, P.R. China, September 20-24, 2008.
- 2008 Oklahoma Bioenergy Center Workshop, April 23, 2008, Norman, OK
- 2007-2012 Member of the Advisory Committee of the China Summit Forums on Industrial Biotechnology
- 2007 Member of the Advisory Committee for The 15th International Conference on Microbial Genomes, September 16–20, 2007, College Park, MA
- 2006 Member of the Advisory Committee for The 14th International Conference on Microbial Genomes, September 24–28, 2006, Lake Arrowhead, CA
- 2006 “Application of OMICs to Field Bioremediation: Current Status, Challenges and Future”. The ERSP Breakout Session 2, Environmental Remediation Science Program, Warrenton, VA, April 3, 2006.

- 2005 Member of the Advisory Committee for The 13th International Conference on Microbial Genomes, September 11 – 15, 2005, Madison, WI.
- 2004 Chair for the session Symposium on Microbial Heterogeneity / Bioremediation, American Geophysical Union, San Francisco, CA, December 13–17, 2004.
- 2004 International Convener for the session on “Impacts of Microarrays and Bioinformatics on Microbial Ecology”, The 10th International Symposium on Microbial Ecology, August 22-27, 2004, Cancun, Mexico.
- 2004 Chair for the session on “Advanced technologies for microbial ecology”, The 10th International Symposium on Microbial Ecology, August 22-27, 2004, Cancun, Mexico.
- 2004 Member of the Advisory Committee for The 12th International Conference on Small Genomes, September 26–30, 2004, Lake Arrowhead, CA
- 2003-2008 Member of the SCOPE (The Scientific Committee on Problems of the Environment, International Council of Scientific Union) Workshop on Environmental Genomics.
- 2003 Organizer and Chair, The 11th International Conference on Microbial Genomes, September 28 – October 2, 2003, Durham, NC.
- 2002 Member of the Advisory Committee for The 10th International Conference on Microbial Genomes, September 8–12, 2002, Lake Arrowhead, CA.
- 2001 Organizer and Chair, The 9th International Conference on Microbial Genomes, October 27–November 1, 2001, Gatlinburg, TN.
- 2001 Organizer for the session on “Application of Microarray Technology to Environmental Studies”, The 9th International Symposium on Microbial Ecology, August 26–31, 2001, Amsterdam, The Netherlands.
- 2001 Chairperson for the Symposium, Microarrays and Microfluidics in Microbial Ecology, The 101st General Meeting of American Society for Microbiology, May 20–24, 2001, Orlando, FL.
- 2001 Session Chair, Bioinformatics and functional genomics, TIGR/ASM Conference on Microorganisms, January 28–31, 2001, Monterey, CA.
- 2000 Member of the Advisory Committee for The 8th International Conference on Small Genomes, September 24–28, 2000, Lake Arrowhead, CA
- 2000 Chair on the session of Bioremediation, The 8th International Conference on Small Genomes, September 24–28, 2000, Lake Arrowhead, CA
- 2000 Co-organizer, The 4th Conference on Molecular Ecology, July 15–18, 2000, Harbin, P.R. China
- 1999 Organizer and Chair, The 7th Conference on Small Genomes, November 13–17, 1999, Washington, DC.
- 1999 Organizer and Chair, DOE NABIR Workshop in Application of Genomic Technology to Bioremediation, December 5–7, 1999, Washington, DC.
- 1999 Co-organizer, The 3rd Conference on Molecular Ecology, August 28–31, 1999, Beijing, P.R. China.
- 1999 Chairperson for the Symposium, Recent Advances in Subsurface Microbial Ecology, The 99th General Meeting of American Society for Microbiology, Chicago, IL, May 30 – June 3, 1999.

- 1998 Organizer for the Symposium, Key Issues in Microbial Ecology, the VII International Congress of Ecology, July 19–25, 1998, Florence, Italy.
- 1998 Chairperson on the session of microbial community dynamics, the VII International Congress of Ecology, July 19–25, 1998, Florence, Italy.

PROMOTION REVIEW

- 2018 University of Nevada
- 2018 Canada Research Chair
- 2017 Michigan State University (Professor Appointment)
- 2017 University of Massachusetts at Amherst (Tenure)
- 2017 University of Mississippi (Professor)
- 2017 University of Alberta (Canada Research Chair)
- 2017 Oak Ridge National Laboratory (Corporate Fellow)
- 2016 University of Michigan (Professor Appointment)
- 2016 Georgia Institute of Technology (Tenure)
- 2016 Young 1000 Scholar program, China
- 2016 Outstanding 100 Scholar Program, Chinese Academy of Sciences
- 2016 Tsinghua University (Tenure)
- 2015 Louisiana State University (Professor appointment)
- 2014 Nanyang Technology University (Tenure)
- 2013 University of Alberta (Tenure)
- 2013 Icahn School of Medicine at Mount Sinai, New York (Tenure)
- 2012 University of Massachusetts, Amherst, MA (Professor appointment)
- 2012 Shanghai Jiaotong University, Shanghai, China (Professor appointment)
- 2012 E' cole Polytechnique Fe'de'rale de Lausanne, Lausanne CH 101, Switzerland (Tenure)
- 2012 University of North Carolina at Charlotte (Tenure)
- 2012 University of California at Berkeley (Professor Appointment)
- 2011 University of California at Berkeley (Distinguished Professor)
- 2011 Pacific Northwest National Laboratory (Senior Scientist)
- 2011 University of Waterloo (tenure)
- 2011 Michigan State University (tenure)
- 2011 Clemson University (tenure)
- 2011 University of Michigan (tenure)
- 2010 Peking University
- 2010 University of Alaska Fairbanks (tenure)
- 2009 Louisiana State University (tenure)
- 2008 University of Nevada (tenure)
- 2002 Uniformed Services University of the Health Sciences (tenure)

PAPER REVIEW

- 2019 BMC Biology
- 2018 Proceedings of The Royal Society B
- 2018 Oikos

2018	Trends in Ecology and Evolution
2018	Nature Biotechnology
2017-present	The Science of the Total Environment
2017	Functional Ecology
2017	ACS Nano
2016-present	mSystems
2016-present	FEMS Microbiology Ecology
2015-present	Scientific Reports
2016-present	Nature Ecology and Evolution
2015-present	Science Advances
2015	Nucleic Acids Research
2014-present	Water Research
2014	Environmental Engineering Science
2014	BMC Ecology
2013-present	Biotechnology for Biofuels
2012-Present	Ecology Letter
2012	Computers & Chemical Engineering
2012-present	Nature Communications
2012-present	Ecology
2011	Antonie van Leeuwenhoek Journal of Microbiology
2011	Biotechnology and Bioengineering
2011-present	PLoS One
2011-present	Genome Biology
2010-present	Nature Review in Microbiology
2009-present	Global Change Biology
2009	Cold Spring Harbor Protocols
2009	Applied Energy
2008	BMC Genomics
2008	BMC Microbiology
2008-present	PLoS Computational Biology
2006-present	The ISME Journal
2006-present	Bioinformatics
2006-present	Environmental Microbiology
2001-present	Reviewer for Applied and Environmental Microbiology
2001-present	Reviewer for the Chinese Society of Ecology journal, Ecology
2001-2007	Reviewer for Omics: A Journal of Integrative Biology
2006-present	BMC Bioinformatics
2005	Journal of Virological Methods
2005-present	FEMS Microbiology Ecology
2005	Environmental Monitoring and Assessment
2004	Anaerobe
2004	Water Research
2004-2005	Analytical Chemistry
2004-present	Soil Biology & Biochemistry
2004	Pedosphere
2004-present	Trends in Biotechnology

2004-present	Environmental Sciences & Technology
2003-present	Biotechniques
2003	Plant and Soil
2003	Frontiers in Ecology and the Environment
2002	Cell Biology International
2002-present	Proceedings of the National Academy of Sciences USA
2002-2003	Journal of Clinical Microbiology
2002-present	Journal of Bacteriology
2001	Soil Science Society of America Journal
2001	Physiological Genomics
2001	Molecular and Cellular Probes
2001-present	FEMS Microbiology Letter
2000	Biogeochemistry
1998	Ecological Engineering

AD HOC PROPOSAL REVIEW

2017	China-Germany Joint Research Program, CNSF
2017	Ministry of Education, Changjiang Scholars
2016	Ministry of Science and Technology, China
2015	The National Research, Development and Innovation Office (NKFIH) of Hungary
2015	NSF --- Arctic Natural Sciences
2014	NSF --- Population and Community Ecology
2014	National Research Foundation of Korea
2014	European Science Foundation
2014-present	NSF--- Ocean Science Program
2013-present	Young Qianren Program, China
2013	Austrian Science Fund
2013-present	NSF Early Career Program
2012	NSF Information & Intelligent Systems (IIS) Division
2012	European Research Council
2011	Biological and Medical Sciences, Austrian Science Fund
2010	NSF Ecosystem Program
2010	Leaders Opportunity Fund, Canada Foundation for Innovation
2010	Natural Environment Research Council
2009	Member of the Panel for Germany-China program on microbial ecology
2009	Swiss National Science Foundation
2005-present	Netherlands Organization for Scientific Research
2009	United States-Israel Binational Science Foundation
2008-present	Geobiology & Low Temperature Geochemistry Program, National Science Foundation
2008	Instrumentation and Facilities Program, National Science Foundation
2008	Israel Science Foundation (ISF)
2006-2008	Chinese National Science Foundation
2008	NSF-USDA Microbial Observatories Program
2007	Energy Biosciences Institute, University of California, Berkeley

2007 Cellular Systems, National Science Foundation
2007 Ecosystem Science Program, National Science Foundation
2007 Genomics:GTL program, Department of Energy
2007 Environmental Genomics Program, National Science Foundation
2007 Frontier in Biological Research, National Science Foundation
2007 North Carolina Biotechnology Center
2006 The Chilean Research Fund Council
2006 The Environment and Water Industry Development Council, Singapore
2006-present National Research Foundation Board of Singapore
2006 Swiss National Science Foundation
2005 Austrian Science Fund
2005 DOE Biological Investigation – Ocean Margin Program (BI-OMP)
2005 NSF Genes and Genome Systems program
2005-present Natural Environment Research Council (NERC), United Kingdom
2005 Natural Sciences and Engineering Research Council (NSERC) of Canada
2004 NSF Microbial Interactions and Processes program
2004-present NSF Faculty Early Career Development (CAREER) Program
2004 NSF Ocean Sciences Program
2004 European Science Foundation
2004 NSF Ecology Program
2004 Singapore Science & Engineering Research Council
2004 NSF Biogeosciences Program
2004 Competitive Grant, Utah State University
2003-2004 Genome Canada program
2003 Idaho Research Center Grant Program
2002-2004 NSF Biocomplexity in the Environment (BE): Integrated Research and Education in Environmental Systems
2003 US Army Research Office, DOD Young Investigator Program
2003 Reviewer for Tamasek Yong Investigator Award, National University of Singapore, Singapore
2002-2007 NSF Microbial Observatories Program
2002 NSF Integrated Research Challenges in Environmental Biology Program
2002 NSF program for International Opportunities for Scientists and Engineers
2002-2005 DOE Small Business Innovation Research and Small Business Technology Transfer Programs
2002 National Oceanographic Partnership Program
2001-2003 US Department of Energy EPSCoR Program
1999 Reviewer for award for Natural Environment Research Council, United Kingdom
1995 Reviewer for grants in NSF Young Scientist Program

INVITED SEMINARS

2019 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at China University of GeoSciences, Beijing, November 5, 2019
2019 “GeoChip and Its Applications”. Invited talk at The 2nd International Workshop on Theories and Techniques in Microbial Ecology, Changsha, October 31, 2019

- 2019 “Theoretical Challenges in Microbial Ecology”. Invited talk at The 2019 Annual Microbial Ecology Meeting, Changsha, October 31, 2019
- 2019 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Northwest Agriculture & Forestry University, Yangling, October 25, 2019
- 2019 “Systems Microbiology: From Genomes to Ecosystems”. Invited talk at Lanzhou University, Lanzhou, October 24, 2019.
- 2019 “Omics-Enabled Prediction of Groundwater Contamination and Ecosystem Functioning”. Invited talk at The 2nd International Conference on All Material Fluxes in River Eco-Systems (AMFR2019), Beijing, October 12, 2019.
- 2019 “A General Framework for Quantitatively Assessing Ecological Stochasticity”. Invited talk at the Department of Civil and Environmental Engineering, Cornell University, Ithaca, NY, September 19, 2019
- 2019 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at GeoSciences, Princeton University, Princeton, NJ, September 12, 2019
- 2019 “A General Framework for Quantitatively Assessing Ecological Stochasticity”. Invited talk at Shandong University, Qingdao, August 31, 2019.
- 2019 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Central South University, Changsha, August 28, 2019.
- 2019 “Global Wastewater Microbiome: Diversity, Biogeography and Future”. Invited talk at 2019 Annual Ecology Meeting, Louisville, Kentucky, August 13, 2019.
- 2019 “Global Wastewater Microbiome: Diversity, Biogeography and Future”. Invited talk at Swiss Federal Institute of Aquatic Science and Technology (Eawag), Zurich, Switzerland, July 5, 2019.
- 2019 “Global Wastewater Microbiome: Diversity, Biogeography and Future”. Invited talk at Swiss Federal Institute of Technology, Lausanne, Switzerland, July 2, 2019.
- 2019 “Global Wastewater Microbiome: Diversity, Biogeography and Future”. Invited talk at Ghent University, Ghent, Belgium, July 1, 2019.
- 2019 “Global Wastewater Microbiome: Diversity, Biogeography and Future”. Invited talk at the 16th IWA World Conference on Anaerobic Digestion, Delft, Netherlands, June 26, 2019.
- 2019 “Systems Microbiology: From Genomes to Ecosystems”. ASM Award Lecture for ASM Award for Environmental Research, 2019 ASM General Meeting, San Francisco, CA, June 23, 2019.
- 2019 “Global Wastewater Microbiome: Diversity and Biogeography”. Invited talk at 2019 Chinese Environmental Scholars Forum, Houston, June 1, 2019
- 2019 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at WestLake University, Hangzhou, May 28, 2019.
- 2019 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Henan Normal University, Xinxiang, May 24, 2019.
- 2019 “Challenges in Using High Throughput Metagenomics Technologies for Microbiome Research”. Invited talk at Shandong University, Qingdao, May 22, 2019.
- 20-19 “Contemporary Microbial Ecology: Challenges and Opportunities”. Invited talk at Shandong University, Qingdao, March 11, 2019.
- 2019 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at China Agricultural University, Beijing, March 8, 2019.

- 2019 “Feedback Responses of Grassland Soil Microbial Communities to Climate Warming”. Invited talk at Zhejiang Univ, March, 2019.
- 2018 “Over 12 years low soil nitrogen accelerates CO₂ stimulation of soil respiration”. Invited talk at International Workshop on Cultivated Land Fertility and Enhanced Nutrient Use Efficiency: Theory and Technique, Nanjing, November 21, 2018.
- 2018 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at The 3rd Institute of Marine Sciences, Xiamen, November 19, 2018.
- 2018 “Stochastic Processes in microbial community diversity and assembly”. Invited talk at Zhejiang University, Hangzhou, November 16, 2018.
- 2018 “Challenges in Using High Throughput Metagenomics Technologies for Microbiome Research”. Invited talk at The 3rd Workshop on Marine Microbiology, The 2nd Institute of Marine Science, Hangzhou, 11-16-2018.
- 2018 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Guangzhou Academy of Agricultural Sciences, Guangzhou, November 13, 2018.
- 2018 “Challenges in Using High Throughput Metagenomics Technologies for Microbiome Research”. Invited talk at The 1st International Workshop on Theories and Techniques in Microbial Ecology, Guangzhou, 11-12-2018.
- 2018 “Global Wastewater Microbiome: Distribution and Biogeography”. Invited talk at 2018 Annual Microbial Ecology Meeting, Guangzhou, November 12, 2018.
- 2018 “Feedback Responses of Grassland Soil Microbial Communities to Climate Warming”. Invited talk at Microbes and Climate Change Workshop, September 17, 2018.
- 2018 “Sensing at Scale: Information Integration Across Scales For Prediction”. Invited talk at Microbiome Soil Sensors Workshop, La Jolla, August 23, 2018.
- 2018 “Microbial Functional Traits, Functional Diversity, and Ecosystem Functioning”. 2018 Ecological Society of America, New Orleans, August 8, 2018.
- 2018 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Chinese Academy of Agricultural Sciences, Beijing, July 16, 2018
- 2018 “Theoretical, Experimental and Computational Challenges in Microbiome Research”. East China Normal University, Shanghai, July 11, 2018
- 2018 “Feedback Responses of Grassland Soil Microbial Communities to Climate Warming”. Invited talk at Central South University, July 10, 2018.
- 2018 “Global Wastewater Microbiomes: Diversity and Biogeography”. Invited Talk at Graduate School at Shenzhen, Tsinghua University, Shenzhen, July 3, 2018.
- 2018 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at South University of Science and Technology, Shenzhen, July 3, 2018.
- 2018 “Global Water Microbiome Consortium (GWMC)”. Shandong University, Qingdao, June 25, 2018.
- 2018 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Institute of Tibetan Plateau Research, Chinese Academy of Sciences, Beijing, June 2, 2018
- 2018 “Global Wastewater Microbiomes: Diversity and Biogeography”. Invited talk at 2018 Sino-Micro Annual Meeting, Atlanta, GA, June 7, 2018.
- 2018 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Lanzhou University, Lanzhou, May 26, 2018.

- 2018 “Global Wastewater Microbiomes: Diversity and Biogeography”. Invited Key Note Talk at 255th ACS National Meeting & Exposition, New Orleans, LA, March 18_22, 2018.
- 2018 “Feedback Responses of Grassland Soil Microbial Communities to Climate Warming”. 2018 JGI User Meeting, San Francisco, March 15, 2018.
- 2018 “Theoretical, Experimental and Computational Challenges in Microbiome Research”. Invited talk at NSFC Workshop on Hydrosphere Microbiomes, Shenzhen, January 11, 2018.
- 2018 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Shandong University, Jinan, January 8, 2018.
- 2018 “Stochastic Processes in microbial community diversity and assembly”. Invited talk at Central South University, Changsha, January 5, 2018
- 2017 “Feedback Responses of Grassland Soil Microbial Communities to Climate Warming”. Invited talk at 2017 Annual Microbial Ecology Meeting, Beijing, October 20_23, 2017.
- 2017 “Challenges in Using High Throughput Metagenomics Technologies for Microbiome Research”. Invited talk at Workshop: Microbiome in Engineered System-- Methodologies, The 15th IWA World Conference on Anaerobic Digestion, Beijing, October 20, 2017.
- 2017 “Global Wastewater Microbiomes: Diversity and Biogeography”. Invited Key Note Talk at The 15th IWA World Conference on Anaerobic Digestion, Beijing, October 19, 2017.
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at China University of GeoSciences, Wuhan, October 16, 2017.
- 2017 “Microbial Functional Diversity Predicts Groundwater Contamination and Ecosystem Functioning”. Invited Key Note talk at International Workshop of Geomicrobiome: Subsurface Microbial Composition and Function and Microbial Interactions with Subsurface Environment, Wuhan, October 15, 2017.
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at SCION, Rotorua, New Zealand October 10, 2017
- 2017 “Microbial Feedbacks to Climate Change: Current Status, Challenges and Future Perspectives”. Invited talk at University of Auckland, Public Seminar, October 9, 2017.
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Agresearch, Lincoln Research Center, Lincoln, New Zealand October 5, 2017
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at University of Auckland, Auckland, New Zealand, October 2, 2017.
- 2017 “Development and Applications of High Throughput Metagenomics Technologies to Marine Biogeochemistry”. Invited talk at The North Pacific Marine Science Organization (PICES)-2017 Annual Meeting, Vladivostok, Russia September 26 2017.
- 2017 “Development and Applications of High Throughput Metagenomics Technologies to Marine Biogeochemistry”. Invited talk at The 1st Yanqi Lake International Conference on Climate Change and Ocean Carbon Sequestration, Yanqi Lake, September 22 2017.
- 2017 “Global Diversity and Biogeography of Bacterial and Eukaryotic Communities in

- Wastewater Treatment Bioprocesses”. Invited talk at Joint Meeting of the 9th ANRRC International Meeting and International Microbiome Workshop | Beijing | 9-21-2017.
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at University of South Dakota, Vermillion, SD, September 11, 2017
- 2017 “An integrated framework for quantifying ecological processes underlying microbial community assembly”. Invited talk at ESA annual meeting | Portland, OR, USA | August 7, 2017
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Nanjing University, Nanjing, July 11, 2017.
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at East China Normal University, Shanghai, July 10, 2017.
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at East China University of Science & Technology, Shanghai, July 9, 2017
- 2017 “Stochastic Processes in microbial community diversity and assembly”. Invited talk at the Workshop on Aquatic Biodiversity, Ecosystem Services and Environmental Safety, Zhejiang University, Zhoushan, July 8, 2017.
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at South China Agricultural University, Guangzhou, July 5, 2017.
- 2017 “Microbial Functional Diversity Predicts Groundwater Contamination and Ecosystem Functioning”. Invited talk at Frontiers in Earth Science, International Professionals for the Advancement of Chinese Earth Sciences (IPACES), South University of Science and Technology of China, Shenzhen, July 1, 2017.
- 2017 “Stochastic Processes in microbial community diversity and assembly”. Invited talk at Sichun University, Chengdu, June 27, 2017.
- 2017 “Precipitation mediates the feedback responses of microbial communities to climate warming”. Invited talk at ASM Microbe 2017, June 1–5, 2017, New Orleans, LA.
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”, Invited talk at King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia, May 3, 2017.
- 2017 “Functional Genomics Studies of *Clostridium cellulolyticum* for Lignocellulose Bioconversion”, Keynote talk at Biofuels and Bioenergy, April 27-28, 2017 Dubai, UAE
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”, Invited talk at China University of Science & Technology, Hefei, April 17, 2017
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”, Invited talk at Huazhong Agricultural University, Wuhan, April 16, 2017
- 2017 “High Throughout Metagenomic Technologies for Microbiome Studies”, Invited talk at Central South University of Forestry and Technology, Changsha, April 15, 2017.
- 2017 “Microbial Ecology in Genomics Era: Challenges and Opportunities”, Invited talk at National University of Singapore, Singapore, April 7, 2017
- 2016 “Functional Gene Arrays-based Metagenomic Technologies for Microbiome Studies”. An invited talk at Hohai University, Nanjing, December 18, 2016.
- 2016 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk at Marine College, Zhejiang University, Zhoushan, November 7, 2016

- 2016 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk at Life Science College, Zhejiang University, Hangzhou, November 4, 2016
- 2016 “Experimental and Computational Challenges in Microbiome Research”. An invited talk at Southern Medical University, Guangzhou, November 1, 2016.
- 2016 “Functional Gene Arrays-based Metagenomic Technologies for Microbiome Studies”. An invited talk at BGI, Shenzhen, October 31, 2016.
- 2016 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk at Graduate School at Shenzhen, Tsinghua University, Shenzhen, October 31, 2016.
- 2016 “Experimental and Computational Challenges in Microbiome Research”. An invited talk at Annual Microbial Ecology Conference, Xiamen October 28, 2016.
- 2016 “Experimental and Computational Challenges in Microbiome Research”. An invited talk at Microbiome Workshop organized by Oklahoma State University, The Samuel Roberts Noble Foundation October 7, 2016
- 2016 “High Throughput Technologies for Microbial Community Analyses: Challenges and Future Perspectives”. An invited talk at Zhongshan University, Guangzhou, September 30, 2016.
- 2016 “Microbial Feedbacks Mediates Vulnerability of Permafrost Carbon to Climate Warming”. An invited talk at CSH-Asia, Microbiology & The Environment, Suzhou, September 29, 2016.
- 2016 “Recent Advances in Developing High Throughput Technologies for Microbial Community Analyses”. Denmark Technological University, October 30, 2016.
- 2016 “Global Water Microbiome Consortium (GWMC): Its Recent Efforts, and Technological Challenges. A talk at IWA Microbial Ecology in Water Engineering & Biofilms, MEWE2016, Copenhagen, Denmark, September 4-7, 2016.
- 2016 “Temperature Mediates Continental-Scale Diversity of Microbes in Forest Soils”. A talk at ISME-16, Montreal, Canada, August 25, 2016.
- 2016 “Microbial Feedbacks Climate Warming: Positive or Negative?”. A talk at the Roundtable Session on Microbial Feedbacks to Climate Change: Current Status, Challenges and Future Perspectives, ISME-16, Montreal, Canada, August 22, 2016
- 2016 “Warming enhances decomposition of organic carbon in subsoil”. An invited talk at 101th ESA Annual Meeting, FT Lauderdale, August 11, 2016.
- 2016 “Interactive effects of warming, altered precipitation and clipping on grassland microbial communities”. An invited talk at 101th ESA Annual Meeting, FT Lauderdale, August 11, 2016.
- 2016 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk at Xiamen University, Xiamen, July 15, 2016.
- 2016 “Microbial Feedbacks Mediates Vulnerability of Permafrost Carbon to Climate Warming”. An invited talk at Microbial Ecology Workshop, Nanjing Institute of Soil Sciences, July 13, 2016.
- 2016 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk at South China Sea Institute of Oceanology, Guangzhou, July 11, 2016.

- 2016 “Microbial Functional Diversity Predicts Groundwater Contamination and Ecosystem Functioning”. Summit on Environmental Microbiology, Water Ecology and Health, Guangdong Institute of Microbiology, Guangzhou, July 10, 2016.
- 2016 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk at Hunan Academy of Agricultural Sciences, Changsha, Hunan, July 6, 2016.
- 2016 “Road to Science: From a Country Boy to a Chaired Professor”. An invited talk at Institute of Subtropical Agriculture, CAS, Changsha, Hunan, July 7, 2016.
- 2016 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk at Institute of Subtropical Agriculture, CAS, Changsha, Hunan, July 6, 2016.
- 2016 “Microbial Network Ecology: Current Status, Challenges and Future Perspectives”. An invited talk at Sichun University, June 29, 2016.
- 2016 “Recent Advances at IEG”. A talk at IEG Alumni Meeting, Tsinghua University, June 27, 2016.
- 2016 “Microbial Network Ecology: Current Status, Challenges and Future Perspectives”. An invited talk at Oak Ridge National Laboratory, June 23, 2016.
- 2016 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk in BioEPIC (Biological and Environmental Program Integration Center) Seminar Series, Lawrence Berkeley National Laboratory, May 11, 2016
- 2016 “Microbial Functional Diversity Predicts Groundwater Contamination and Ecosystem Functioning”. Talk at Nanyang Technological University, Singapore, May 5, 2016.
- 2016 “Microbial Feedbacks Mediates Vulnerability of Permafrost Carbon to Climate Warming”. Talk at Nanyang Technological University, Singapore, April 28, 2016.
- 2015 “Microbial Functional Diversity: Does It Matter To Ecosystem Functioning?” Talk at Nanyang Technological University, Singapore, November 25, 2015.
- 2015 “How to Prepare Publications to High Profile Broader Scientific Journals: Some Tips”. An invited talk at Nanyang Technological University, Singapore, November 12, 2015.
- 2015 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Zhongshan University, Guangzhou, November 5, 2015.
- 2015 “Global Water Microbiome Consortium (GWMC)”. Invited talk at The 4th International Conference on Environmental Simulation and Pollution Control Beijing, China, November 2, 2015.
- 2015 “Recent Advances in Developing High Throughput Technologies for Microbial Community Analyses”. Invited talk at Sichun University, October 30, 2015.
- 2015 “Microbial Functional Diversity: Does It Matter To Ecosystem Functioning?”. Invited talk at Frontiers in Soil Microbiology, Beijing, October 26th, 2015.
- 2015 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Kunming University of Science and Technology, Kunming, October 22, 2015.
- 2015 “Feedback Responses of Soil Microbial Communities to Climate Warming”. An invited talk at 2015 ESA Annual Meeting, Baltimore, MD, August 12, 2015 (Given by Cong Wang)
- 2015 “Microbial Functional Diversity: Does It Matter To Ecosystem Functioning?” An invited talk at 2015 Annual Meeting on Microbial Ecology, Daqing, July 25th, 2015 (Given by Yunfeng Yang).

- 2015 “From Community Structure to Functions: GeoChip-based Metagenomics Technology”. An invited talk at Nanyang Technological University, Singapore, June 25, 2015.
- 2015 “Metagenomics: Current Status, Challenges, and Future Perspectives”. An invited talk at Nanyang Technology University, Singapore, June 23, 2015.
- 2015 “Road to Success: From a Country Boy to a Chaired Professor”. School of Environment, Tsinghua University, Beijing, June 12, 2015.
- 2015 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk at Shandong University, Jinan, June 11, 2015.
- 2015 “Microbial Genomics, Genomics Technologies, and Environmental Applications”. OU Day, Tsinghua University, Beijing, June 9, 2015.
- 2015 “High Throughput Metagenomic Technologies for Microbial Community Analysis: Current Status, Challenges and Future Perspectives”. Invited talk at Peking University, Beijing, March 20, 2015.
- 2015 “Microbial Functional Diversity: Does It Matter To Ecosystem Functioning?”. Invited talk at The 3rd Conference on Biogeochemistry, Wuhan Geological University, Wuhan, March 18, 2015.
- 2015 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Shanghai Jiaotong University, Shanghai, March 16, 2015.
- 2014 “Metagenomics-Enabled Understanding of Soil Microbial Feedbacks to Climate Warming”. Invited talk at The 47th American Geological Union Annual Fall Meeting, San Francisco, CA, December 15- 19, 2014
- 2014 “From Macroecology to Microecology: Ten Lessons Learned from JMT”. The Jim Tiedje Family Reunion in China, Beijing, October 26, 2014
- 2014 “Stochastic Processes in microbial community assembly and Succession”. Invited talk at 2014 Annual Microbial Ecology, Beijing, October 26, 2014
- 2014 “High Throughput Metagenomic Technologies for Microbial Community Analysis: Current Status, Challenges and Future Perspectives”. Invited talk at Environmental Forum, Tsinghua University, Beijing, October 25, 2014.
- 2014 “How to Prepare Publications to High Profile Broader Scientific Journals”. Invited talk at the Writing Workshop, Annual Microbial Ecology Meeting, Beijing, October 25, 2014.
- 2014 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Nanjing Institute of Geography & Limnology, Nanjing, October 24, 2014.
- 2014 “High Throughput Metagenomic Technologies for Microbial Community Analysis: Current Status, Challenges and Future Perspectives”. Invited talk at Hunan Academy of Agricultural Sciences, Changsha, October 22, 2014.
- 2014 “High Throughput Metagenomic Technologies for Microbial Community Analysis”. Invited talk at The 2nd Forum on Microbial Ecology and Ocean Environment, Ningbo University, Ningbo, October 17, 2014.
- 2014 “Grand Computational Challenges in the Metagenomics Era: A Biologist’s View”. Invited talk at Univ of Southern California, Los Angelis, October 2, 2014
- 2014 “Global Water Microbiome Consortium (GWMC)”, Invited talk at The IWA World Water Congress, Lisbon, Portugal, September 24, 2014

- 2014 “Global Water Microbiome Consortium (GWMC)”, Roundtable Discussion at Microbial Ecology in Water Engineering Session, The IWA World Water Congress, Lisbon, Portugal, September 22, 2014
- 2014 “Road to Success: From a Country Boy to a Chaired Professor”. Talk to senior undergraduate and graduate students at Tsinghua University, September 9, 2014
- 2014 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk at Hunan Agricultural University, Changsha, September 4, 2014.
- 2014 “Microbial Network Ecology: Current Status, Challenges and Future Perspectives”. An invited talk at ISME-15, Seoul, South Korea, August 24-29, 2014
- 2014 “Challenges in Linking Microbial Biodiversity to Ecosystem Functioning”. An invited talk at 2014 ESA Annual Meeting, Sacramento, CA, August 12, 2014.
- 2014 “Challenges in Linking Microbial Biodiversity to Ecosystem Functioning”. An invited talk at 2014 ESA Annual Meeting, Sacramento, CA, August 12, 2014.
- 2014 “Succession, Stability and Mechanisms of Microbial Communities in Anaerobic Digestion Reactors”. An invited talk at Science Summit on Urban Water, and IWA International Workshop on Resource Recovery from Wastewater/Biosolids, Harbin, China, July 13-16, 2014.
- 2014 “High Throughput Metagenomic Technologies for Soil Microbial Community Analysis”. An invited talk at Nanjing Institute of Soil Sciences, July 10, 2014.
- 2014 “Ecosystem Manipulation: MEC?” Talk at Xiamen University, Xiamen, July 8, 2014.
- 2014 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk at International Symposium on Microbiology in the Omics Era, Chongqing, China, June 30, 2014.
- 2014 “Feedback Responses of Soil Microbial Communities to Climate Warming”. An invited talk at 114th General Meeting | American Society for Microbiology, Boston, MA, May 17 - 20, 2014.
- 2014 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. An invited talk at Department of Civil and Environmental Engineering, University of California at Berkeley, Berkeley, March 21, 2014.
- 2014 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. A talk at Department of Environmental Science, Policy and Management, University of California at Berkeley, Berkeley, February 19, 2014.
- 2014 “From Community Structure to Functions: Linking Metagenomics to Single Cell Analysis”. Invited talk at Symposium on Advanced Single Cell Biotechnology, University of Sheffield, Sheffield, UK, February 14, 2014
- 2013 “Metagenomic insights of microbial feedbacks to Climate Warming”. Invited talk at American Geophysical Union’s 46th annual Fall Meeting, San Francisco, December 13, 2013.
- 2013 “Recent Development of Metagenomics Technologies Available To Environmental Sciences And Engineering”. Stanford University, EES, Stanford, November 22, 2013.
- 2013 “High Throughput Metagenomic Technologies for Microbial Community Analysis: Current Status, Challenges and Future Perspectives”. Tsinghua University, Beijing, November 19 2013

- 2013 “Temperature-dependent latitudinal microbial diversity in forest soils”. Invited Keynote talk at Annual Microbial Ecology Meeting, Chengdu, November 16, 2013
- 2013 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at University of Hong Kong, Hong Kong, November 8, 2013.
- 2013 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited Keynote talk at The 3rd International Conference on Environmental Simulation and Pollution Control, Beijing, November 7, 2013.
- 2013 “Grand Computational Challenges in the Metagenomics Era: A Biologist’s View”. Invited talk at National Tsinghua Univ, Hsingchu, Taiwan, November 5, 2013.
- 2013 “High Throughput Metagenomic Technologies for Microbial Community Analysis”. Invited talk at National Cheng Kung University, Tainan, Taiwan, November 4, 2013.
- 2013 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited Keynote talk at The 5th Taiwan-Korea-Japan International Symposium on Microbial Ecology, Taipei, Taiwan, November 1, 2013.
- 2013 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Nanyang Technology University, Singapore, September 23, 2013.
- 2013 “Recent Advances in Developing High Throughput Technologies for Microbial Community Analyses”. Invited talk at Nanyang Technology University, Singapore, September 23, 2013.
- 2013 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at DOE Joint Genome Institute, Walnut Creek, CA, August 22, 2013.
- 2013 “Stochastic assembly leads to alternative communities with distinct functions”. Invited talk at The 98th ESA Annual Meeting, Minneapolis, MN, August 7, 2013
- 2013 “Stochasticity, Succession and Ecosystem Characteristics”. Invited talk at The 98th ESA Annual Meeting, Minneapolis, MN, August 6, 2013
- 2013 “Recent Advances in Developing High Throughput Technologies for Microbial Community Analyses”. Invited talk at Sichun University, Chengdu, China, July 23, 2013
- 2013 “Recent Advances in Developing High Throughput Technologies for Microbial Community Analyses”. Invited talk at Xiamen University, Xiamen, China, July 18, 2013
- 2013 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Cruise Lectures Under the Visiting Speaker Program (VSP) organized by Australian Society for Microbiology, University of Western Sydney, Penrith South, NSW, Australia, July 12, 2013.
- 2013 “High Throughput Metagenomic Technologies for Microbial Community Analysis”. Cruise Lectures Under the Visiting Speaker Program (VSP) organized by Australian Society for Microbiology, CSIRO Ecosystem Sciences, Glen Osmond, SA, Australia, July 11, 2013.
- 2013 “Metagenomic insights of microbial feedbacks to elevated CO₂”. Invited keynote talk at Australian Society for Microbiology Annual Meeting, Adelaide, Australia, July 10, 2013.
- 2013 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Cruise Lectures Under the Visiting Speaker Program (VSP) organized by Australian Society for Microbiology, University of Queensland, Brisbane, Australia, July 5, 2013.

- 2013 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Cruise Lectures Under the Visiting Speaker Program (VSP) organized by Australian Society for Microbiology, University of Sydney, Sydney, Australia, July 3, 2013.
- 2013 “High Throughput Metagenomic Technologies for Microbial Community Analysis”. Cruise Lectures Under the Visiting Speaker Program (VSP) organized by Australian Society for Microbiology, University of New South Wales, Sydney, July 1, 2013.
- 2013 “Recent Advances in Developing High Throughput Technologies for Microbial Community Analyses”. Invited talk at US-China Collaborative Research on Geomicrobiological Processes in Extreme Environments, Yunnan University, Kunming, June 30, 2013.
- 2013 “GeoChip Development and Applications”. Invited Keynote talk at 12th International Symposium on the Genetics of Industrial Microorganisms, Cancun, Mexico, June 26, 2013
- 2013 “Tracking Community Functions with Functional Gene Arrays”. Invited talk at Marshfield Clinic Research Foundation, Marshfield, WI, May 23, 2013
- 2013 “High Throughput Metagenomic Technologies for Microbial Community Analysis”. Invited talk at Marshfield Clinic Research Foundation, Marshfield, WI, May 22, 2013
- 2013 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited talk at Michigan State University, East Lansing, MI, April 1, 2013
- 2013 “Recent Advances in Developing High Throughput Technologies for Microbial Community Analyses”. Invited talk at China Agricultural University, Beijing, China, March 6, 2013
- 2013 “Feedback Responses of Soil Microbial Communities to Climate Warming”. Invited talk in 2013 DOE Genomic Science Meeting, Washington DC, February 24-27, 2013
- 2013 “Responses of Microbial Communities to Oil Spill and Chemical Dispersant”. Invited talk at Gulf of Mexico Oil Spill and Ecosystem Science Conference, January 22, 2013.
- 2013 “From Community Structure to Functions: Metagenomics Technologies, Current Status, Challenges and Future Perspectives”. Invited talk at Institute of Applied Ecology, Shenyang, January 7, 2013.
- 2013 “Recent Advances in Developing High Throughput Technologies for Microbial Community Analyses”. Invited talk at Harbin Institute of Technology, Harbin, January 4, 2013.
- 2012 “Grand Computational Challenges in the Metagenomics Era: A Biologist’s View”. Invited talk at Computer Sciences, Zhongshan Univ, Guangzhou, December 31, 2012
- 2012 “From Community Structure to Functions: Metagenomics Technologies, Current Status, Challenges and Future Perspectives”. Invited talk at College of Life Sciences, Zhongshan University, Guangzhou, December 30, 2012
- 2012 “Recent Advances in Developing High Throughput Technologies for Microbial Community Analyses”. Invited talk at Central South University, Changsha, December 26, 2012.
- 2012 “High Throughput Metagenomics Technologies for Microbial Community Analysis”. Invited talk at Sichun University, Chengdu, December 24, 2012

- 2012 “Molecular Ecological Network”. Invited talk at Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Berlin, Germany, December 3, 2012
- 2012 “From Community Structure to Functions: Metagenomics Technologies, Current Status, Challenges and Future Perspectives”. Invited talk at Department of Civil and Environmental Engineering, Rice University, Houston, TX, November 26, 2012.
- 2012 “From Community Structure to Functions: Metagenomics Technologies, Current Status, Challenges and Future Perspectives”. Invited talk at Department of Civil and Environmental Engineering, UCLA, Los Angeles, November 6, 2012.
- 2012 “New Methods and Technologies for Soil Biology”. Invited talk at the Forum on Soil Biology organized by Chinese Academy of Sciences, November 5, 2012.
- 2012 “Recent Advances in High Throughput Technologies for Microbial Community Analyses”. Plenary talk at International Workshop on Agricultural Resource Utilization and Soil Quality Improvement, Nanjing Agriculture University, Nanjing, October 29, 2012.
- 2012 “From Community Structure to Functions: Metagenomics Technologies, Current Status, Challenges and Future Perspectives”. Plenary talk at ISABE2012, Proceedings of 2012 International Symposium on Advanced Biological Engineering, Guilin, China, October 27, 2012.
- 2012 “Microbial Gene Functions Enriched in the Deep-Sea Oil Plume”. An invited talk at The 3rd International Workshop on Deep-Sea Microbiology, Shanghai, October 26, 2012.
- 2012 “Molecular Ecological Network In Response To Elevated Carbon Dioxide”. An invited at ASA-CSSA-SSSA, 2012 International Annual Meetings, Cincinnati, OH, October 22, 2012.
- 2012 “From Community Structure to Functions: GeoChip-based High throughput Metagenomic Technologies and their Applications”. An invited talk at Memorial Sloan Kettering Cancer Center, New York, October 2, 2012.
- 2012 “From Macroecology to Microecology: Grand Challenges and Future Perspectives”. Invited talk The 77th Shuangqing Forum on Earth Microbiomes sponsored by Chinese National Sciences Foundation, Guiyang, August 26, 2012
- 2012 “Microbial Network Ecology: Current Status, Challenges and Future Perspectives”. Invited talk at the Roundtable Session on Microbial Network Ecology: Deciphering complex interactions in microbial communities, ISME-14, Copenhagen, Denmark, August 20, 2012
- 2012 “Long-term elevated CO₂ decreases microbial biodiversity in a grassland ecosystem as revealed by metagenomics sequencing”. Invited talk at Society of Industrial Microbiology, Washington DC, August 13, 2012
- 2012 “From Community Structure to Function: Metagenomics-Enabled Predictive Understanding of Microbial Communities to Climate Warming at the Temperate Grassland Ecosystems in Oklahoma”. Talk at The 97th ESA Annual Meeting, Portland, OR, August 6, 2012
- 2012 “From Macroecology to Microecology: Grand Challenges and Future Perspectives”. Invited talk at Special Session: "Earth Stewardship: Exploring Connections Between Microecology and Macroecology", The 97th ESA Annual Meeting, Portland, OR, August 6, 2012

- 2012 “High Throughput Metagenomics Technologies for Microbial Community Analysis”. Invited talk at Xiamen Institute of Urban and Environment, Chinese Academy of Sciences, Xiamen, August 3, 2012
- 2012 “High Throughput Metagenomics Technologies for Microbial Community Analysis”. Invited talk at West China College of Stomatology, Sichun University, August 2, 2012
- 2012 “High Throughput Metagenomics Technologies for Microbial Community Analysis”. Invited talk at Northeast Institute of Geography and Agricultural Ecology, Chinese Academy of Sciences, Harbin, July 30, 2012
- 2012 “Molecular Ecological Networks”. Invited talk at Harbin Institute of Technology, Harbin, China, July 28, 2012
- 2012 “High Throughput Metagenomics Technologies for Microbial Community Analysis”. Invited talk at Harbin Institute of Technology, Harbin, China, July 28, 2012
- 2012 “Grand Challenges and Opportunities of Microbial Ecology in MetaGenomics Era”. Invited Plenary talk at Microbial Ecology Annual Meeting, Shenyang, China, July 26, 2012.
- 2012 “High Throughput Metagenomics Technologies for Microbial Community Analysis”. Invited talk at Eco-Environmental Research Center, Chinese Academy of Sciences, Beijing, July 23, 2012.
- 2012 “Soil microbial community responses to global warming”. Invited talk at Forum on Environmental Microbiology and Bioenergy, Lanzhou, July 16, 2012.
- 2012 “High Throughput Metagenomics Technologies for Microbial Ecology and Biogeochemical Sciences”. Invited talk at Max-Planck-Institute for Terrestrial Microbiology, Marburg, Germany, June 27, 2012.
- 2012 “Molecular Ecological Networks”. Invited talk at University of Florence, Florence, Italy, June 22, 2012
- 2012 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at University of Florence, Florence, Italy, June 22, 2012
- 2012 “High Throughput Metagenomics Technologies for Studying Microbiomes”. Invited talks at Sino-Micro Symposium 2012, San Francisco, June 16, 2012
- 2012 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at the Institute of Marine and Environmental Technology, University System of Maryland, Baltimore, May 31, 2012
- 2012 “GeoChip: Development, Applications, and Future Perspectives”. Invited talk at Xiamen University, Xiamen, May 14, 2012.
- 2012 “Road to Success: From a Country Boy to a Professional Professor”, Invited talk at School of Environment for undergraduate students, Central South University, Changsha, May 14, 2012.
- 2012 “Current Status And Challenges Of Soil Metagenomics Related To Climate Warming”. Invited talk at Institute of Tibetan Plateau Research, Chinese Academy of Sciences, Beijing, May 11, 2012.
- 2012 “High Throughput Metagenomics Technologies For BiogeoSciences”. Invited talk at Institute of Hydrogeology and Environmental Geology, Chinese Academy of Geological Sciences, May 9, 2012.

- 2012 “Road to Success: From a Country Boy to a Professional Professor ”, Invited talk at School of Environment for undergraduate students, Tsinghua University, Beijing, May 7, 2012.
- 2012 “Current Status of Soil Metagenomics”, Invited talk at Soil Biology Forum, Chinese Academy of Sciences, Beijing, May 6, 2012
- 2012 “Systems Microbiology: From Genomes to Ecosystems”. Invited talk at University of Alberta, Edmonton, AB, Canada, April 5, 2012.
- 2012 “Comparison Of Metagenomics Technologies To Profile Microbial Community Structure”. Invited talk at University of Alberta, Edmonton, AB, Canada, April 4, 2012.
- 2012 “From Community Structure to Functions: Metagenomics Technologies, Current Status, Challenges and Future Perspectives”. Invited talk at Pennsylvania State University, University Park, PA, March 30, 2012.
- 2012 “From Community Structure to Functions: Metagenomics Technologies, Current Status, Challenges and Future Perspectives”. Invited talk at Stanford University, Stanford, CA, March 20, 2012.
- 2012 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Carnegie Institution for Science, Stanford, CA, March 19, 2012.
- 2012 “From Community Structure to Functions: Metagenomics Technologies, Current Status, Challenges and Future Perspectives”. Invited talk at University of Tennessee, Knoxville, TN, February 24, 2012.
- 2011 “Stochastic Assembly Mediates the Responses of Microbial Communities to Environmental Perturbations”. Invited talk at 2011 Annual Meeting and International Symposium on Microbial Ecology, Nanjing, December 29, 2011
- 2011 “From Community Structure to Functions: Metagenomics Technologies, Current Status, Challenges and Future Perspectives”. Invited talk at Beijing Normal University, Beijing, December 21, 2011.
- 2011 “Metagenomics Technologies for Microbial Community Analysis: Current Status, Challenges And Future Perspectives”. Invited talk at Tsinghua University, Beijing, December 20, 2011.
- 2011 “Microbial Functional Responses and Feedbacks to Global Climate Change”. Invited talk at Nanjing Institute of Geography and Limnology, Chinese Academy of Science, Nanjing, December 19, 2011.
- 2011 “From Structure to Functions Metagenomics Technologies: Current Status, Challenges And Future Perspectives”. Invited talk at the 18th Forum on Terrestrial and Ocean Carbon Dynamics, Chinese Association of Sciences and Technologies, Sanya, December 15, 2011
- 2011 “Tracking Ecosystem Functions With GeoChip: Current Status, Challenges And Future Perspectives”. Invited talk at the 2nd World Congress on Biotechnology, Philadelphia, November 30, 2011.
- 2011 “Systems Microbiology: From Genomes to Ecosystems”. Invited talk at The 14th Annual Conference on Environmental Microbiology, Xiamen, November 26, 2011.
- 2011 “High Throughput Metagenomics Technologies for Analyzing Microbial Community structure”. Invited talk at Tsinghua University, Beijing, China, November 23, 2011”

- 2011 “Comparison of metagenomics technologies to profile soil microbial community structure”. Invited talk at 2011 International Conference on Soil Omics (ICSO)-Nanjing, November 20, 2011.
- 2011 “Tracking Ecosystem Functions With GeoChip: Current Status, Challenges And Future Perspectives”, Invited talk at 2011 International Conference on Soil Omics (ICSO)-Nanjing, November 20, 2011.
- 2011 “From Macroecology to Microecology: Lessons Learned from JMT”. Invited talk at The Jim Tiedje Symposium on Microbial Genomics and Ecology, East Lansing, MI, October 29, 2011.
- 2011 “Molecular Ecological Network in Response to Elevated CO₂”. Invited talk at The 3rd Soil Metagenomics Workshop, Bloomingdale, IL October 7, 2011.
- 2011 “Grand Computational Challenges in the Metagenomics Era: A Biologist’s View”. Invited talk at Tsinghua National Laboratory for Information Sciences and Technologies (TNLIST), Beijing, September 22, 2011.
- 2011 “High Throughput Metagenomics Technologies for Soil Microbial Communities”. Invited talk at Chinese Academy of Agricultural Sciences, Beijing, China, September 22, 2011.
- 2011 “GeoChip-Based Metagenomics Analysis Of A Field Bioremediation Pilot Experiments In Zambia”, Invited talk at the 19th International Biohydrometallurgy Symposium, Changsha, China, September 17-25, 2011.
- 2011 “High Throughput Metagenomics Technology For Bioenergy And Environmental Protection”, Invited talk at Changzhou Science and Technology Center, Changzhou, China, September 18, 2011
- 2011 “BioTechnologies For Biomedicine, Bioenergy And Environmental Protection”, Invited talk at 2011 Qianren Plan Meeting, Wuxi, China, September 16, 2011
- 2011 “Tracking ecosystem functions with GeoChip: Current Status, Challenges and Future Perspectives”, Invited talk at the 96th ESA Annual Meeting, Austin, TX, August 7-12, 2011.
- 2011 “High Throughput Metagenomics Technologies for Biogeochemical Sciences”, Invited talk at China-US Collaborative Research on Tibetan Lake Ecology, Xining, China, August 2, 2011
- 2011 “Molecular Ecological Network”, Invited talk at Xiamen University, Xiamen, August 1, 2011
- 2011 “Tracking the impacts of arsenic contamination on soil microbial communities with GeoChip”, Invited talk at SIM Annual Meeting, New Orleans, LA, July 28, 2011
- 2011 “Comparison of metagenomics technologies to differentiate the effects of elevated CO₂ on soil microbial communities”, Invited talk at SIM Annual Meeting, New Orleans, LA, July 26, 2011
- 2011 “Genomics and Bioenergy”, Invited talk at International Workshop on Application and Optimization of Methane Production under Drought Condition, Lanzhou University, Lanzhou, China, July 11, 2011.
- 2011 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Lanzhou University, Lanzhou, China, July 7, 2011.
- 2011 “High Throughput Metagenomics Technologies for Marine Biogeochemistry”, Invited talk at The 2nd International Ocean Sciences Summer School & PhD Forum, Xiamen, July 5, 2011

- 2011 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Earth Science Center, Tsinghua University, Beijing, China, June 29, 2011.
- 2011 “High Throughput Metagenomics Technology For Bioenergy And Environmental Protection”, Invited talk at 2011 Conference on Oversea Chinese Pioneering and Developing, Wuhan, China, June 26_28, 2011.
- 2011 “Biogeographic Patterns of Microbial Communities from Different Oil-Contaminated Fields in China”, Invited talk at International Symposium on Applied Microbiology and Molecular Biology in Oil Systems (ISMOS), Calgary, Canada, June 14, 2011.
- 2011 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at University of Science and Technology Beijing, Beijing, China, June 3, 2011.
- 2011 “GeoChip: A High Throughput Technology for Linking Microbial Community Structure to Functions”, Invited talk at Beijing National Engineering Research Center for Biochip Technology, Beijing, China, May 31, 2011.
- 2011 “Tracking Biogeochemical Functions with GeoChip: Current Status, Challenges, and Future Perspectives”, Invited talk at China University of GeoSciences, Wuhan, China, May 29, 2011.
- 2011 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at China Ocean University, Qingdao, China, May 28, 2011.
- 2011 “Microbial Conversion Of Lignocellulosic Biomass To Biofuels”, Invited talk at The Fifth China Summit Forum on Industrial Biotechnology Development, Qingdao, China, May 25-27, 2011
- 2011 “Tracking Community Functions with GeoChip: Current Status, Challenges, and Future Perspectives”, Invited talk at International Symposium of Microbial Biofilm, Chengdu, China, April 6-8, 2011
- 2011 “Road to Success: From a Country Boy to a Professional Professor”, Invited talk to Junior Undergraduate student, School of Environment, Tsinghua University, March 29, 2011.
- 2011 “GeoChip-Based Metagenomics Insights Of Microbial Communities In Response To BP Oil Spill”. Invited talk at University of Arkansas at Pine Bluff, Pine Bluff, AR, February 22, 2011.
- 2011 “GeoChip-based Metagenomics Technologies for Monitoring Carbon Cycling Processes”. Invited talk at ASLO (American Society of Liminology and Oceanography) Emerging Issues Workshop and The 2nd Meeting of SCOR (Scientific Committee for Oceanic Research, International Council for Science) WG134, San Juan, Puerto Rico, February 18-21, 2011.
- 2011 “Metagenomic Analysis of the Feedback Responses of Soil Microbial Communities to Elevated CO₂”, Invited talk at Microbial Genome Sequencing and Microbial Observatories Programs Awardee Workshop, Plant & Animal Genome XIX, San Diego, CA, January 15-19, 2011.
- 2010 “High Throughput Metagenomics Technologies for Biogeosciences”, Invited talk at China University of Geosciences, Beijing, China, December 23, 2010.
- 2010 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Shandong University, Jinnan, China, December 13, 2010.
- 2010 “From Community Structure to Functions: GeoChip Development and Applications”. Talk at Soils Metagenomics, Braunschweig, Germany, December 8-

- 11, 2010
- 2010 “Metagenomics Insights of The Effects of Long-term Fertilization on Microbial Community Functional Structure”. Invited talk at Argonne Soils Metagenomics Workshop, Argonne, IL, October 7, 2010
- 2010 “Recent Advances in Microbial Metagenomics”, Invited talk at Central South University, Changsha, September 28, 2010.
- 2010 “High Throughput Metagenomics Technologies for Microbial Community Analysis”, Invited plenary talk at Microbial Metagenomics Workshop, Yonsei University, Seoul, South Korea, September 27, 2010.
- 2010 “Applications of Metagenomics Technologies to Environmental Sciences and Engineering”. Invited talk at Academic Salon on Environmental Sciences and Engineering, Tsinghua Univ, Beijing, September 25, 2010.
- 2010 “Microbial Mediation of Carbon Cycle Feedbacks to Climate Change”. Invited plenary talk at China-US 2010 Joint Symposium: “Energy, Ecosystem, and Environmental Change (E³C), Beijing, September 22-24, 2010.
- 2010 “Rapid Genome Evolution and Adaptation to Salt Selection”. The 18th International Conference on Microbial Genomes. Lake Arrowhead, CA, September 12-16, 2010.
- 2010 “GeoChip and BP Oil Spill”. Departmental Seminar, Department of Botany and Microbiology, University of Oklahoma, Norman, OK. September 9, 2010.
- 2010 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Washington State University, Pullman, WA, August 25, 2010.
- 2010 “Promoting collaboration between American Society of Microbiology and Chinese Society of Microbiology”. Ambassador Meeting for International Symposium on Microbial Ecology, Seattle, WA, August 23, 2010
- 2010 “Linking community structure to functions: Approaches, Problems Challenges, and Strategies”. Roundtable talk at The 13th International Symposium on Microbial Ecology, Seattle, WA, August 23, 2010.
- 2010 “Microbial Mediation of Carbon Cycle Feedbacks to Climate Warming”. Invited talk at The 13th International Symposium on Microbial Ecology, Seattle, WA, August 23, 2010.
- 2010 “Applications of Metagenomics Technologies to Environmental Sciences and Engineering”. Invited keynote talk at Workshop on Key Issues in Environmental Sciences, Harbin, China, August 16-17, 2010.
- 2010 “Metagenomic Insights of microbial Communities in Response to Climate Change”. Invited keynote talk at 2010 Annual Meeting on Microbial Ecology, Harbin, China, August 12-13, 2010.
- 2010 “Systems Microbiology: From Genomes to Ecosystems”. Invited talk at South China Sea Institute of Oceanography (SCSIO), Guangzhou, China, July 8, 2010.
- 2010 “GeoChip: A High Throughput Metagenomics Technology for Characterizing Microbial Functional Community Structure”. Invited talk at Guangdong Institute of Microbiology, Guangzhou, China, July 8, 2010.
- 2010 “Systems Microbiology: From Genomes to Ecosystems”. Invited talk at Zhongshan University, Guangzhou, China, July 7, 2010
- 2010 “Rapid Genome Evolution and Adaptation to Salt Stress”. Invited talk at Halophiles 2010, 9th International Conference on Halophilic Microorganisms, Beijing, China, June 29-July 3, 2010

- 2010 “GeoChip: A High Throughput Metagenomics Technology for Characterizing Microbial Functional Community Structure”. Invited talk at Deep Sea Research and Earth Systems Science Symposium, Tonji University, Shanghai, June 29, 2010.
- 2010 “Genomic Insights of Bacterial Stress Responses” Invited talk at Harbin Institute of Technology, Harbin, China, June 4, 2010.
- 2010 “High Throughput Metagenomics Technologies for Microbial Community Analysis”, Invited talk at Harbin Institute of Technology, Harbin, China, June 4, 2010.
- 2010 “Stress Responses: From Genomes to Ecosystems”, Invited talk at The 110th General Meeting of American Society for Microbiology, Division N Talk, San Diego, CA, May 24, 2010
- 2010 “GeoChip: High Throughput Metagenomics Technologies for BioGeosciences”, Invited talk at Workshop: US-China Collaborative Research on Geomicrobiological Processes in Extreme Environments, Penn State University, May 18-23, 2010.
- 2010 “High Throughput Metagenomics Technologies for Microbial Community Analysis”, Invited talk at Chinese Academy of Agricultural Sciences, Beijing, China, April 12, 2010.
- 2010 “High Throughput Metagenomics Technologies for Microbial Community Analysis”, Invited talk at Institute of Microbiology, Chinese Academy of Sciences, Beijing, China, April 7, 2010.
- 2010 “High Throughput Metagenomics Technologies for Microbial Community Analysis”, Invited talk at Tsinghua University, Beijing, China, April 8, 2010.
- 2010 “High Throughput Metagenomics Technologies for Microbial Community Analysis”, Invited talk at Institute of Microbiology, Chinese Academy of Sciences, Beijing, China, April 7, 2010.
- 2010 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Zhejiang University, Institute of Microbiology, Hangzhou, China, April 6, 2010.
- 2010 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Zhejiang University, Medical School, Hangzhou, China, April 6, 2010.
- 2010 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Xiamen Institute of Urban Environment, Chinese Academy of Sciences, Xiamen, China, April 2, 2010.
- 2010 “High Throughput Metagenomics Technology for Microbial Community Analysis”, Invited talk at Xiamen University, Xiamen, China, April 2, 2010.
- 2010 “GeoChip-based Analysis of Community Structure in Microbial Electrohydrolysis Cell”, Invited talk at American Chemical Society (ACS) Annual Meeting, San Francisco, CA, March 21, 2010
- 2010 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Northwestern University, Evanston, IL, January 22, 2010.
- 2010 “Metagenomic Analysis of the Feedback Responses of Soil Microbial Communities to Elevated CO₂”, Invited talk at Microbial Genome Sequencing and Microbial Observatories Programs Awardee Workshop, Plant & Animal Genome XVIII, San Diego, CA, January 8-13, 2010.
- 2009 “Metagenomic Analysis of the Feedback Responses of Soil Microbial Communities to Elevated CO₂”, Invited talk at ASA-CSSA-SSSA, 2009 International Annual Meetings, Pittsburgh, PA, November 1-5, 2009

- 2009 “Spatial Scaling of Microbial Functional Gene Diversity Across Different Soil Ecosystems”, Invited talk at Soil Metagenomics Workshop, Argonne, October 26, 2009
- 2009 “Metagenomic Analysis of the Feedback Responses of Soil Microbial Communities to Elevated CO₂”, Invited talk at DIVERSITAS, Cape Town, South Africa, October 13-17, 2009
- 2009 “Comparative Genomics of Ethanol-Producing Clostridia”, Invited talk at 17th Annual Microbial Genomics Conference, Rocky Gap State Park, Cumberland, MD, October 11-15, 2009
- 2009 “GeoChip: Current Development, Challenges, and Applications”, Invited talk in the Monsoon Asia Agro-Environmental Research Consortium (MARCO): Toward International Research Collaboration, Workshop on Metagenomic approach on the rhizosphere soil microbiome. Tsukuba, Japan, October 4-8, 2009
- 2009 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Xiamen University, Xiamen, August 17, 2009.
- 2009 “Random Matrix Theory-based Network Analysis for Microbial Ecology”. Invited talk at European Molecular Biology Organization, World Practical Course, Computational Biology: From (meta)genomes to phenotype and environment, Shanghai Jiaotong University, Shanghai, August 16, 2009
- 2009 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Shanghai Institute of Plant Physiology and Ecology, Shanghai, August 14, 2009.
- 2009 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at Nanjing Agricultural University, Nanjing, August 13, 2009.
- 2009 “Linking Community Structure to Functions: GeoChip Development, Challenges, and Applications”, Invited talk at Nanjing Institute of Soil Science, Nanjing Institute of Geography and Limnology, Chinese Academy of Science, Nanjing, August 12, 2009.
- 2009 “GeoChip: A High Throughput Genomics Technology For Characterizing Microbial Functional Community Structure”, Invited talk at American Phytopathological Society (APS) - Annual Meeting 2009, Portland, OR, August 3, 2009.
- 2009 “Genomics and Bioenergy”. Invited talk at 2009 International Conference for Bioeconomy (BioEco 2009), Tianjin, China, June 25-28, 2009
- 2009 “GeoChip: A High Throughput Genomics Technology for Characterizing Microbial Functional Community Structure”. The 2nd International Symposium on Applied Microbiology and Molecular Biology in Oil Systems (ISMOS-2), Aarhus, Denmark, June 17-19, 2009.
- 2009 “Metagenomic analysis of the feedback responses of soil microbial communities to elevated CO₂”, The 10th International Symposium on Bacterial Genetics and Ecology (Bageco-10), Uppsala, Sweden, June 15-19, 2009.
- 2009 “Key issues in soil metagenomics”. TerraGenome Workshop, Uppsala, Sweden, June 14-15, 2009.
- 2009 “Key issues in soil metagenomics”. TerraGenome Workshop, Uppsala, Sweden, June 14-15, 2009.
- 2009 “GeoChip as a high throughput tool to analyze microbial communities”. Invited Seminar in International Organization for Biological Control (IOBC) Workshop on Multitrophic Interactions in Soil. Uppsala, Sweden, June 10-13, 2009.

- 2009 “GeoChip: A High Throughput Metagenomics Tool for Functional Microbial Ecology”. Invited Seminar, Eco-Environmental Research Center, Chinese Academy of Sciences, Beijing, May 27, 2009.
- 2009 “GeoChip: A High Throughput Metagenomics Tool for Functional Microbial Ecology”. Invited Seminar, International Ecopolis Forum, Huaibei, China, May 23-26, 2009.
- 2009 “Linking Community Structure to Functions: GeoChip Development and Applications”, The 109th General Meeting of American Society for Microbiology, Philadelphia, PA, May 17–21, 2009.
- 2009 “GeoChip: Current Development, Challenges, and Applications”. Invited Seminar, University of Toronto, Toronto, Canada. May 13-14, 2009.
- 2009 “Genomics of Cellulose-Degrading and Ethanol-Producing Bacteria”, Invited talk at Oklahoma NSF EPSCoR Annual State Conference, Oklahoma City, OK, March 31, 2009.
- 2009 “Systems Microbiology: From Genomes to Ecosystems”, Invited Seminar, University of Texas, Arlington, TX, March 12-14, 2009.
- 2009 “Microbial Systems Biology”, Invited Departmental Seminar, Department of Mathematics, University of Oklahoma, Norman, OK, February 17, 2009.
- 2009 “Systems Microbiology: From Genomes to Ecosystems”, Invited Seminar, Louisiana State University, Baton Rouge, LO, February 13, 2009.
- 2009 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at National University of Singapore, Singapore, January 22, 2009.
- 2009 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at Nanyang Technical University, Singapore, January 21, 2009.
- 2009 “GeoChip: A High Throughput Genomics Technology for Characterizing Microbial Functional Community Structure”, ISME-IWA Colloquium on The Engineering of Microbial Communities, Singapore, January 18-21, 2009.
- 2009 “Genomics of ethanol-producing microorganisms”, NSF EPSCoR Workshop, Oklahoma City, OK, January 12, 2009.
- 2008 “GeoChip: A High Throughput Genomics Technology for Characterizing Microbial Functional Community Structure”, American GeoPhysical Union (AGU) Meeting, San Francisco, December 18, 2008.
- 2008 “Systems Microbiology: From Genomes to Ecosystems”, Invited Departmental Seminar, Michigan State University, East Lansing, MI, November 24-26, 2008.
- 2008 “Target Sequencing Microbial Genes of Interest”, Workshop on the Complete Metagenome Sequencing of a Reference Soil, Lyon, France, December 13-14, 2008
- 2008 “GeoChip: A High Throughput Genomics Technology for Characterizing Microbial Functional Community Structure”. Joint Bioenergy Institute (JBEI), Berkeley, CA, November 14, 2008.
- 2008 “GeoChip: A High Throughput Genomics Technology for Characterizing Microbial Functional Community Structure”. Invited talk at Tsinghua University, Beijing, China, November 13, 2008.
- 2008 “Systems Microbiology: From Genomes to Ecosystems”, Invited talk at China Agricultural University, Beijing, China, November 13, 2008.

- 2008 “Random Matrix Theory-based Network Identification”. Invited talk at Qingdao Institute of Biomass Energy and Bioprocessing Technology (QIBEBT), Chinese Academy of Sciences, Qiangdao, Shandong, China, November 11, 2008
- 2008 “Genomics and Bioenergy”. Invited talk at Annual Meeting on Microbial Ecology, Ecological Society of China, Changsha, China, November 10, 2008.
- 2008 “GeoChip: Recent Development, and its Applications to Global Change Biology”, Invited talk at ASM-CSM (Chinese Society of Microbiology) Joint Workshop on Environmental Microbiology and Bioenergy, Haikou, China, November 8, 2008.
- 2008 “Issues related to Long-Term Microbial Sampling and Analysis”. Invited talk at “Curation of Biological Specimens, Physical Samples and Associated Data”. NMNH (National Museum of Natural History)-NSF NEON Workshop, Smithsonian Institution, Washington, DC, October 19-22, 2008.
- 2008 “GeoChip: Recent Development, and its Applications to Bioenergy and Sustainability”. Invited talk at the joint annual meeting of Geological Society of America (GSA)-Soil Science Society of America (SSSA)-American Society of Agronomy (ASA)-Crop Society of America (CSSA), Houston, TX, October 5-9, 2008.
- 2008 “Systems Microbiology: From Genomes to Ecosystems”, Washington University at St. Louis, St. Louis, MO, October 3, 2008.
- 2008 “Genomics-Enabled Microbial Biogeography”. The 4th SCOPE (The Scientific Committee on Problems of the Environment, International Council of Scientific Union) Workshop on Microbial Environmental Genomics, Changsha, P.R. China, September 20-24, 2008.
- 2008 “Random Matrix Theory-based Network Identification”. The 4th SCOPE (The Scientific Committee on Problems of the Environment, International Council of Scientific Union) Workshop on Microbial Environmental Genomics, Changsha, P.R. China, September 20-24, 2008.
- 2008 “GeoChip: Recent Advances and Applications”. The 4th SCOPE (The Scientific Committee on Problems of the Environment, International Council of Scientific Union) Workshop on Microbial Environmental Genomics, Changsha, P.R. China, September 20-24, 2008.
- 2008 “Metagenomics Insights of the Feedback Responses of a Grassland Ecosystem to Elevated Atmospheric CO₂”. The 16th International Conference on Microbial Genomes. Lake Arrowhead, CA, September 14-18, 2008.
- 2008 “GeoChip: A high throughput genomics technology for linking microbial community structure to functions”, Invited talk at the Roundtable session, Emerging Ecogenomic Methods: Is one better?, The 12th International Symposium on Microbial Ecology, Cairns, Australia, August 17-22, 2008.
- 2008 “Microbial Systems Biology”, Invited Talk at The University of Memphis, Memphis, TN, July 3, 2008
- 2008 “GeoChip: Current Development, Challenges, and Applications”, Invited talk at Biocorrosion Workshop, Norman, OK, June 24-25, 2008.
- 2008 “Genomics and Bioenergy”, Invited Talk at National Center for Agricultural Utilization Research (NCAUR), Peoria, IL, June 24, 2008

- 2008 “GeoChip: Current Development, Challenges, and Applications”, Invited talk at the US-EC Workshop on Metabolomics and Environmental Biotechnology, Palma de Mallorca, Spain, June 16-17, 2008.
- 2008 “GeoChip: Recent Development, and its Applications to Marine Environments”, Invited talk at the Academy colloquium: "Assessing marine microbial diversity: problems and solutions", the Royal Netherlands Academy of Arts and Sciences, Amsterdam, Netherlands, May 26-30, 2008
- 2008 “Genomics and Bioenergy”, Talk at Oklahoma Bioenergy Center, Norman, Oklahoma, April 23, 2008
- 2008 “Genomics and Bioenergy”, Invited talk at China Summit on Industrial Biotechnology Development • 2008, Tianjin, China, April 18-19, 2008
- 2008 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at Tianjin University, Tianjin, China, April 17, 2008
- 2008 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at Qingdao Institute of Biomass Energy and Bioprocessing Technology (QIBEBT), Chinese Academy of Sciences, Qiangdao, Shandong, China, April 16, 2008
- 2008 “From Community Structure to Functions: GeoChip Development and Its Applications to Bioremediation”, Invited talk at DOE ERSP Annual PI Meeting, Lansdowne, VA, April 7-9, 2008.
- 2008 “Genomics of Ethanol-Producing Bacteria”, Invited talk at Oklahoma NSF EPSCoR Annual State Conference, March 7, 2008.
- 2008 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at University of California, Davis, CA, March 2-4, 2008
- 2008 “GeoChip: Current status, challenges and future perspectives”, Invited talk at NSF Workshop, Integrating NEON with Microbial Biology, Baton Rouge, Louisiana, February 14-16, 2008
- 2007 “Most recent development in metagenomics”, Invited talk at Tsinghua University, Beijing, China, December 19, 2007
- 2007 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at Peking University, Beijing, China, December 19, 2007
- 2007 “Microbial ecology in current genome era”, Invited talk at Annual Meeting on Microbial Ecology, Ecological Society of China, Henan, China, December 16-18, 2007.
- 2007 “Metagenomics: Current Status, Challenges, and Future Perspectives”, Invited talk at Central South University, Changsha, China, December 14, 2007
- 2007 “Metagenomics: Current Status, Challenges, and Future Perspectives”, Invited talk at Harbin Institute of Technology, Harbin, China, December 12, 2007
- 2007 “GeoChip: Current Development, Challenges, and Applications”, Invited talk at Harbin Institute of Technology, Harbin, China, December 11, 2007
- 2007 “Systems Genome Biology: Current Status, Challenges and Future Perspectives”, Invited talk at Harbin Institute of Technology, Harbin, China, December 10, 2007
- 2007 “Molecular Microbial Ecology”, Invited talk at Harbin Institute of Technology, Harbin, China, December 9, 2007
- 2007 “Linking Community Structure To Functions: GeoChip-based Analysis Of Microbial Communities In Uranium Bioremediation And Hydrogen Production”,

- Invited talk at The 3rd SCOPE Meeting on Microbial Environmental Genomics, Lyon, France, November 29-December 2, 2007
- 2007 “GeoChips: A comprehensive arrays for studying various biogeochemical, ecological and environmental processes”, University of Minnesota, St Paul, MN November 19-20, 2007
- 2007 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at Oklahoma State University, Stillwater, OK, November 12, 2007
- 2007 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at Montana State University, Bozeman, MT, November 1-2, 2007
- 2007 “Genomics and Ecology: Challenges and future perspectives”, Invited talk at NSF Workshop: Data-Model Assimilation in Ecology: Techniques and Applications, Norman, Oklahoma, October 22-24, 2007
- 2007 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at University of Southern California, Los Angelis, CA, October 17-20, 2007.
- 2007 “Genomics of ethanol-producing bacteria”, The 2nd Annual Grow: Oklahoma Biofuels Conference, October 15-17, 2007
- 2007 “GeoChips: A comprehensive arrays for studying various biogeochemical, ecological and environmental processes”, Invited talk, The 15th International Conference on Microbial Genomes, College Park, MA, September 16-20, 2007
- 2007 “Recent updates of GeoChips for environmental applications”, Invited talk at Rothamsted Experimental Station, Harpenden, UK, September 7, 2007
- 2007 “GeoChips: A comprehensive arrays for studying various biogeochemical, ecological and environmental processes”, Invited talk, 161st Meeting, Society for General Microbiology, University of Edinburgh, Edinburgh, UK, September 3-6, 2007
- 2007 “Applications of Genomics to Ecology and Bioenergy”, Invited talk at Institute of Botany, Chinese Academy of Sciences, Beijing, China, July 30, 2007
- 2007 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at The University of Sciences and Technology of China, Anfei, Hefei, China, July 23, 2007
- 2007 “Ecosystem Genomics: Current Status, Challenges and Future Perspectives”, Invited talk at Shanghai Institute of Plant Physiology and Ecology, Shanghai, China, July 19, 2007.
- 2007 “GeoChip development and its applications”, Invited talk at Shanghai Institute of Plant Physiology and Ecology, Shanghai, China, July 19, 2007
- 2007 “Systems Genome Biology: Current Status, Challenges and Future Perspectives”, Invited talk at The Third Institute of Oceanography, Xiamen, China, July 13, 2007
- 2007 “Genomics and Bioenergy”, Invited talk at Hunan Agricultural University, Changsha, China, July 17, 2007
- 2007 “Genomics and Bioenergy”, Invited talk at The Third Institute of Oceanography, Xiamen, China, July 13, 2007
- 2007 “Ecosystem Genomics: Current Status, Challenges and Future Perspectives”, Invited talk at The Third Institute of Oceanography, Xiamen, China, July 13, 2007

- 2007 “Systems Genome Biology: Current Status, Challenges and Future Perspectives”, Invited talk at The Third Institute of Oceanography, Xiamen, China, July 13, 2007
- 2007 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at Yunnan University, Kuming, Yunnan, China, July 9, 2007
- 2007 “Community Genomics: Current Status, Challenges and Future Perspectives”, Invited talk at Tsinghua University, Beijing, China, July 5, 2007
- 2007 “Genomics and Bioenergy”, Invited talk at Institute of Microbiology, Chinese Academy of Sciences, Beijing, China, July 4, 2007
- 2007 “Ecosystem Genomics: Current Status, Challenges and Future Perspectives”, Invited talk at Institute of Microbiology, Chinese Academy of Sciences, Beijing, China, July 4, 2007
- 2007 “Systems Genome Biology: Current Status, Challenges and Future Perspectives”, Invited talk at Institute of Microbiology, Chinese Academy of Sciences, Beijing, China, July 4, 2007
- 2007 “Microbial Functional Genomics: Current Status, Challenges and Future Perspectives”, Invited talk at Tsinghua University, Beijing, China, July 3, 2007
- 2007 “Applications of Functional Gene Arrays for Environmental Studies”, Invited talk at Tsinghua University, Beijing, China, July 3, 2007
- 2007 “Development of Functional Gene Arrays for Microbial Community Analysis”, Invited talk at Tsinghua University, Beijing, China, July 2, 2007
- 2007 “Molecular Microbial Ecology”, Invited talk at Tsinghua University, Beijing, China, July 2, 2007
- 2007 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at 2007 International Conference for Bioeconomy, Tianjin, China, June 27, 2007
- 2007 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at East China Normal University, Shanghai, June 25, 2007
- 2007 “GeoChip: Development and Applications for Microbial Community Analysis”, Conferences Jacques-Monod: Environmental Genomics: from individual genomes to genomes of complex communities, Roscoff, France, June 11, 2007
- 2007 “Genomics-enabled Microbial Ecology: Current Status, Challenges and Future Perspectives”, Central South University, May 29, 2007.
- 2007 “Microbial Ecology at Genome Era: Current Status, Challenges and Future Perspectives” Keynote talk at The 3rd International Ecosummit, Beijing, May 26, 2007
- 2007 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Invited talk at Auburn University, Auburn, AL, May 1, 2007
- 2007 “Genomics of ethanol-producing bacteria”, The 29th Symposium on Biotechnology for Fuels and Chemicals, Denver, Co, April 29, 2007
- 2007 “Functional Gene Arrays: Current Status, Challenges and Future”, University of Oklahoma, April 4, 2007
- 2007 “Genomics of ethanol-producing bacteria”, The First Annual Oklahoma Biofuels Symposium, Ponca City, OK, March 10, 2007

- 2007 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”. Robert M. and Mary Haythornthwaite Distinguished Lecture, College of Engineering, Temple University, Philadelphia, PA, February 23, 2007.
- 2006 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”. Invited talked, Genomics Division, Los Alamos National Laboratory, Los Alamos, November 7, 2006.
- 2006 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”. Invited talked, Department of Genetics and Biochemistry, Clemson University, Clemson, SC. October 27, 2006.
- 2006 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”. Lawrence Berkeley National Laboratory, Berkeley, CA. September 29, 2006.
- 2006 “Development and Application of Functional Gene Arrays for Assessing Microbial Community Structure and Functions in Natural Settings”, Department of Environmental Sciences, Policy and Management, University of California, Berkeley, CA. September 28, 2006.
- 2006 “Genomics of ethanol-producing bacteria”. The 14th International Conference on Microbial Genomes. Lake Arrowhead, CA, September 24-28, 2006.
- 2006 “Functional Gene Arrays: Current Status, Challenges and Future”. The 4th Okazaki Biology Conference, Okazaki, Japan, September 10-15, 2006.
- 2006 “Development and Applications of Functional Gene Arrays to Understanding Microbial Diversity, Distribution and Dynamics in Groundwaters, Soils and Marine Sediments”, Invited talk at Rothamsted Experimental Station, Harpenden, UK, August 25, 2006
- 2006 “Development and Application of Functional Gene Arrays for Assessing Microbial Community Structure and Functions in Natural Settings”, Invited talk at The 11th International Symposium on Microbial Ecology, Vienna, Austria, August 20-25, 2006
- 2006 “Functional Gene Arrays: Current Status, Challenges and Future”, Invited talk at Central South University, Changsha, China, August 19, 2006
- 2006 “Microbial Genomics, Genomic Technologies and Environmental Applications”, Keynote speech at The 9th National Symposium on Environmental Microbiology, Hangzhou, China, August 15, 2006
- 2006 “Microbial Genomics, Genomic Technologies and Environmental Applications”, Invited talk at Institute of Microbiology, Chinese Academy of Sciences, Beijing, China, August 7, 2006
- 2006 “Functional Gene Arrays: Current Status, Challenges and Future”, Invited talk at Tsinghua University, Beijing, China, August 7, 2006
- 2006 “Microbial Genomics, Genomic Technologies and Environmental Applications”, Invited talk at Zhejiang University, Hangzhou, China, August 4, 2006
- 2006 “Microbial Genomics, Genomic Technologies and Environmental Applications”, Invited talk at Shanghai Jiaotong University, Shanghai, China, August 2, 2006
- 2006 “Challenges and Trends in Contemporary Microbial Ecology”, Keynote speech at 2006 Annual Symposium of Chinese Society of Ecology, August 3, 2006.

- 2006 “GeoChip: A Comprehensive Microarrays for Studying Geochemical, Ecological and Environmental Processes”, Distinguished seminar at the Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang, China, July 31, 2006.
- 2006 “Development and Application for Understanding Spatial Variation in Soil Microbial Communities”, Keynote speech at the 18th World Congress of Soil Science, Philadelphia, PA, July 10-14, 2006.
- 2006 “Functional Gene Arrays for Environmental Studies: Current Status, Challenges and Future”, Keynote speech at the International Symposium on Environmental Biotechnology, Leipzig, Germany, July 10-13, 2006.
- 2006 “Challenges in Metagenomics and Microarray-based Functional Analysis of Microbial Communities at Contaminated Sites”. The ERSP PI Meeting, Environmental Remediation Science Program, Warrenton, VA, April 3, 2006.
- 2006 “Development and Use of Integrated Microarray-Based Genomic Technologies for Monitoring Microbial Community Dynamics in groundwaters and marine sediments”, Keynote speech at the 6th International Symposium on Global Renaissance by Green Energy Revolution, The 21st Century COE (Center of Excellence) Program, Nagaoka, Japan, January 26-28, 2006.
- 2005 “Microbial Genomics, Genomic Technologies and Environmental Applications”, Keynote talk at the 2nd International Symposium on Environmental Chemistry and Toxicology, Hong Kong, December 26-29, 2005.
- 2005 “Physiological and Genomic Diversity of Thermophilic Iron-Reducing Bacteria from the Deep Subsurface” The 8th International Thermophiles Conference - From Evolution to Revolution, Gold Coast, Queensland, Australia, September 18-22, 2005.
- 2005 “Microbial community diversity at the NABIR Field Research Center, Oak Ridge, TN”, The 13th International Conference on Microbial Genomes, Madison, WI, September 11–15, 2005.
- 2005 “Use of Microarray-based Genomic Technologies for Assessing Microbial Community Composition and Dynamics in Contaminated Groundwater” The Joint International Symposia for Subsurface Microbiology (ISSM 2005) and Environmental Biogeochemistry (ISEB XVII), Jackson Hole, Wyoming; August 14-19, 2005.
- 2005 “Application of Microarrays to Microbial Community Analysis”, Eco-Environmental Research Center, Chinese Academy of Sciences, Beijing, China, July 7, 2005.
- 2005 “Genomic Technologies, And Their Applications”, Institute of Zoology, Chinese Academy of Sciences, Beijing, China, July 7, 2005.
- 2005 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, China Agricultural University, Beijing, China, July 6, 2005.
- 2005 “Application of Microarrays to Microbial Community Analysis”, Tsinghua University, Beijing, China, July 4, 2005.
- 2005 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Hunan Normal University, Changsha, China, June 30, 2005.
- 2005 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Hunan Agricultural University, Changsha, China, June 29, 2005.

- 2005 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Northwestern University, Xian, China, June 24, 2005.
- 2005 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Chinese Academy of Sciences, Beijing, China. Special keynote talk at Chinese Academy of Sciences under the special seminar series, "Sciences and China", sponsored by Chinese Academy of Sciences, National Academy of Sciences, National Academy of Engineering, Ministry of Science and Technology, Ministry of Education, and Chinese Association of Sciences and Technologies. June 21, 2005.
- 2005 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Central South University, Changsha, China, June 21, 2005.
- 2005 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Medical School, Zhejiang University, Hangzhou, China, June 17, 2005.
- 2005 “Using functional gene arrays to assess microbial community diversity in marine sediments from Gulf of Mexico,” The 2nd International Workshop on Microbial Environmental Genomics, Shanghai, China, June 11–16, 2005.
- 2005 “Functional gene arrays: current status, challenges and future,” The 105th General Meeting of American Society for Microbiology, Atlanta, GA, June 4 – June 9, 2005.
- 2005 “Microarrays-based functional analysis of stress responses”. The 5th Annual Northwestern Gene Expression Conference, University of Washington, Seattle, May 25-27, WA, 2005.
- 2005 “Microarrays-based functional analysis of stress responses”. Departmental Seminar, Plant Science, University of Tennessee at Knoxville, Knoxville, TN, April 28, 2005.
- 2005 “Development and application of integrated genomic technology for microbial community analysis”. The 8th Annual PI Meeting, Natural and Accelerated Bioremediation Program (NABIR), Warrenton, VA, April 17–20, 2005.
- 2005 “Microarrays-based Genomic Technologies for Environmental and Microbial Community Analysis”, New England BioLabs, Beverly, MA, March 23-24, 2005.
- 2005 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Medical School, Southern Illinois University, Springfield, IL, March 10-12, 2005.
- 2005 “Novel Random Matrix Theory-Based Approach for Identifying Gene Interaction Network”, Departmental Seminar, Department of Mathematics, University of Tennessee at Knoxville, Knoxville, TN, February 21, 2005.
- 2004 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Departmental Seminar, Environmental and Civil Engineering, Stanford University, Stanford, December 15, 2004.
- 2004 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Departmental Seminar, Environmental and Civil Engineering, University of Tennessee at Knoxville, Knoxville, TN, November 3, 2004.
- 2004 “Application of Functional Gene Arrays for Analyzing Community Structure at NABIR Field Research Center”. DOE Natural and Accelerated Bioremediation Program (NABIR) Workshop, Oak Ridge, TN, October 18-19, 2004.
- 2004 “Microarray-Based Genomic Technologies for Microbial Community Analysis”. Great Lakes and Central States Ecological Observatory (GLACEO) Workshop on

- Building a Regional Ecological Observatory: Sensors, Tools, and Networking, University of Michigan Biological Station, Pellston, MI, October 15-17, 2004.
- 2004 “Novel random matrix theory-based approach for identifying modular network”, The 12th International Conference on Microbial Genomes, Lake Arrowhead, CA, September 26–30, 2004.
- 2004 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Argonne National Lab, September 20, 2004.
- 2004 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Brookhaven National Lab, Upton, NY, September 17-18, 2004
- 2004 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Medical School, University of Alabama at Birmingham, Birmingham, AL, September 7-8, 2004.
- 2004 “Functional gene arrays for environmental studies”, The 10th International Symposium on Microbial Ecology, Cancun, Mexico, August 22-27, 2004
- 2004 “Microarrays-based analysis of stress responses”. The 10th International Symposium on Microbial Ecology, Cancun, Mexico, August 22-27, 2004
- 2004 “Genomics-based stress responses of meta-reducing bacteria”. Workshop on Stress in Metal-Reducing Bacteria: Ecology, Functional Genomics, Bioinformatics at the Society of Industrial Microbiology Annual Meeting, Anaheim, CA, July 25-29, 2004
- 2004 “Microarrays for bacterial detection and community analysis”, National Institute of Biological Monitoring and Quarantine, Beijing, China, September 15, 2004
- 2004 “Microbial Functional Genomics, Genomic Technologies and Environmental Applications”, Chinese National Sciences Foundation, Beijing, China, September 14, 2004.
- 2004 “Microarrays for bacterial detection and microbial. community analysis”, Workshop, Nucleic Acids-based Technologies, Amplifications Amplified. Cambridge Health Tech Institute, McLean, VA, June 21-23, 2004.
- 2004 “Functional Genomics of Environmentally Important Model Microorganisms”, The South East Structural Genomics Workshop on Frontier in Biology, The University of Georgia, Athens, GA, May 20-21, 2004.
- 2004 “Microarray-Based Genomic Technologies for Environmental Studies”. The 2nd International Workshop in Biochips and Environmental Biosensors, Gwangju, Korea, May 1-2, 2004.
- 2004 “Integrated Functional Analysis Of Environmentally Important Microorganisms”. The 5th International Symposium on Advanced Environmental Monitoring, Seoul, Korea, April 29-30, 2004.
- 2004 “Microarray-Based Functional Analysis of the Radiation-Resistant Bacterium, *Deinococcus radiodurans*”. 2004 European Symposium on Environmental Biotechnology, Oostende, Belgium, April 27-29, 2004.
- 2004 “DOE genomics programs”. The 1st International Workshop on Microbial Environmental Genomics, Wageningen, The Netherlands, April 18–20, 2004.
- 2004 “Microarray-Based Genomic Technologies for Environmental Studies”. The 1st International Workshop on Microbial Environmental Genomics, Wageningen, The Netherlands, April 18–20, 2004.

- 2004 “Functional Gene Arrays for Studying Microbial Community Structure”. The 7th Annual PI Meeting, Natural and Accelerated Bioremediation Program (NABIR), Warrenton, VA, March 14–16, 2004.
- 2004 “Microbial functional genomics, genomic technology and environmental applications”, The University of Georgia, Athens, GA, February 10, 2004.
- 2004 “Molecular Microbial Ecology And Community Genomics”, Savannah River Ecology Laboratory, Aiken, SC, February 12, 2004.
- 2004 “Functional genomic analysis of *Shewanella oneidensis* MR-1”, The University of Georgia, Athens, GA, February 11, 2004.
- 2004 “Microbial functional genomics, genomic technology and environmental applications”, The University of Georgia, Athens, GA, February 10, 2004.
- 2004 “Microbial functional genomics, genomic technology and environmental applications”, Zhongshan University, Guangzhou, China, January 1, 2004.
- 2003 “Microbial functional genomics, genomic technology and environmental applications”, Central South University, Changsha, China, December 25, 2003.
- 2003 “Microbial functional genomics, genomic technology and environmental applications”, Hunan Agricultural University, Changsha, China, December 24, 2003.
- 2003 “Future Perspectives of Microbial Ecology: Ecological Genomics Beyond Single Cells”, Eco-Environmental Research Center, Chinese Academy of Sciences, Beijing, China, December 24, 2003.
- 2003 “Microarray-based functional analysis of environmentally important microorganisms and communities”, Tsinghua University, Beijing, China, December 23, 2003.
- 2003 “Microarray-based functional analysis of environmentally important microorganisms and communities”, Chinese Academy of Forestry Sciences, Beijing, China, December 23, 2003.
- 2003 “Microbial functional genomics, genomic technology and environmental applications”, Keynote speaker, The 5th National Symposium on Microbial Ecology, Beijing, China, December 22, 2003.
- 2003 “Extremophilic metal-reducing bacteria”, NASA Astrobiology Workshop: Looking into the Extremes of Life, American Society for Gravitational and Space Biology (ASGSB), Huntsville, AL, November 12-15, 2003.
- 2003 “Application microarray-based genomic technology to environmental studies”, Savannah River Ecology Laboratory, Aiken, SC, October 22-23, 2003.
- 2003 “Soil microbial diversity, controlling mechanisms and detection”. International Symposium on Structure and Function of Soil Microbiota, Marburg, Germany, September 18-20, 2003.
- 2003 “Microbial genomics, genomic technology and environmental applications”, Lawrence Berkeley National Laboratory, Berkeley, CA, July 30-31, 2003.
- 2003 “Microbial genomics, genomic technology and environmental applications”, DOE Joint Genome Institute, Walnut Creek, CA, May 6-8, 2003.
- 2003 “Microarray-based functional analysis of the radiation-resistant bacterium, *Deinococcus radiodurans*”. The 10th Genome Conference of DOE Genome Joint Institute, Santa Fe, NM, March 29–April 2, 2003.

- 2003 “Development and evaluation of oligonucleotide-based functional gene arrays for bioremediation”. The 6th Annual PI Meeting, Natural and Accelerated Bioremediation Program (NABIR), Warrenton, VA, March 17–19, 2003.
- 2003 “Microarray-based genomic technology for microbial community analysis”. Montreal Microarray Symposium, Montreal, Canada, March 12-15, 2003.
- 2003 “Microarray technology for gene expression analysis”. DOE Genome To Life Workshop, Washington DC, February 10-12, 2003.
- 2002 “Microarray-based genomic technology and microbial ecology”. The Advisory Committee Meeting for Natural and Accelerated Bioremediation Program (NABIR), Baltimore, MD, November 7, 2002.
- 2002 “Microbial genomics, genomic technology and environmental applications”, Department of Microbiology, University of Alabama, Birmingham, AL, October 24-25, 2002.
- 2002 “Microbial genomics, genomic technology and environmental applications”, Pacific Northwest National Laboratory, Richland, WA, October 15, 2002.
- 2002 “Microbial genomics, genomic technology and environmental applications”, Washington State University, Pullman, WA, October 14, 2002.
- 2002 “Microbial genomics and ecology”, on an international Workshop entitled An Ecological Perspective of Genomics: Assessing Ecological Risk Through Partnerships. Pensacola Florida, FL, September 22–25, 2002.
- 2002 “Development and evaluation of microarray-based genomics technology for microbial detection”. The Genomic Workshop on Environmental Biotechnology, Idaho Falls, ID, September 19–20, 2002.
- 2002 “Microarray-based whole genome analysis for metal-reducing and radiation-resistant bacteria”. The US-Japan Workshop on System Biology, Tsuruoka, Yamagata, Japan, September 14–18, 2002.
- 2002 “Development of Novel Attachment Strategy for Immobilizing Oligonucleotides and Proteins on Microarrays”, The 10th International Conference on Small Genomes, Lake Arrowhead, CA, September 14–18, 2002.
- 2002 “Development and evaluation of 16S rRNA-based oligonucleotide microarrays for microbial detection”. The Xth International Congress of Bacteriology and Applied Microbiology, Paris, France, July 27–August 1, 2002.
- 2002 “Microbial genomics, genomic technology and environmental applications”, The Sanger Centre, Wellcome Trust Genome Campus, Hinxton, UK, July 22, 2002.
- 2002 “Development and evaluation of microarray-based genomics technology for microbial detection”. The 102nd General Meeting of American Society for Microbiology, Salt Lake City, UT, July 27–August 1, 2002.
- 2002 “Development of microarray-based genomics technology for microbial community analysis”. Department of Microbiology, North Carolina State University, Raleigh, NC, March 28, 2002.
- 2002 “Development of microarray-based genomics technology for microbial community analysis”. Department of Biology, Duke University, Durham, NC, March 27, 2002.
- 2002 “Molecular microbial diversity of NABIR Field Research Center, Oak Ridge, TN”. The 5th Annual PI Meeting, Natural and Accelerated Bioremediation Program (NABIR), Warrenton, VA, March 18–20, 2002.

- 2002 “Integrated analysis of genes and proteins involved in anaerobic energy metabolism of *Shewanella oneidensis* MR-1”. The 9th Genome Contractor and Grantee Workshop, Department of Energy, Oakland, CA, January 27–31, 2002.
- 2002 “Environmental microbial genomics, genomic technology and detection”, Department of Pharmaceutics and Pharmacodynamics, University of Illinois, Chicago, IL, January 16, 2002.
- 2002 “Microbial genomics, genomic technology and environmental applications”, Biotechnology research Institute, National Research Council Canada, Montreal, Quebec, Canada, February 1, 2002.
- 2001 “Development of Microarray-based genomic technology for environmental detection”, American Society for Microbiology Southeastern Branch Annual Meeting, Birmingham, AL, November 8–10, 2001.
- 2001 “Application of genomic technology to microbial ecology”, The 9th International Symposium on Microbial Ecology, August 26–31, 2001, Amsterdam, The Netherlands.
- 2001 “Functional gene arrays and community gene arrays”, The 101st General Meeting of American Society for Microbiology, Orlando, FL, May 20–24, 2001.
- 2000 “Metal reduction by extremophiles”, American Geophysical Union, Session B19 on Metal reduction, San Francisco, CA, December 15–19, 2000.
- 2000 “Developing microarray-based genomic technology for environmental studies,” a special symposium at the American Society of Agronomy meetings, Minneapolis, MN, November 6–9, 2000.
- 2000 “Genome-wide functional analysis of metal-reducing bacteria *Shewanella oneidensis* MR-1”, The 8th International Conference on Small Genomes, Lake Arrowhead, CA, September 24–28, 2000.
- 2000 “Microbial model organisms and DOE’s mission”, Oak Ridge National Laboratory, September 20, 2000.
- 2000 “Microbial genomics of metal-reducing bacteria”, Life Sciences Division, Oak Ridge National Laboratory, August 15, 2000.
- 2000 “Genomics and toxicology,” Shanghai Institute of Medicine, Shanghai, China, June 23, 2000.
- 2000 “Genomics, genomic technology and their impacts,” Zhejiang University, Hangzhou, China, June 21, 2000.
- 2000 “Genomics, genomic technology and their applications,” Hunan Normal University, Changsha, China, June 20, 2000.
- 2000 “Microarray-based microbial detection,” Hunan Agricultural University, Changsha, Hunan, China, June 13, 2000.
- 2000 “Recent advances in bioremediation,” Eco-Environmental Research Center, Chinese Academy of Sciences, Beijing, China, June 12, 2000.
- 2000 Keynote speech, “Genomics, genomic technology and applications,” Northeastern Forest University, Harbin, P.R. China, June 10, 2000.
- 2000 “Microarray-based genomic technology for environmental studies,” NASA/JPL, Pasadena, CA, May 25, 2000.
- 2000 “Microbial genomics and ecology”, Life Sciences Division, Oak Ridge National Laboratory, April 5, 2000.

- 2000 “Development of microarray-based genomic technology for environmental studies,” Ohio State University, Columbus, OH, April 15, 2000.
- 1999 “DNA microarrays for characterizing microbial communities,” DOE NABIR Workshop in Application of Genomic Technology to Bioremediation, Washington, DC, December 5–7, 1999.
- 1999 “Ecological, physiological and genomic diversity of metal-reducing bacteria,” The 7th Conference on Small Genomes, Washington, DC, November 13–17, 1999.
- 1999 “Molecular microbial diversity and controlling mechanisms in subsurface environments,” The 99th General Meeting of American Society for Microbiology, Chicago, IL, May 29–June 3, 1999.
- 1999 “Bioremediation, genomic technology and data analysis,” Life Sciences Division, Oak Ridge National Laboratory, November 25, 1999.
- 1998 “Recent advances of nucleic acid technology for measuring microbial biomass and activities,” DOE NABIR Workshop, Bethesda, MD, November 17, 1998.
- 1998 “Unusual microbial community diversity in soils and its controlling mechanisms,” in the Session of Microbial Community Dynamics, the VII International Congress of Ecology, Florence, Italy, July 18–26, 1998.
- 1998 Keynote speech, “Extremophilic iron-reducing bacteria: their implications for possible life in extraterrestrial environments,” The Third Symposium of Chinese Young Scientists, Beijing, P.R. China, August 19–22, 1998.
- 1998 Keynote speech, “Genomics and bioremediation,” The workshop for environmental technology, The Ministry of Chinese Sciences and Technology, Beijing, P.R. China, September 1–2, 1998.
- 1998 “Microbial genomics,” Institute of Microbiology, Chinese Academia of Sciences, Beijing, China, August 23, 1998.
- 1998 “Trends in ecology,” Eco-Environmental Research Center, Chinese Academia of Sciences, Beijing, China, August 24, 1998.
- 1998 “Bioremediation of hydrogen carbons, chlorinated solvents and heavy metals,” Eco-Environmental Research Center, Chinese Academia of Sciences, Beijing, China, August 25, 1998.
- 1998 “Application of molecular techniques to environmental studies,” Northeastern Forestry University, Harbin, China, August 27–29, 1998.
- 1995 “Ecological and phylogenetic diversity of toluene-degrading bacteria,” Hunan Agricultural University, Changsha, China, December 22, 1995.
- 1995 “Applications of molecular techniques to microbial community analysis,” Institute of Microbiology, Chinese Academy of Sciences, Beijing, China, December 20, 1995.
- 1995 “Recent advances in microbial ecology,” Eco-Environmental Research Center, Chinese Academy of Sciences, Beijing, China, December 19, 1995.

SPECIALLY INVITED WORKSHOP PARTICIPATION

- 2015 AAM Colloquium on Promoting Ethical Practices in the Scientific Enterprise. September 14-15, 2015.
- 2009 ISME-IWA Colloquium on The Engineering of Microbial Communities, Singapore, January 18-21, 2009.

- 2008 “Matasted”, Workshop on the Complete Metagenome Sequencing of a Reference Soil, Lyon, France, December 13-14, 2008
- 2008 “Curation of Biological Specimens, Physical Samples and Associated Data”. NMNH (National Museum of Natural History)-NSF NEON Workshop, Smithsonian Institution, Washington, DC, October 19-22, 2008.
- 2008 “Integrating NEON with Microbial Biology”, NSF Workshop, Baton Rouge, Louisiana, February 14-16, 2008
- 2007 “Data-Model Assimilation in Ecology: Techniques and Applications”, NSF Workshop, Norman, Oklahoma, October 22-24, 2007
- 2005 “Molecular Biological Tools Workshop” organized by the Strategic Environmental Research and Development Program (SERDP) and the Environmental Security Technology Certification Program (ESTCP), Charlottesville, Virginia, August 9-10, 2005.
- 2005 “Workshop on Genetic Sensors for Environmental Water Quality”, The Alliance for Coastal Technologies (ACT) and the University of South Florida (USF), St. Petersburg, FL, January 5-7, 2005.
- 2004 “DOE Genomics:GTL Technology Deep-Dive Specification Workshop” Arlington, VA, June 14-16, 2004.
- 2003 “Workshop on Progress and Promise in Systems Microbiology”, The National Academies of Sciences, Washington DC, August 19, 2003.

Current staff at OU

Name	From	Time	Position	E-mail address
Liyu Wu 吴力游	Hunan Agricultural Univ	2005.11	Research Professor	lywu@ou.edu
Daliang Ning 宁大亮	Tsinghua University	2016.7	Research Scientist	ningdaliang@gmail.com
Gangsheng Wang 王 纲胜	Oak Ridge National Laboratory	2018.6	Research Scientist	wanggs@ou.edu
Naijia Xia 肖乃佳	Georgia Institute of Technology	2018.1	Research Scientist	naijia.xiao@gmail.com
Aifen Zhou 周爱芬	Shandong Univ	2010.7	Research Scientist	Aifen.Zhou-1@ou.edu
Joy Van Nostrand	Medical University of South Carolina	2010.7	Research Scientist	joy.vannstrand@ou.edu
Ying Fu 富莹	Nanjing University	2016.2	Laboratory Manager	yfu@ou.edu
Lindsay Rice		2017.12	Administrative Assistant	lrice@ou.edu

Current postdocs at OU

Postdoctorals	From	Start time		E-mail address
Megan L. Kempfer	Southern Illinois University, Carbondale, IL	2015.1		megan.kempfer@gmail.com
Weiling Shi 史伟玲	Shandong U	2015.10-		sw187930@163.com
Linwei Wu 吴林蔚	Tsinghua U	2017.2-		Linwei.Wu-1@ou.edu
Jialiang Kuang 邝嘉良	Zhongshan U	2017.4-		kjialiang@ou.edu
Ya Zhang 张亚	University of Illinois at Urbana-Champaign	2018.7		Ya.Zhang-1@ou.edu
Yang Ouyang 欧阳扬	Utah State Univ	2018.12		ouyangy2016@ou.edu
Yajiao Wang 王雅娇	Tsinghua University	2019.5		yajiaowang@outlook.com

Current graduate students at OU

Student	From	Start time		E-mail address
Jiajie Feng 冯佳界	Tsinghua Univ	2013.8	Ph.D candidate	Jiajie.Feng-1@ou.edu
Colin Bates	Univ of Texas, Austin	2015.7	Ph.D candidate	colbates22@gmail.com
Xuanyu Tao 陶玄宇	Lanzhou University	2015.8	Ph.D candidate	xuanyu.tao@ou.edu
Yupeng Fan 樊宇鹏	Zhejiang U	2016.8-	Ph.D candidate	Yupeng.Fan-1@ou.edu
Jonathan Michael	Middlebury College	2017.8	PhD Candidate	jonathan.p.michael@ou.edu

Current visiting students at OU (including incoming)

Student	From	Start time		E-mail address
Xiaoling Wan 万 万	Institute of Hydrobiology-	2017.9	Ph.D candidate	wxling92@163.cm

晓玲	CAS			
Mu Peng 彭木	Northeast Forestry Univ	2018.9	Ph.D candidate	pengmu1025@hotmail.com
Hongjie Wang 王 弘杰	U of Chinese Academy of Sciences	2018.10	Ph.D candidate	hjjwang@iue.ac.cn
Xiaolan Lin 林 筱岚	Xiamen University	2018.11	Ph.D candidate	21620150150528@stu.xmu.edu.cn
Qi Qi 齐 琪	Tsinghua University	2018.10	Ph.D candidate	qiq17@mails.tsinghua.edu.cn
Danmei Chen 陈 丹梅	Southwest University	2018.10	Ph.D candidate	dorischan0808@163.com
Yinan Xie 谢懿楠	Zhejiang University	2018.11	Ph.D candidate	11641050@zju.edu.cn
Jiaying Guo 郭 佳婧	Hunan University	In coming	Ph.D candidate	guojiaying1986@163.com
Jie Ma 马 杰	China Univ of Geosciences	In coming	Ph.D candidate	cugmajie@163.com
Yu Xue 薛宇	Tsinghua University	In coming	Ph.D candidate	767562842@qq.com
Mengxiao jun Wu 邬梦晓俊	China University of Geoscience	In coming	Ph.D candidate	wumengxiaojun@outlook.com
Shun Han 韩顺	Huazhong Agricultural University	In coming	Ph.D candidate	670175131@qq.com
Chenxian g Sun 孙晨翔	Tsinghua University	In coming	Ph.D candidate	scx17@mails.tsinghua.edu.cn
Li Ji 及利	Northeast Forestry University	In coming	Ph.D candidate	jlnefu@hotmail.com

Current visiting scholars at OU (including incoming)

Name	From	Start time	Position	E-mail address
Ning Hu 胡宁	Hezhou University	2017.5 -	Assistant professor	2009huning@163.com

Peng Shi 史鹏	Northwest Agricultural & Forrest University	2018.10	Associate professor	shipeng27@nwafu.edu.cn
Yue Teng 滕跃	Jiangnan University	2018.11	Associate Professor	tengyue@jiangnan.edu.cn
Xin Zhao 赵鑫	Northeastern University	2018.12	Associate Professor	zhaoxin@mail.neu.edu.cn
Zhipeng Gao 高 志鹏	Hunan Agricultural University	2019.1	Associate Professor	gaozhipeng627@163.com
Chong Zhang 张 翀	Shengjing Hospital of China medical University	2019.2	Lecturer, Attending	zhangchong_83@163.com
Dongmei Deng 邓 冬梅	Guangxi University	2019.3	Associate Professor	deng-dongmei@163.com
Dashuai Mu 穆 大帅	Shandong University	2019.3	Associate Professor	dashuai.mu@sdu.edu.cn
Yufei Sun 孙宇飞	Guangxi Univ of Science and Tech	2019.4	Associate Professor	sunyufei@gxust.edu.cn
Yumei Li 李玉梅	University of Jinan	2019.9	Associated professor	mls_liym@ujn.edu.cn
Yingsong Liu 刘 音颂	Northeast petroleum University	2019.5	Associated professor	18603695082@163.com
Jiantao Liu 刘建涛	Jiangxi Science and Tech Normal Univ	2019.8	Associated professor	liujtcn@163.com
Fenghua Wang 王凤花	Shandong Agricultural University	2019.9	Associate professor	wfh@sdau.edu.cn
Alin Song 宋阿琳	Chinese Academy of Agricultural Sciences	In coming	Associate professor	songalin@caas.cn
Xianjun Hao 郝鲜俊	Shanxi Agricultural University	In coming	Professor	haoxianjun660@.126.com

Guohua Wang 王国华	University of South China	In coming	Lecturer	wghcsu@163.com
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Current staff at Tsinghua University

Name	From	Start Time	Position	E-mail Address
Yunfeng Yang 杨云锋	Oak Ridge National Laboratory	2010.9	Professor	yangyf@tsinghua.edu.cn
Shuhong Zhang 张书红		2017.9	Administrative Assistant	hongzs@mail.tsinghua.edu.cn

Current postdoc and graduate students at Tsinghua University

Name	From	Start Time	Position	E-mail Address
Xue Guo 郭雪	Central South Univ	2018.08	Postdoc	guoxue0601@sina.com
Tianjiao Dai 代天娇	Beijing University	2019.08	Postdoc	tianjiaodai@126.com
Changyi Xie 谢昌益	Tsinghua University	2014.9	Ph.D candidate	xiocy14@mails.tsinghua.edu.cn
Qun Gao 高群	Shandong University	2014.9	Ph.D candidate	gao-q14@mails.tsinghua.edu.cn
Ziyan Qin 秦紫焉	Tsinghua University	2016.9	Ph.D candidate	qzy15@mails.tsinghua.edu.cn
Qi Qi 齐琪	China Agricultural University	2017.9	Ph.D candidate	qiq17@mails.tsinghua.edu.cn
Jianmin Cheng 程静敏	Lund University	2017.9	Ph.D candidate	chengjm17@mails.tsinghua.edu.cn
Yufei Zheng 曾宇飞	Southern University of Science & Technologies of China	2019.9	Ph.D candidate	zengyf93@qq.com

Past staff scientists

Name	From	Time period	Current institute/position	Current E-mail Address
Zhili He 贺志理	Australian National Univ, Australia	2005.11-2017.5	One Thousand Talent Professor at Zhongshan Univeristy, Guangzhou, China	hezili@mail.sysu.edu.cn
Missy Lee		2007.5-2017.12	Administrative Assistant, Retired	

Ph.D. students mentored at OU

Names	From	Time Periods	Current institute/position	Current E-mail Address
Qichao (Philloid) 屠奇超	Zhejiang Univ	2008.8-2014.8	Shandong Univ Professor,	tuqichao@zju.edu.cn
Ming Xie 谢明	Central South Univ	2009.1-2016.11	U of Texas at Dallas	
Tao Xu 徐涛	Chinese Academy of Agricultural Sciences	2011.8-2016.11	Joslin Diabetes Center, Harvard University	
Zhou Shi 石舟	Yunnan Univ	2010.8-2017.5	UC- San Francisco Postdoc	jason.shi@gladstone.ucsf.edu zhoushihn@gmail.com
Mengting Yuan 袁梦婷	Tsinghua Univ	2011.8-2017.8	UC Berkeley postdoc	ymt.yuan@gmail.com
Feifei Liu 刘飞飞	Central South Univ, China	2008.1-2017.8	Guangzhou Insitute of Microbiology	
Wenbin Liu 刘文斌	Central South Univ, China	2008.1-2017.12	Tsinghua University MBA program	
Daniel Curtis	Georgia State Univ	2011.8-2018.12		dancurtis87@ou.edu

Yujia Qin 秦愈佳	Harbin Institute of Technology	2009.1-2018.12		Yujia.Qin-10@ou.edu
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Ph.D. students mentored at Tsinghua U

Names	From	Periods	Present position	
Linwei Wu 吴林蔚	Tsinghua University	2012.9-2016.10	University of Oklahoma	
Shuo Yang 杨硕	Tsinghua University	2011.9-2015.12	Tsinghua University	
Ying Gao 高莹	Tsinghua University	2011.9-2015.12	China Forestry Science Research Institute	
Mengxin Zhao 赵梦欣	China Agricultural University	2011.9-2016.8	Tsinghua University	
Junjun Ding 丁军军	Qingdao U	2012.9-2016.6	Chinese Academy of Agricultural Sciences	
Haowei Yue 岳浩伟	Tsinghua University	2012.9-2017.7	EPA, Shengzhen City, China	
Xinyu Ma 马星宇	China Forestry University	2013.9-2018.7	Ph.D candidate	
Mengmeng Wang 王萌萌	Shandong University	2012.9-2018.7	Ph.D candidate	
Sihang Yang 杨思航	Shandong University	2014.9-2019.7	Ph.D candidate	

Master students mentored at OU

Names	From	Time period	Present Address/position	Current Address	E-mail
Jingrong Chen	Nanjing Univ, China	2006.8-2009.5	Oklahoma Medical Research Foundation		
Yunyu (Irene) Chen	Nanjing Agricultural Univ	2007.8-2011.5	Baylor College of Medicine		

Yue Huang 黄跃	Shanghai Institute of Plant Physiology and Ecology	2009.1-2013.5	Private company in China	
Rong Song 宋蓉	Virginia Tech	2010.6-2014.12	Private Company	
Depeng Xu	Tsinghua Univ	2011.8-2014.12	University of Arkansas, Little Rock	
Cong Wang 王丛	Tsinghua Univ	2013.8-2016-8	University of Michigan	

Master students mentored at Tsinghua U

Names	From	Time periods	Present Address/position	Current Address	E-mail
Houjuan Chu 褚厚娟	Tsinghua University	2011.9-2014.7	Beijing Kangpusheng Biotechnologies Inc		
Shanshan Liu 刘珊珊	Tsinghua University	2011.9-2014.7	Zijin Mining Group Co., Ltd		
Xin Sun 孙欣	Tsinghua University	2012.9-2015.7	Princeton University, Ph.D candidate		
Qiaoshu Zheng 郑乔舒	Tsinghua University	2013.9-2105.7	Yongchang Group Inc.		
Tengxu Wang 王腾旭	Tsinghua University	2013.9-2016.7	Civil Design Institute of Northern China		
Jianshu Zhao 赵建树	Nanjing Agricultural University	2016.9-2019.7	Georgia Institute of Technology		
Qiuting Zhang 张秋亭	Jilin University	2016.9-2019.7	Tsinghua University		

POSTDOCTORAL TRAINED

Postdoctorals	From	Time period	current institution/position	current e-mails address

Raymond D. Stapleton	Univ of Tenn, Knox	1998.4-1999.8	Synthetic Biologics Senior Vice President, Manufacturing, Merck & Co Pharmaceutical Company, VA	
Guangshan (Gary) Li 李广善	Virginia Tech	1998.10-2000.9	Principal Investigator and Group Leader, Dow Corning, NY	
Richard Hurt	Univ of Tenn, Knox	1998.4-2001.9	Staff Scientist, Atomic Sciences, Oak Ridge, TN	
Dorothea Thompson	Univ of Maryland	1999.12-2001.9	Campbell University Associate Professor	dthompson@campbell.edu
Gina Holguin	Univ of Waterloo	2000.12-2001.6	Staff Scientist , Centrede Investigaciones Biolo'gicasdel No-roeste, CIBNOR, LaPaz 23090, BCS, Mexico	
Matthew Fields	Cornell Univ	2000.12-2000.9	Prof, Montana State Univ	matthew.fields@erc.montana.edu
Christopher Bagwell	Univ of South Carolina	2001.3-2002.8	Staff Scientist, Lab, Aiken, SC.	Christopher.bagwell@srl.doe.gov
Alex Beliaev	Univ of Massettutes	1999.12-2002.9	Microbiology Scientist, Pacific Northwest National Laboratory, Richland, WA	alex.beliaev@pnl.gov
Adam Leaphart	Univ of South Carolina	2002.6-2003.9	Staff Scientist, State Department of Health, SC.	
Sonia Maraya Tiquia	Univ of Hongkong	2001.9-2003.8	Professor, Univ of Michigan, Dearborne, MI.	smtiquia@umich.edu

Sung-Keun Rhee	Rutgers University	2002.3-2003.8	Chungbuk National University	rhees@chungbuk.ac.kr
Xiufeng Wan 万秀峰	Univ of Mississippi	2001.12-2003-11	Mississippi State university Assistant Professor	Wan@cvm.msstate.edu
Yongqing Liu 刘永庆	Noble Foundation, OK	2000.3-2003.12	Assistant Professor, University of Louisville, Louisville, KY	yongqing.liu@louisville.edu
Ting Li 李婷	Univ of Kentucky	2002.3-2003.12	Postdoc, Univ of Georgia, Athens, GA	
Song Chong	Oregon Polytech	2002.3-2003.9	Scientist, private company, Korea	
Jost Liebich		2003.1-2004.7	Postdoc, Institute of Chemistry and Dynamics of the Geosphere IV, Forschungszentrum Jülich GmbH, Germany	
Crystal Bickley McAlvin	Univ of Tenn, Knoxville	2003.3-2004.11	Postdoc, Univ of Tenn, Knoxville	
Yunfeng (David) Yang 杨云锋	Albert Einstein College of Medicine, Bronx, NY	2003.2-2005.11	Tsinghua University Professor	yangyf@tsinghua.edu.cn
Christopher Schadt	Univ of Colorado	2003.1-2005.11	Senior Staff Scientist, Oak Ridge National Lab	schadtcw@ornl.gov
Steve Brown	Univ of Otago, Dunedin, New Zealand	2002.10-2005.11	Staff Scientist, Oak Ridge National Lab	brownsd@ornl.gov
Terry Gentry	Univ of Arizona	2003.8-2005.11	Associate Professor, Texas A&M Univ	tjgentry@tamu.edu

Xichun Zhou 周曦春	Univ of Singapore	2001.8- 2005.11	Staff Scientist, Adatech Inc, Denver, CO	xichun.zhou@lifebioscience.com
Haichun Gao 高海春	Purdue Univ	2002.2- 2008.4	Professor, Zhejiang Univ	haichung@zju.edu.cn
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Youlboong Sung	Georgia Institute of Technology	2004.8- 2006.8	Staff Scientist, Research Institute of Industrial Science and Technology, South Korea.	
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James Voordeckers	Rutgers University	2009.8-2016.5		
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Mark H. Pinkerton	Drexel Univ	2010.8-2011.7	Private firm	
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Di Liu 刘迪	Institute of Microbiology, Chinese Academy of Science (CAS)	2008.2-2008.5	Scientist, Institute of Microbiology, CAS	
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Past visiting undergraduate students and interns

Name	From	Time periods	Current institution/Position	Current address	e-mails
Patrick E. McDonel	University of Indiana at South Bend	1998.8-1999.8	Ph.D candidate, Univ of Calif, Berkeley		
Zakee Sabree	Florida A&M Univ	1998.8-1998.12	Univ of Wisconsin, Madison, WI		
Jestus Kim	Emory University	1999.6-1999.8	Emory Univ		
Nicholas Laszio		2001.9-12			
Jon Brooks Boroughs		2000.6-2000.8	High School Teacher		
Daree Russell		2000.4-2001.3			
Roshitha V. Dunstan		2001.6-2001.8			
Shreni Keniya		2001.8-2001.12			
Katie Bergman		2001.6-2001.8			
Samantha Danielle		2002.5-2002.8			
Scott J. Pesek	Univ of Tennessee	2003.8-2003.12	Univ of Tennessee		

Funjun Zhou	Univ of Tennessee	2004.8-2004.12	Univ of Tennessee	
Kevin Kuhaida		2000.10-2000.12		
Rachel Lynch		2004.5-2004.8		
Melissa Schuyler		2004.5-2004.8		
Lei Chen	Tsinghua University	2016.2-2016.5	Ph.D. candidate at TU	
Aiyang Li	Tsinghua University	2016.2-2016.5	Ph.D. candidate at TU	
Yupeng Fan	Zhejiang U	2015.9-2016.8	Ph.D. candidate at OU	

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Xiaoyun Qiu	Michigan State Univ	1999-2004
Laurel Crosby	Stanford Univ	1999-2003
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Weiming Liu	Electrical and Computer Engineering, Univ. of Oklahoma	2006-2010
Xia Xu	Microbiology and Plant Biology, Univ of Oklahoma	2008-2012
Huang Chen	Biochemistry, Univ of Oklahoma	2012
Kangmei Zhao	Dept of Microbiology and Plant Biology, Univ. of Oklahoma	2012
Yuchen Qiu	Electrical and Computer Engineering, Univ. of Oklahoma	2012
Chen Huang	Dept of Chemistry and Biochemistry, OU	2011-2017