

## CURRICULUM VITAE

**JIZHONG ZHOU**

(As of 12-31-2024)

### PERSONAL:

Date of Birth:

August 6, 1959

Place of Birth:

Shaoyang, Hunan Province, P. R. China

Citizenship:

The United States of America  
Naturalized date: April 12, 2001

Marital Status:

Cindy Shi (Wife)

Children:

Elizabeth Yaxi Zhou (Daughter)  
Benjamin Yamin Zhou (Son)

Home Address:

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### Business Address:

George Lynn Cross Research Professor, School of Biological Sciences  
Director of the Institute for Environmental Genomics (IEG)  
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### EDUCATION:

BS	1978-1981	<b>Plant Pathology &amp; Entomology</b> , Hunan Agricultural University, Changsha, China
MS	1982-1984	<b>Mathematical Ecology</b> , 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	<b>Systems Ecology</b> , Research Center for Eco-Environmental Sciences (RCEES), Chinese Academy of Sciences, Beijing China Advisor: Prof. Shijun Ma (Academician) Thesis: Ecological engineering, simulation, and prediction of agroecosystems.
Ph.D.	1990-1993	<b>Molecular Biology</b> , 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

2022-present Adjunct Professor, School of Computer Science, Norman, University of Oklahoma  
 2019-2020 Visiting Professor, Department of Ecology and Evolution and Princeton Environmental Institute, Princeton University, with Dr. Simon Levin  
 2014-Present George Lynn Cross Research Professor, School of Biological Sciences (Formerly, Department of Microbiology and Plant Biology), University of Oklahoma, Norman, OK  
 2005-present Director of the Institute for Environmental Genomics (IEG), University of Oklahoma, Norman, OK  
 2015-present Adjunct Professor, School of Civil Engineering and Environmental Sciences, University of Oklahoma, Norman, OK  
 2005-present Presidential Professor, School of Biological Sciences (Formerly, Department of Microbiology and Plant Biology), University of Oklahoma, Norman, OK  
 2006-present Senior Visiting Scientist, Lawrence Berkeley National Laboratory (LBL), Berkeley, CA  
 2009-present Adjunct Professor (Distinguished visiting professor), School of Environment, Tsinghua University, Beijing, China  
 2015-2017 Visiting Professor, Nanyang Environment and Water Research Institute (NEWRI), The School of Civil and Environmental Engineering, Nanyang Technological 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

- 2006-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

- 2023-present Mentor for R25 funded Careers through Mentoring and training in Omics and Data for Early-stage investigators, Columbia University
- 2023-present Member of Climate Action Advisory Group, Applied Microbiology International (AMI)
- 2022-present Committee member for Global Ocean Negative Carbon Emissions (ONCE), Southern Marine Science and Engineering Guangdong Laboratory (Zhuhai)
- 2022-present Member of Advisory Committee, Key Laboratory of Coastal Environment and Resources of Zhejiang Province (KLaCER), Westlake University
- 2022 Member of Review Panel for Systems and Synthetic Biology, NSF Division of Molecular and Cellular Biosciences (MCB)
- 2022 Member of Review Panel for EPSCoR RII Track-1, NSF's Office of Integrative Activities (OIA).
- 2022 IWA Fellows Nomination Committee
- 2022 Member of the Advisory Committee for the 8th International Symposium on Soil Organic Matter (SOM), June 26-30, 2022, Seoul, South Korea
- 2022 Member of Review Panel for NSF EFRI (Emerging Frontiers in Research and Innovation program).
- 2022 Member of Review Panel for DOE Great Lake Bioenergy Research Center (GLBRC)
- 2021 Member of Ernest Orlando Lawrence Award Committee, DOE
- 2021 Member of Review Panel for Early Career program, NSF Environmental Engineering Program
- 2021 Panel member for BER Science Focus Area (SFAs) projects for KBase applications
- 2021 Committee Member for OU entrepreneurship working group

2021 Member of Review Panel for Understanding the Rules of Life: Microbiome Interactions and Mechanisms (URoL:MIM)

2020-present Member of the International Academic Advisory Committee, Shandong Energy Institute

2020 Member of Review Panel for Early Career program, NSF Environmental Engineering Program

2020 International assessment of Chinese Academy of Sciences Research Institutes, Research Center for Eco-Environmental Sciences.

2020 Member of Ernest Orlando Lawrence Award Committee, DOE

2020-present Member of Project Support Group, Materials & Manufacturing research thrust in the National Alliance for Water Innovation (NAWI) Hub, which is administrated by Lawrence Berkley National Laboratory.

2020-2023 Editorial Advisor for BMC Microbiology

2019-present Member of Advisory Committee/Chief Scientist, Center for Grassland Microbiome, Lanzhou University

2019 Member of Review Panel for NSF Environmental Engineering Program

2018-2020 Member of Advisory Committee for Southern Marine Sciences and Engineering Guangdong Laboratory (Zhuhai), Sun Yat-sen University (SYSU)

2017 Member of Review Panel for Science Foundation Ireland

2018-present Member of Advisory Committee for International Center for Deep Life Investigation (IC-DLI), Shanghai Jiaotong University

2017-2019 Member of Review Panel for Hydrosphere Microbiology Program, Chinese National Science Foundation

2016-present Scientific advisor, Guangdong MagiGene Biotechnology Co. Ltd., Guangzhou

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.

2014-2019 Member of Advisory Committee, CAS Key Laboratory, Center for Eco-Environmental Sciences (RCEES), Chinese Academy of Sciences.

2014-2018 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, Sichuan University, China

2011-2014 Member of Local Organizing Committee, The 15<sup>th</sup> International Symposium on Microbial Ecology (ISME-15)

2011-2019 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 on global hot spring 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 3<sup>rd</sup> 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.  
2001-2006 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**

2024	Guest Editor for PNAS
2023	Guest Editor for PNAS
2022	Guest Editor for PNAS
2021	Guest Editor for PNAS
2021-present	Co-Editor-in-Chief for mLife
2020	Guest Editor for PNAS
2020-present	Associate Editor for Microbiome and Environmental Microbiome
2017-2023	Senior Editor for The ISME Journal, the prime journal in microbial ecology.
2020-2023	Editorial Advisor for BMC Microbiology
2014-2020	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

2023-present	Microbial Ecology
2021-present	Engineering Microbiology
2017-present	Soil Systems
2008-2014	Environmental Microbiology and Environmental Microbiology Reports
2013-present	Member of Faculty 1000
2007-2017	The ISME Journal
2007-2022	Chinese Journal of Biotechnology
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  
 Ecological Society of America  
 International Water Association  
 American Geological Union  
 Soil Science Society of America

### AWARDS AND HONORS

2024	Among the top 0.1% of the world's highly cited researchers in both fields of <b>Microbiology</b> , and <b>Environment &amp; Ecology</b> , <a href="https://clarivate.com/highly-cited-researchers/">https://clarivate.com/highly-cited-researchers/</a> . (A total of 6,626 scholars across 21 research fields were recognized. Of the world's population of scientists and social scientists, Highly Cited Researchers™ are 1 in 1,000. Only 216 (3%) being recognized in more than two fields).
2024	World's most cited researcher (top 0.1%) across all science & engineering fields (22 scientific fields and 174 sub-fields) among >10.2M scientists based on Elsevier's <i>Scopus</i> ( <a href="https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/7">https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/7</a> ). (ranked at 4,175 in total of 10,257,575 (top 0.04%) scientists based on the ranking with <b>no self-citation</b> ; at

- 63 of 115291 (top 0.05%) in Environmental Sciences, and at 140 of 204759 (0.06%) in Microbiology)
- 2024 Distinguished Scientist Award by Southeastern Universities Research Association (SURA) for recognizing scientists who are performing world-leading research. ([https://en.wikipedia.org/wiki/Southeastern\\_Universities\\_Research\\_Association](https://en.wikipedia.org/wiki/Southeastern_Universities_Research_Association)), with ~60 universities, including MIT, Duke, Georgia Tech, Vanderbilt, Rice, Tulane, UGA, U of Maryland, U of Florida, UNC, OU etc.
- 2024 Fellow of Soil Science Society of America (SSSA), the highest recognition given by the Society.
- 2024 **Member of Academia Europaea (The Academy of Europe)** (Academia Europaea is the only Academy with individual membership from the Council of Europe states and other countries worldwide, and is one of the most influential scientific organizations in the world).
- 2024 **Best Scientist** in the field of Microbiology: ranked at top #38 worldwide of nearly 44,555, and #20 of nearly 1686 nationally in the United States (<https://research.com/scientists-rankings/ecology-and-evolution>) (Based on the 3<sup>rd</sup> edition of Research.com, 11-21-2023; a total of 166,880 researchers were evaluated in this field)
- 2024 **Best Scientist** in the field of Ecology and Evolution: ranked at top #30 worldwide of nearly 21,000, and #14 of nearly 2500 nationally in the United States (<https://research.com/scientists-rankings/ecology-and-evolution>) (Based on the 3<sup>rd</sup> edition of Research.com, 11-21-2023; a total of 166,880 researchers were evaluated in this field).
- 2024 Inaugural Lifetime Achievement Award from University of Oklahoma for recognizing exceptional and innovative research and creative activity contributions, the impact of which offers broad societal benefits.
- 2023 World's most cited researcher (top 0.1%) across all science & engineering fields (22 scientific fields and 174 sub-fields) among >9.6M scientists based on Elsevier's *Scopus* (<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw>). (ranked at 5,032 in total of 9,617,281 (top 0.05%) scientists based on the ranking with no self-citation)
- 2023 Among the top 0.1% of the world's highly cited researchers in both fields of **Microbiology**, and **Environment & Ecology**, <https://clarivate.com/highly-cited-researchers/>. (A total of 7,125 scholars across 21 research fields were recognized. Of the world's population of scientists and social scientists, Highly Cited Researchers™ are 1 in 1,000. Only 6% within this rank have the additional distinction of ranking among two categories)
- 2023 **Member of American Academy of Arts & Sciences (AAA&S)** for recognizing people from every discipline and profession who are making extraordinary contributions to society.
- 2023 **Best Scientists** in the field of Ecology and Evolution: ranked at top #40 worldwide of nearly 12,000, and #19 of > 2000 nationally in in the United States (<https://research.com/scientists-rankings/ecology-and-evolution>) (Based on the 2<sup>nd</sup> edition of Research.com, 12-21-2022; a total of 11,774 researchers were evaluated in this field).
- 2022 World's most cited researcher (top 0.1%) across all science & engineering fields among >9M scientists based on Elsevier's *Scopus* (<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw>). (ranked at 6,150 in total of 9,068,663 scientists based on the ranking with no self-citations)
- 2022 Among the top 0.1% of the world's highly cited researchers (total of 6,938 scholars across 21 research fields) in the field of **Microbiology**, and the field of **Environment & Ecology**, <https://clarivate.com/highly-cited-researchers/>.

- 2022 Most highly cited researcher (H-index > 100) according to their Google Scholar Citations (<http://www.webometrics.info/en/hlargerthan100>), (position at 2051; global total 5,882 based on statistics on Second week of March 2022, 15<sup>th</sup> Edition).
- 2022 **ISME-IWA BioCluster Grand Prize** Award for recognizing and rewarding interdisciplinary research of unusual merit in the interface of microbial ecology and water/wastewater treatment (<https://iwa-network.org/bio-cluster-award/>, <https://www.isme-microbes.org/awards/bio-cluster-award/>).
- 2022 **Soil Science Research Award** for recognizing outstanding research contributions in soil science (<https://www.soils.org/awards/view/67>)
- 2021 Among the top 0.1% of the world's highly cited researchers (total of 6,612 scholars across 21 research fields) in Microbiology, <https://recognition.webofscience.com/awards/highly-cited/2021/>.
- 2021 Among the 2021 Reuters List of World's **Top 1000 Climate Scientists** (ranked at 445, among the the scientists who are having the biggest impact on the climate-change debate – their lives, their work and their influence on other scientists, the public, activists, and political leaders; <https://www.reuters.com/investigates/special-report/climate-change-scientists-list/>) (The only microbiologist among the list).
- 2021 2021 Award for Excellence in Research in the Natural Sciences. Vice President for Research and Partnerships, University of Oklahoma.
- 2021 World's most cited researcher (top 0.1%) across all science & engineering fields among 8.5M scientists based on Elsevier's *Scopus* (<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3>). (Without self-citations, at position of 6,301 in total of 8,545,559 scientists with no self citations).
- 2020 Fellow of International Water Association (IWA)
- 2019-2023 Most highly cited researcher (H-index > 100) according to their Google Scholar Citations (<http://www.webometrics.info/en/hlargerthan100>), (fewer than 6,000 globally).
- 2020 World's most cited researcher (top 0.1%) across all science & engineering fields among 7.9M scientists based on Elsevier's *Scopus* (<https://doi.org/10.1371/journal.pbio.3000918>). (without self-citations, at position of 7,549 in total of 7.9M).
- 2020 Among the top 0.1% of the world's highly cited researchers (fewer than 6,400 scholars across 21 research fields) (<https://recognition.webofscience.com/awards/highly-cited/2020/>) in microbiology.
- 2019 World's most cited researcher (top 0.13%) across all science & engineering fields among 6.9M scientists based on Elsevier's *Scopus*, the largest abstract and citation database of peer-reviewed literature (<https://doi.org/10.1371/journal.pbio.3000384>), ranked at top 75 of >55K environmental scientists worldwide. (without self-citations, at position of 7,549 in total of 6,987,292)
- 2019 Among the top 0.1% of the world's highly cited researchers at Cross Field (fewer than 6,300 scholars across 21 research fields) <https://recognition.webofscience.com/awards/highly-cited/2019/>).
- 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 Among the top 0.1% of the world's highly cited researchers (fewer than 6,200 scholars across 21 research fields) (<https://recognition.webofscience.com/awards/highly-cited/2018/>) at Cross Field (*Recognizing the world's most influential researchers of the past decade, demonstrated by the production of multiple highly-cited papers that rank in the top 1% by citations for field and year in Web of Science*)
- 2018 Fellow of Ecological Society of America (ESA)



2017-present	Chinese Association of Microbial Ecology (CAME) established an award under his name: “Jizhong Zhou Award on Microbial Ecology” to recognize Outstanding Microbial Ecologists.
2017	National Chair Professor, Tsinghua University
2016-2017	Hood Fellowships Awards, The University of Auckland, New Zealand
2016	Patent Award, University of Oklahoma
2015	<b>The Ernest Orlando Lawrence Award</b> in Biological and Environmental Research in 2014 ( <i>U.S Department of Energy’s scientific award established by President Dwight Eisenhower in 1959; One of the highest honors presented by the U.S. government in science</i> ); In <b>Congressional Record</b> (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 ( <a href="http://www.theasm.org.au/visiting-speakers-program-2013">http://www.theasm.org.au/visiting-speakers-program-2013</a> ).
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	<b>R&amp;D 100 Award</b> for GeoChip development by R&D Magazine, which <i>presents awards annually to the 100 most innovative scientific and technical breakthroughs of the year</i> .
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 An Men Square for celebrating 60 <sup>th</sup> 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	GeoChip technology highlighted in the NRC’s report on the New Science of Metagenomics, Page 75, ( <a href="https://www.ncbi.nlm.nih.gov/books/NBK54006/pdf/Bookshelf_NBK54006.pdf">https://www.ncbi.nlm.nih.gov/books/NBK54006/pdf/Bookshelf_NBK54006.pdf</a> )
2007-present	<b>Honorary Director</b> for Chinese Association of Microbial Ecology (CAME)
2007-2010	Oversea Changjiang Scholar (One of the greatest awards for Oversea Chinese professionals) by Chinese Ministry of Education at Central South University.
2006	GeoChip technology (formerly functional gene array) highlighted in the roadmap for NSF’s National Ecological Observatory Network (NEON), Page 45, ( <a href="https://www.neonscience.org/sites/default/files/document-files/ISEP_2006Oct23.pdf">https://www.neonscience.org/sites/default/files/document-files/ISEP_2006Oct23.pdf</a> )
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 oversea Chinese Scientists for memorizing Mr. Xiaoping Deng (Chinese Leader) for 100 years of birth for his education reform in China in 1977.
2004-2009	Oversea Outstanding Young Scientist (Highest award for oversea young scientist), Chinese National Science Foundation at Central South University.
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 (PECASE)** 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, DOE**
- 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-present Guest Professor, Jinan, Shandong University
- 2012-2017 Guest Professor, One hundred talent scholar, Sichuan University
- 2011-2019 Guest Professor, Harbin Institute of Technology, Harbin, China
- 2010 Guest Professor, Zhongshan University, Guangzhou, China
- 2009-2020 Guest Professor, Minjiang Scholar, State Key Laboratory of Marine Environmental Science, 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-present 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.
- 2009-present Guest Professor, Central South University, Changsha, 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, Research Center for Eco-Environmental Sciences (RCEES), 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 - one of the best two universities in China, with main purposes to recognize excellent graduate students in microbial ecology, environmental science, and engineering at Tsinghua University, and to promote international collaboration between US and China. He also established “Cindy and Jizhong

Zhou Graduate Student/Post-doctorate Travel Award in Environmental Science and Technology” at OU and “Jizhong Zhou Award in Ecology Research” for undergraduate and graduate students at Lanzhou U. Chinese Association of Microbial Ecology (CAME) – a major professional organization for microbial ecology in China, established an award under his name in 2017 to recognize Outstanding Microbial Ecologists, “Jizhong Zhou Award on Microbial Ecology for Outstanding Middle Career Microbial Ecologists”. In addition, Dr. Zhou 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.

## **MAJOR AWARDS AND HONORS OF STUDENTS, POSTDOCTORALS AND VISITING SCIENTISTS (not complete statistics):**

### **Awards**

- Yuting Liang, Outstanding Young Scientist, National Natural Science Foundation of China, 2024
- Jianjun Wang, Outstanding Young Scientist, National Natural Science Foundation of China, 2022
- Linwei Wu, Excellent Young Scientist, National Natural Science Foundation of China, 2021
- Gangsheng Wang, Excellent Young Scientist, National Natural Science Foundation of China, 2021
- Lei Cheng, Outstanding Young Scientist, National Natural Science Foundation of China, 2020
- Jiangtao Li, Chang Jiang Scholars (Chang Jiang Scholars Program), Ministry of Education, People’s Republic of China, 2020
- Jin Zeng, Excellent Young Scientist, National Natural Science Foundation of China, 2020
- Ye Deng, Young Wanren Plan Scholar, 2019
- Yunfeng Yang, Outstanding Young Scientist from National Natural Science Foundation of China, 2018
- Meiyong Xu, Wanren Plan Scholar, 2017
- Haichun Gao, Wanren Plan Scholar, 2017
- Aijie Wang, Wanren Plan Scholar, 2016
- Zhili He, Qianren Scholar, Zhongshan University, 2016
- Yuting Liang, Excellent Young Scientist, National Natural Science Foundation of China, 2016
- Yuting Liang, Outstanding Young Scientist, Jiangsu Province, 2016
- Outstanding Young Scientist in Agricultural Research of the Ministry of Agriculture and Rural Affairs 2021
- First Jiangsu Province Young Female Scientist Award 2023
- Jiangsu Province May Day Labor Medal 2022
- Fengping Wang, Outstanding Young Scientist from National Natural Science Foundation of China, 2015
- Hongchen Jiang, Excellent Young Scientist, National Natural Science Foundation of China, 2014
- Meiyong Xu, Excellent Young Scientist, National Natural Science Foundation of China, 2014
- Zhenmei Lu, Excellent Young Scientist, National Natural Science Foundation of China, 2014
- Lei Cheng, Excellent Young Scientist, National Natural Science Foundation of China, 2014
- Ye Deng, 100 Scholar, Chinese Academy of Sciences, 2014
- Yunfeng Yang, Distinguished Young Scholar, Tsinghua University, 2013
- Lei Cheng, Overseas Talents Program, 2013
- Lei Cheng, The Elizabeth Sulzman Award, The Ecological Society of America(ESA), 2013
- Lei Cheng, The Early Career Ecologist Award (Asian Ecology Section), The Ecological Society of America(ESA), 2013
- Aijie Wang, Changjiang Scholar, Ministry of Education, 2011
- Aijie Wang, Outstanding Young Scientist from National Natural Science Foundation of China, 2011
- Dongru Qiu, 100 Scholar, Chinese Academy of Sciences, 2011
- 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
- Xueduan Liu, Shenghua Scholar, Central South University, 2002-2007
- Xue Guo, 100 Scholar, Chinese Academy of Sciences, 2023
- Xue Guo, The Early Career Award (Asian Ecology Section), The Ecological Society of America(ESA), 2021
- Xue Guo, Chinese Science and Technology New Talent Award, 2021
- Qun Gao, Future Women Scientists Award, China Association for Science and Technology, 2021
- Qun Gao, Young Elite Scientists Sponsorship Program, China Association for Science and Technology, 2021
- Qun Gao, Top 10 Distinguished Postdoctoral Fellowship, Tsinghua University, 2022
- Qun Gao, Microbial Ecology Awards for Young Scholars, Ecological Society of China, 2023
- Yu Zhang, The Second Prize of the National Natural Science Prize, 2017
- Yu Zhang, The Second Prize of National Scientific and Technological Progress, 2006

### **Honors & leaderships**

- Aijie Wang, He Liang He Li Foundation Science and Technology Innovation Award, 2023
- Aijie Wang, the Second Prize of National Technology Invention, China, 2021
- Yu Zhang, member of the World Health Organization (WHO)'s Strategic and Technical Advisory Group for Antimicrobial Resistance (STAG-AMR). 2020-present.
- Fengping Wang, Board Member for International Society for Microbial Ecology (ISME) (2020-2026)
- Aijie Wang, The International Water Association (IWA) Fellow, 2015
- Aijie Wang, Chair for The International Water Association (IWA) Anaerobic Digestion (AD), 2018-present
- Yu Zhang, Director of Chinese Association for Microbial Ecology (CAME), 2018-present
- Yunfeng Yang, Deputy Director of Chinese Association for Microbial Ecology (CAME), 2018-present
- Aijie Wang, Deputy Director of Chinese Association for Microbial Ecology (CAME), 2018-present
- Meiyong Xu, Deputy Director of Chinese Association for Microbial Ecology (CAME), 2018-present
- Xueduan Liu, Deputy Director of Chinese Association for Microbial Ecology (CAME), 2010-present
- Huiwen Zhang, Deputy Director of Chinese Association for Microbial Ecology (CAME), 2010-present
- Fengping Wang, Deputy Director of Chinese Association for Microbial Ecology (CAME), 2010-present
- Ye Deng, General Secretary of Chinese Association for Microbial Ecology (CAME), 2018-present
- Zhili He, Committee members of Chinese Association for Microbial Ecology (CAME), 2018-present
- Lei Cheng, Committee members of Chinese Association for Plant Ecology, 2024-present
- Lei Cheng, Deputy Director of Soil Biology and Biochemistry, Soil Science Society of China, 2019-present
- Lei Cheng, Committee members of Chinese Association for Microbial Ecology (CAME), 2018-present
- Qichao Tu, Committee members of Chinese Association for Microbial Ecology (CAME), 2018-present
- Qingyun Yan, Committee members of Chinese Association for Microbial Ecology (CAME), 2018-present
- Huaqun Yin, Committee members of Chinese Association for Microbial Ecology (CAME), 2018-present
- Jianjun Wang, Board of Directors of Chinese Association for Quaternary Research (CHIQUA), 2024-present

### **Editorships**

- Ye Deng, Senior Editor for ISME J, 2021-present
- Yunfeng Yang, Associate Editor of mLife, 2021-present
- Yunfeng Yang, Associate Editor of Microbiome and Environmental Microbiome, 2020-present
- Zhili He, Associate Editor of Microbiome and Environmental Microbiome, 2020-present
- Yunfeng Yang, Associate Editor of *BMC Microbiology*, 2017-present
- Ye Deng, Associate Editor of *BMC Microbiology*, 2017-present
- Lei Cheng, Associate Editor, National Science Review, 2024-
- Lei Cheng, Associate Editor, Associate Editor of *Soil Ecology Letters* 2019-
- Lei Cheng, Associate Editor, Journal of Applied Ecology 2017-
- Ye Deng, Associate Editor of Microbiome and Environmental Microbiome, 2020-present
- Yunfeng Yang, Associate Editor of *Soil Ecology Letters*, 2018-present
- Jianjun Wang, Associate Editor of Functional Ecology, 2018-present
- Jianjun Wang, Editorial Board of the ISME journal, 2023-present
- Jianjun Wang, Editorial Advisory Board of Global Change Biology, 2023-present
- Aijie Wang, Editor-in-Chief of Environmental Research, 2019-present
- Aijie Wang, Associate Editor of *BMC Microbiology*, 2017-present
- Aijie Wang, Executive Editor-in-Chief of *Environmental Science & Ecotechnology*, 2018—present
- Fengping Wang, Associate Editor, Frontiers in marine molecular biology and ecology, 2017-present
- Fengping Wang, Editor, mLife, 2022-present
- Fengping Wang, Editor, Systematic and Applied Microbiology, 2019-present
- Fengping Wang, Editor, Environmental Microbiology, 2023-2028
- Fengping Wang, Academic Editor, PLoS Biology, 2021-present

**PUBLICATIONS** (<https://scholar.google.com/citations?user=4ho6TVUAAAAJ&hl=en>)

### Summary

- Over 700 peer reviewed publications
- Google Scholar: h-index = **155**, >86,600 citations
- Web of Science: h-index = **138**, >69,000 citations
- **49** publications in *Science*, *Nature*-branded journals, and *Proceedings of the National Academy of Sciences*
- **207** papers published in **Nature indexed journals**, including *Science* (4), *Nature Climate Change* (5), *Nature Geoscience* (1), *PNAS* (13), *Nature Communications* (15), *Ecology Letters* (2), *The ISME Journal* by Nature Publishing Group (55) (The top one journal in microbial ecology), *Environmental Science & Technology* (27), *Water Research* (15), and *Geochimica et Cosmochimica Acta* (2), and other prestigious journals, e.g., *Nature Microbiology* (4), *Nature Ecology and Evolution* (2), *Nature Food* (1), *Nature Plants* (1), *Nature Water* (1), *Nature Reviews Microbiology* (2), *Microbiology and Molecular Biology Reviews* (1), *mBio* (25), *Global Change Biology* (20), *Microbiome* (11), and *Ecology* (1).

### Impacts

- 2024                      *Research.com* **Best Scientist** in the field of Ecology and Evolution: ranked at top **#30** worldwide of nearly 21,000, and **#14** of nearly 2,500 nationally in the United State (<https://research.com/scientists-rankings/ecology-and-evolution>)
- 2021                      Among the 2021 Reuters List of World’s Top 1000 Climate Scientists (#445)
- 2019-2024              Among world’s most highly cited researchers (top 0.1%) across all science & engineering fields among 10.2 million scientists based on Elsevier's *Scopus* in 2024 (<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/7>).

- 2019-present Most highly cited researcher (H-index > 100) according to their Google Scholar Citations, about 6,000 worldwide in 2023 (<http://www.webometrics.info/en/hlargerthan100>)
- 2018-2024 Top 0.1% global highly cited researcher in **both** fields of Microbiology, and Environment & Ecology based on the numbers of top 1% highly cited publications by Web of Science. A total of 6,626 scholars across 21 research fields were recognized in 2024, only 216 (3%) being recognized in more than two fields). (<https://hcr.clarivate.com/>).

## Research articles

### In revision or accepted

### Published

1. Zhang, L., D. Ning, D. Mantilla-Calderon, Y. Xu, B. Liu, W. Chen, J. Gao, K. A. Hamilton, J. Liu and **J.-Z. Zhou**, and F. Ling. 2024. Daily sampling reveals household-specific water microbiome signatures and shared antimicrobial resistomes in premise plumbing. **Nature Water**: 1-17, <https://doi.org/10.1038/s44221-024-00345-z>.
2. Liang Y., H. Han, T. W., Crowther, R. G. Jørgensen, C. Liang, J. Chen, Y. Sun, J. Ding, A. Huang, **J.-Z. Zhou**, and J. Zhang. 2024. Global decline in microbial-derived carbon stocks with climate warming and its future projections. **National Science Review**, 11(11): nwae330., [doi.org/10.1093/nsr/nwae330](https://doi.org/10.1093/nsr/nwae330)
3. Ma Z., M. Jiang, C. Liu, E. Wang, Y. Bai, M. M. Yuan, S. Shi, **J.-Z. Zhou**, J. Ding, Y. Xie, H. Zhang, Y. Yang, R. Shen, T.W. Crowther, J. Zhang, and Y. Liang. 2024. Quinolone-mediated metabolic cross-feeding develops aluminum tolerance in soil microbial consortia. **Nature Communications**, 15(1): 10148; <https://doi.org/10.1038/s41467-024-54616-0>
4. Ni, H., H. Hu, C. M. Zohner, W. Huang, J. Chen, Y. Sun, J. Ding, **J.-Z. Zhou**, X. Yan, J. Zhang, Y. Liang and T. W. Crowther. 2024. Effects of winter soil warming on crop biomass carbon loss from organic matter degradation. **Nature Communications**, 15(1); DOI: 10.1038/s41467-024-53216-2.
5. Chen, B., Z. Peng, S. Chen, Y. Liu, J. Qi, H. Pan, H. Gao, J. Gao, C. Liang, J. Liu, X. Qian, X. Zhang, S. Chen, J. Zhou, G. Wei and S. Jiao. 2024. Bridging ecological processes to diversity formation and functional profiles in belowground bacterial communities. **Soil Biology & Biochemistry** 198; DOI: 10.1016/j.soilbio.2024.109573.
6. Hua, H., C. Qian, K. Xue, R. G. Jorgensen, M. Keiluweit, C. Liang, X. Zhu, J. Chen, Y. Sun, H. Ni, J. Ding, W. Huang, J. Mao, R.-X. Tan, **J.-Z. Zhou**, T. W. Crowther, Z.-H. Zhou, J. Zhang and Y. Liang. 2024. Reducing the uncertainty in estimating soil microbial- derived carbon storage. **Proc. Natl. Acad. Sci. U.S.A**, 121(35); DOI: 10.1073/pnas.2401916121.
7. Jiang, M., W. Huang, J. Ding, Z. Ma, H. Hu, R. Huang, Y. Yang, **J.-Z. Zhou** and Y. Liang. 2024. Declining soil pH reduces microbial biomass-driven soil multifunctionality. **Applied Soil Ecology**, 203; DOI: 10.1016/j.apsoil.2024.105623.
8. Liang, Z., X. Guo, S. Liu, Y. Su, Y. Zeng, C. Xie, Q. Gao, J. Lei, B. Li, M. Wang, T. Dai, L. Ma, F. Fan, Y. Yang, X. Liu and **J.-Z. Zhou**. 2024. Microbial mediation of soil carbon loss at the potential climax of alpine grassland under warming. **Soil Biology & Biochemistry**, 192; DOI: 10.1016/j.soilbio.2024.109395.
9. Ma, Z., S. Jiao, K. Zheng, H. Ni, D. Li, N. Zhang, Y. Yang, **J.-Z. Zhou**, B. Sun and Y. Liang. 2024. Multiple spatial scales of bacterial and fungal structural and functional traits affect carbon mineralization. **Molecular Ecology**, 33(3); DOI: 10.1111/mec.17235.
10. Qi, Q., S. Ning, X. Guo, J. Zhao, R. Tian, H. Gui, J.-S. He, H. Wang, Z. Zhang, K. T. Konstantinidis, Q. Gao, Y. Wang, S. Li, W. Zhao, Y. Yang and **J.-Z. Zhou**. 2024. More sensitive microbial responses to the interactive effects of warming and altered precipitation in subsoil than topsoil of an alpine grassland ecosystem. **Global Change Biology**, 30(9); DOI: 10.1111/gcb.17487.

11. An, J., X. Xuan, Y. Wang, L. Wu, **J.-Z. Zhou**, and D. Mu. 2024. Analysis of genomic and characterization features of *Luteolibacter soli* sp. nov., isolated from soil. **Front. Microbiol.** 15:1483195. doi: 10.3389/fmicb.2024.1483195.
12. Xin, Y., Q. Gao, X. Chen, S. Sun, J. Liu, H. Gao, **J.-Z. Zhou**, and X. Xia. 2024. High biological N fixation potential dominated by heterotrophic diazotrophs in alpine permafrost rivers on the Qinghai–Tibet Plateau. **Water Res.** 15:264: 122239.; doi: 10.1016/j.watres.2024.122239.
13. Baker, N. R., K. Zhalnina, M. Yuan, D. Herman, J. A. Ceja-Navarro, J. Sasse, J. S. Jordan, B. P. Bowen, L. Wu, C. Fossum, A. Chew, Y. Fu, M. Saha, **J.-Z. Zhou**, J. Pett-Ridge, T. R. Northen, and M. K. Firestone. 2024. Nutrient and moisture limitations reveal keystone metabolites linking rhizosphere metabolomes and microbiomes. **Proc. Nat. Acad. Sci.**, 121: e2303439121; <https://doi.org/10.1073/pnas.2303439121>.
14. Feng, K., S. Wang, Q. He, M. Bonkowski, M. Bahram, E. Yergeau, Z. J. Wang, X. Peng, D. R. Wang, S. Z. Li, Y. C. Wang, Z. C. Ju, X. F. Du, C. L. Yan, S. S. Gu, T. Li, X. S. Yang, W. L. Shen, Z. Y. Wei, Q. L. Hu, P. F. Li, Y. M. Zhu, G. X. Lu, C. Qin, G. X. Zhang, C. W. Xiao, Y. F. Yang, **J. Z. Zhou** and Y. Deng. 2024. CoBacFM: Core bacteria forecast model for global grassland pH dynamics under future climate warming scenarios. **One Earth** 7: 1275-1287.
15. Hunt, K. A., A. V. Carr, A. E. Otwell, J. J. Valenzuela, K. S. Walker, E. R. Dixon, L. M. Lui, T. N. Nielsen, S. Bowman, F. von Netzer, J.-W. Moon, C. W. Schadt, M. Rodriguez Jr, K. Lowe, D. Joyner, K. J. Davis, X. Wu, R. Chakraborty, M. W. Fields, **J.-Z. Zhou**, T. C. Hazen, A. P. Arkin, S. D. Wankel, N. S. Baliga and D. A. Stahl. 2024. Contribution of Microorganisms with the Clade II Nitrous Oxide Reductase to Suppression of Surface Emissions of Nitrous Oxide. **Environmental Science & Technology**, 58, 16, 7056–7065.
16. Jian, S., J. Li, G. Wang, **J.-Z. Zhou**, C. W. Schadt and M. A. Mayes. 2024. Generalizing Microbial Parameters in Soil Biogeochemical Models: Insights From a Multi-Site Incubation Experiment. **Journal of Geophysical Research-Biogeosciences.** 129, e2023JG007825., <https://doi.org/10.1029/2023JG007825>.
17. Lei, J., Y. Su, S. Jian, X. Guo, M. Yuan, C. T. Bates, Z. J. Shi, J. Li, Y. Su, D. Ning, L. Wu, **J.-Z. Zhou** and Y. Yang. 2024. Warming effects on grassland soil microbial communities are amplified in cool months. **ISME Journal.** 18(1): wrae088
18. Li, S., M. Delgado-Baquerizo, J. X. Ding, H. Hu, W. G. Huang, Y. S. Sun, H. W. Ni, Y. Y. Kuang, M. M. Yuan, **J.-Z. Zhou**, J. B. Zhang and Y. T. Liang. 2024. Intrinsic microbial temperature sensitivity and soil organic carbon decomposition in response to climate change. **Global Change Biology.** 3, e17395; <https://doi.org/10.1111/gcb.17395>.
19. Liu, X. J. A., S. Han, S. D. Frey, J. M. Melillo, **J.-Z. Zhou** and K. M. Deangelis. 2024. Microbial responses to long-term warming differ across soil microenvironments. **ISME Communications.** 4, [doi.org/10.1093/ismeco/ycae051](https://doi.org/10.1093/ismeco/ycae051).
20. Qin, H. L., Y. Liu, C. L. Chen, A. L. Chen, Y. T. Liang, C. R. Cornell, X. Guo, E. Bai, H. J. Hou, D. Wang, L. Y. Zhang, J. Y. Wang, D. L. Yao, X. M. Wei, **J.-Z. Zhou**, Z. L. Tan, and B. L. Zhu. 2024. Differential contribution of microbial and plant-derived organic matter to soil organic carbon sequestration over two decades of natural revegetation and cropping. **Science of the Total Environment.** 949, 174960, <https://doi.org/10.1016/j.scitotenv.2024.174960>.
21. Shi, Z., F. M. Hoffman, M. Xu, U. Mishra, S. D. Allison, **J.-Z. Zhou** and J. T. Randerson. 2024. Global-Scale Convergence Obscures Inconsistencies in Soil Carbon Change Predicted by Earth System Models. **AGU Advances.** 5(2), e2023AV001068, [doi.org/10.1029/2023AV001068](https://doi.org/10.1029/2023AV001068).
22. Tian, R., **J. Z. Zhou** and B. Imanian. 2024. PlasmidHunter: accurate and fast prediction of plasmid sequences using gene content profile and machine learning. **Briefings in Bioinformatics.** 25(4), [doi.org/10.1093/bib/bbae322](https://doi.org/10.1093/bib/bbae322).
23. Wang, D., P. Candry, K. A. Hunt, Z. Flinkstrom, Z. Shi, Y. Liu, N. Q. Wofford, M. J. McInerney, R. S. Tanner, K. B. De Leon, **J.-Z. Zhou**, M.-K. H. Winkler, D. A. Stahl and C. Pan. 2024). Metaproteomics-informed stoichiometric modeling reveals the responses of wetland microbial

- communities to oxygen and sulfate exposure. **npj Biofilms and Microbiomes**. 10, 55. doi.org/10.1038/s41522-024-00525-5.
24. Zeng, Y., X. Guo, J. Lei, Y. Shi, X. Liu, T. Dai, Q. Zhang, Q. Gao, H. Chu, Y. Liu, **J.-Z. Zhou** and Y. Yang. 2024. Regional microbial biogeography linked to soil respiration. **Science of the Total Environment**. 929: 172263, <https://doi.org/10.1016/j.scitotenv.2024.172263>
  25. Zhang, L., R. Huang, Z. Ma, S. Li, J. Ding, W. Huang, C. Liu, Y. Sui, **J.-Z. Zhou**, J. Zhang and Y. Liang. 2024. Warming Leads to Changes in Soil Organic Carbon Molecules Due to Decreased Mineral Protection. **Journal of Agricultural and Food Chemistry**. 72(14): 7765-7773, [doi.org/10.1021/acs.jafc.3c09657](https://doi.org/10.1021/acs.jafc.3c09657).
  26. Zhu, L., L. Luan, Y. Chen, X. Wang, S. Zhou, W. Zou, X. Han, Y. Duan, B. Zhu, Y. Li, W. Liu, **J.-Z. Zhou**, J. Zhang, Y. Jiang and B. Sun. 2024. Community assembly of organisms regulates soil microbial functional potential through dual mechanisms. **Global Change Biology**, 30(2), e17160, [doi.org/10.1111/gcb.17160](https://doi.org/10.1111/gcb.17160).
  27. Michael, J. P., A. D. Putt, Y. Yang, B. G. Adams, K. R. McBride, Y. Fan, K. A. Lowe, D. Ning, S. Jagadamma, J. Won Moon, D. M. Klingeman, P. Zhang, Y. Fu, T. C. Hazen, and **J.-Z. Zhou**. 2024. Reproducible responses of geochemical and microbial successional patterns in the subsurface to carbon source amendment. **Water Research**, 255: 121460, [doi.org/10.1016/j.watres.2024.121460](https://doi.org/10.1016/j.watres.2024.121460)
  28. Zhang, Y., Y. Deng, C. Wang, Li S, Lau FTK, **J.-Z. Zhou**, T. Zhang. 2024; Effects of operational parameters on bacterial communities in Hong Kong and global wastewater treatment plants. *mSystems*. 9:e0133323. doi: 10.1128/msystems.01333-23.
  29. Liang, Z., X. Guo, S. Liu, Y. Su, Y. Zeng, C. Xie, Q. Gao, J. Lei, B. Li, M. Wang, T. Dai, L. Ma, F. Fan, Y. Yang, X. Liu, and **J.-Z. Zhou**. 2024. Microbial mediation of soil carbon loss at the potential climax of alpine grassland under warming. **Soil Biology and Biochemistry**, 192: 1093, <https://doi.org/10.1016/j.soilbio.2024.109395>
  30. Qiao, M. R. Sun, , Z. Wang, K. Dumack, X. Xie, C. Dai, E. Wang, **J.-Z. Zhou**, B. Sun, X. Peng, M. Bonkowski, and Y. Chen. 2024. Legume rhizodeposition promotes nitrogen fixation by soil microbiota under crop diversification. **Nature Communications**; 15: 2924, [oi.org/10.1038/s41467-024-47159-x](https://doi.org/10.1038/s41467-024-47159-x).
  31. Qiu Z., C. Lian, L., Yuan, B. Lin, J. Chen, R. Mu, X. Qiao, L. Zhang, Z. Xu, L. Fan, Y. Zhang, S. Wang, J. Li, H. Cao, B. Li, Y. Liu, L. Shi, Y. Tian, J. Ni, T. Zhang, **J.-Z. Zhou**, W. Zhuang, and K. Yu. 2024. BASALT refines binning from metagenomic data and increases resolution of genome-resolved metagenomic analysis. **Nature Communications**. 15:2179; doi.org/10.1038/s41467-024-46539-7
  32. Tian, J., J. Dungait, R. Hou, Y. Deng, L. Hartley, Y. Yang, Y. Kuzyakov, F. Zhang, M. Cotrufo, and **J.-Z. Zhou**. 2024. Microbially mediated mechanisms underlie soil carbon accrual by conservation agriculture under decade-long warming, **Nature Communications**, 15:377; doi.org/10.1038/s41467-023-44647-4.
  33. Zhang, Z., L. Zhang, L. Zhang, H. Chu, **J.-Z. Zhou**, and F. Ju. 2024. Diversity and Distribution of Biosynthetic Gene Clusters in Agricultural Soil Microbiomes. **mSystem**, 9: e01263-23; <https://doi.org/10.1128/msystems.01263-23>
  34. Ma, Z., S. Jiao, K. Zheng, H. Ni, D. Li, N. Zhang, Y. Yang, **J.-Z. Zhou**, B. Sun, and Y. Liang. 2024. Multiple spatial scales of bacterial and fungal structural and functional traits affect carbon mineralization, **Molecular Ecology**, 33: e17235 <https://doi.org/10.1111/mec.17235>.
  35. Qin, W., Wei, S.P., Zheng, Y., Choi, E., Li, X., Johnston, J., Wan, X., Abrahamson, B., Flinkstrom, Z., Wang, B., Li, H., Hou, L., Tao, Q., Chlouber, W.W., Sun, X., Wells, M., Ngo, L., Hunt, K.A., Urakawa, H., Tao, X., Wang, D., Yan, X., Wang, D., Pan, C., Weber, P.K., Jiang, J., **J.-Z. Zhou**, Zhang, Y., Stahl, D.A., Ward, B.B., Mayali, X., Martens-Habbena, W., Winkler, M.H. 2023. Ammonia-oxidizing bacteria and archaea exhibit differential nitrogen source preferences. **Nature Microbiology**, 9: 524–536; doi.org/10.1038/s41564-023-01593-7
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## PATENTS & PATENT APPLICATIONS

1. **Zhou, J. Z.**, D. Thompson, L. Wu. 2003. Detecting microorganisms using whole genomic DNA or RNA microarray. US patent No. 20030186220 A1(<https://www.google.com/patents/US20030186220>).
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. 2014. Methods of producing protoporphyrinix and bacterial mutants therefor. US Patent No. WO2014144329 A2 (<https://www.google.com/patents/WO2014144329A2?cl=en>).

## PROJECTS

Since moving from ORNL to OU in 2006, has 45 projects in genomics and microbial ecology with a total funding of >**\$46M**. Had 36 projects of **\$26M** at ORNL.

### Currently funded projects

1. Microbes Achieve Resistance to MicroOrganism-influenced Rust ( $\mu$ ARMOR): An Integrated Platform for Defeating Corrosion. Department of Defense, DARPA program, Co-PI with Arum Han, Arul Jayaraman, Paul de Figueredo etc. **\$699K** for J. Zhou (Jan 9, 2023 to Dec 31, 2026).
2. Fungal-Bacterial Interactions: Bridging Soil Niches in Regulating Carbon and Nitrogen Processes. Department of Energy. Co-PI with Nguyen, Yuan, et al et al, ~**\$433K** for J. Zhou (October1, 2022 - September 30, 2024)
3. EPRI E3P: High throughput synthetic biology approaches for mixed plastic degradation and reutilization. National Science Foundation. Co-PI with Arum Han, Aifen Zhou et al, ~**\$425K** to OU (October 1, 2021 to September 30, 2025).
4. ENIGMA (Ecosystems & Networks Integrated with Genes and Molecular Assemblies): A Multi-scale Systems Approach. Department of Energy. PI, **\$2,800K** (Oct 1. 2021-September 30, 2025) (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)

5. Dimensions of Biodiversity: US-China Collaborative Research: Quantifying the Impact of Eutrophication on the World's Grassland Soil Microbial Biodiversity and Functioning. National Science Foundation. Zhou (PI) with Elizabeth Borer, Eric Seabloom, and Daliang Ning, **\$2M** in total, ~**\$1.25M** for J. Zhou and D. Ning (October 1, 2021, September 30, 2026). China side, Yunfeng Yang ~\$450K by Chinese NSF.
6. Rules of Life: Microbiome Theory and Mechanisms (URoL:MTM): Searching for General Rules Governing Microbiome Dynamics using Anaerobic Digesters as Model Systems. National Science Foundation. Zhou (PI) with Alan Hastings, Mathew Leibold, Qiang He, and Daliang Ning, **\$3M** in total, ~**\$1.3M** for J. Zhou and D. Ning (October 1, 2020, September 30, 2025).
7. Management Practices to Promote Soil Biological Health with Reduced irrigation Inputs. US Department of Agriculture (USDA), Co-PI with Lauren Hale, **\$370K** (July 1, 2019 to May 30, 2024)
8. 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 (October1, 2019 - September 30, 2024)

### Accomplished projects

1. 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 May 31, 2023).
2. 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, 2022).
3. Succession characteristics of soil microorganisms and carbon transformation mechanism in alpine meadow under long-term warming and dry and wet conditions. National Natural Science Foundation of China (NSFC). ~**\$93K** (Jan. 1, 2019 - Dec 31, 2022) (This funding is to Tsinghua University).
4. 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, 2021) (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).
5. 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 (October1, 2015 - September 30, 2021)
6. 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 (October1, 2016 - September 30, 2020)
7. 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** (October1, 2013 - September 30, 2019) (OU's portion: \$2,069K).
8. Microbial biogeography of soil communities in paddy fields. PI, Chinese NSF, ¥3.6M (October 1, 2014 - September 30, 2019)
9. 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 (October1, 2013 - September 30, 2017)
10. 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).
11. 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)
12. 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)
  13. 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)
  14. HuMiChip to detect and characterize the human microbiome. Co-PI with Zhili He. OCAST, **\$300K** (February 1, 2011 to January 31, 2014)
  15. 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).
  16. 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)
  17. 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)
  18. 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. Nealon, 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.
  19. 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)
  20. 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.
  21. MO: A Genomics-enabled FACE Microbial Observatory: Changes in Microbial Diversity and Functions in responding to elevated CO<sub>2</sub>, Nitrogen Deposition and Plant Diversity. NSF-USDA Microbial Observatories Program, PI with Zhili He, **\$866K** (July 1, 2007 – August 13, 2012).
  22. 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.
  23. 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).
  24. 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)
  25. 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.
  26. 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)

27. 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)
28. Whole genome DNA arrays for bacterial identification and detection, Co-PI with Wu et al. OCAST, \$300K (February 1, 2008 to January 31, 2011)
29. Characterization of an H<sub>2</sub> Producing Biological System operating at 1 nM H<sub>2</sub> Concentration. Co-PI with Krumholtz et al (\$900K in total). DOE BES, **\$250K** for J. Zhou (Oct 1, 2008-Sept 30, 2011)
30. 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)
31. 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)
32. 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)
33. Institute for Environmental Genomics, PI with Z.L. He, **\$200K** (January 1, 2008 --- December 31, 2010).
34. The Joint BioEnergy Institute (JBEI) (\$125M in total), \$400K for J. Zhou (October 1, 2007 – September 30, 2012).
35. Development of Comprehensive Functional Gene Arrays for Microbial Community Analysis, Co-PI with He. OCAST, \$300K (October 1, 2006 to Sept 30, 2009)
36. 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)
37. Development of microbial consortia for efficient ethanol production from plant biomass, PI, Department of Energy, Oklahoma, \$200K (April 1, 2007 --- March 31, 2009)
38. 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)
39. 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).
40. 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).
41. 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.
42. 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.
43. 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).
44. 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).
45. 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).



46. 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.
47. 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).
48. 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).
49. 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).
50. 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.
51. 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).
52. 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).
53. 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).
54. 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).
55. 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.
56. 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.
57. 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.
58. 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).
59. 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).
60. *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).
61. 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).

62. 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).
63. 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).
64. 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)
65. 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).
66. 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).
67. 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)
68. 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).
69. 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).
70. 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

- 2024 Convenor for the ISME-IWA Biocluster Awards, ISME-19, August 22, Cap Town, South Africa
- 2023 Chairperson for the Symposium, Ecological and evolutionary responses of microbial communities to climate change, ASM Microbe 2023, June 15–19, 2023, Houston, TX
- 2021 Organizer for Joint online Symposium on microbial ecology between Chinese Association of Microbial Ecology (CAME) and ISME J.
- 2020-present Chair, International Forum on Advanced Environmental Sciences and Technology (iFAST), online seminar (<https://www.ou.edu/ieg/seminars>)
- 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<sup>st</sup> International Forum for Advanced Microbial Ecology (iFAME), Oct 28-31, 2019, Beijing
- 2019 Organizer for a Special Session on Global Wastewater Microbiome Consortium, the 16<sup>th</sup> IWA World Conference on Anaerobic Digestion, Delft, Netherlands, June 26, 2019.
- 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<sup>nd</sup> Jim Tiedje International Symposium on Microbial Genomics and Ecology, Oct 20-23, 2017, Beijing
- 2007 Co-Chair for Workshop on Microbiome in Engineered System—Methodologies: The 15<sup>th</sup> IWA World Conference on Anaerobic Digestion, Beijing, October 20, 2017
- 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, Denmark, 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
- 2014 Co-Chair for Roundtable Discussion on “Global Water Microbiome Consortium (GWMC)”, at Microbial Ecology in Water Engineering Session, The IWA World Water Congress, Lisbon, Portugal, September 22, 2014
- 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 15<sup>th</sup> International Symposium on Microbial Ecology
- 2011 Co-Organizer, The 1<sup>st</sup> 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 18<sup>th</sup> 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 13<sup>th</sup> 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 13<sup>th</sup> International Symposium on Microbial Ecology, Seattle, WA, August 22-27, 2010.
- 2009 Member of the Advisory Committee for The 17<sup>th</sup> 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 109<sup>th</sup> 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 16<sup>th</sup> International Conference on Microbial Genomes, September 14–18, 2008, Lake Arrowhead, CA
- 2008 Chair and Organizer, The 4<sup>th</sup> 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 15<sup>th</sup> International Conference on Microbial Genomes, September 16–20, 2007, College Park, MA
- 2006 Member of the Advisory Committee for The 14<sup>th</sup> 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 13<sup>th</sup> 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 10<sup>th</sup> International Symposium on Microbial Ecology, August 22–27, 2004, Cancun, Mexico.
- 2004 Chair for the session on “Advanced technologies for microbial ecology”, The 10<sup>th</sup> International Symposium on Microbial Ecology, August 22–27, 2004, Cancun, Mexico.
- 2004 Member of the Advisory Committee for The 12<sup>th</sup> 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 11<sup>th</sup> International Conference on Microbial Genomes, September 28 – October 2, 2003, Durham, NC.
- 2002 Member of the Advisory Committee for The 10<sup>th</sup> International Conference on Microbial Genomes, September 8–12, 2002, Lake Arrowhead, CA.
- 2001 Organizer and Chair, The 9<sup>th</sup> 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 9<sup>th</sup> International Symposium on Microbial Ecology, August 26–31, 2001, Amsterdam, The Netherlands.
- 2001 Chairperson for the Symposium, Microarrays and Microfluidics in Microbial Ecology, The 101<sup>st</sup> 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 8<sup>th</sup> International Conference on Small Genomes, September 24–28, 2000, Lake Arrowhead, CA

- 2000 Chair on the session of Bioremediation, The 8<sup>th</sup> International Conference on Small Genomes, September 24–28, 2000, Lake Arrowhead, CA
- 2000 Co-organizer, The 4<sup>th</sup> Conference on Molecular Ecology, July 15–18, 2000, Harbin, P.R. China
- 1999 Organizer and Chair, The 7<sup>th</sup> 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 3<sup>rd</sup> Conference on Molecular Ecology, August 28–31, 1999, Beijing, P.R. China.
- 1999 Chairperson for the Symposium, Recent Advances in Subsurface Microbial Ecology, The 99<sup>th</sup> 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

- 2024 Ohio State University (Professor)
- 2024 Temple University (Tenure)
- 2024 Canada Research Chairs (CRC) Program
- 2024 Southern University of Science and Technologies (SUSTech) (Tenure)
- 2024 Scripps Institution of Oceanography, University of California at San Diego (possible appointment for a tenured associate professor)
- 2023 University of Maryland, Baltimore County (UMBC) (Professor)
- 2023 University of Science and Technology of China (USTC) (Professor)
- 2023 Universiti Tunku Abdul Rahman (UTAR) (Professor), Malaysia
- 2023 Rice University (Tenure)
- 2021 Institute of Tibetan Plateau Research, Chinese Academy of Sciences (ITPCAS), 17 scientists
- 2020 Zhongshan University (Professor)
- 2020 University of California at San Diego (Advanced Professor Promotion)
- 2020 Michigan State University (Tenure)
- 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)

#### **AD HOC PAPER REVIEW**

2024	Science Advances
2024	Geoderma
2023	Nature
2022	Nature Microbiology
2021	iScience
2021	J Hazardous Materials
2020	Nature Reviews Earth & Environment
2019	PeerJ
2019	BMC Biology
2018	Proceedings of The Royal Society B
2018	Oikos
2018	Trends in Ecology and Evolution
2018	Nature Biotechnology
2017-2020	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
2003-2023	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**

2024	Dutch Research Council NOW, Netherlands Polar Programme
2024	European Research Council (ERC), ERC Synergy Grant on water
2024	European Research Council (ERC), ERC Starting Grant on soil
2024	Wittgenstein Award Nomination - The Austrian Science Fund (FWF)
2023	The Research Foundation – Flanders (FWO), Belgium.
2022-present	European Research Council (ERC)
2022	Qingdao Institute of Biomass Energy and Bioprocessing Technology (QIBEBT)
2022	United Arab Emirates University

2022-present Biotechnology and Biological Sciences Research Council (BBSRC), UK  
 2022 DOE Office of Science Graduate Student Research  
 2021 Chinese National Science Foundation (Excellent Young Scientist Program, GeoScience Division)  
 2021 The NWO Gravitation program  
 2021-present Research Grant Council, Hong Kong  
 2020 Canada Foundation for Innovation  
 2020 Army Research Office  
 2020 The United Arab Emirates University (UAEU)  
 2019-present Chinese Outstanding Young Scientist Program, CNSF  
 2018-present Earth Science Programs, CNSF  
 2018 France-Berkley Fund  
 2017-present 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-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-present European Research Council  
 2011 Biological and Medical Sciences, Austrian Science Fund  
 2010 NSF Ecosystem Program  
 2010 Leaders Opportunity Fund, Canada Foundation for Innovation  
 2009 Member of the Panel for Germany-China program on microbial ecology  
 2005-present Netherlands Organization for Scientific Research (NOW)  
 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-present Swiss National Science Foundation  
 2005 Austrian Science Fund (FWF)  
 2005 DOE Biological Investigation – Ocean Margin Program (BI-OMP)  
 2005 NSF Genes and Genome Systems program  
 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-present	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
2001-2010	US Department of Energy EPSCoR Program
1999-present	Reviewer for award for Natural Environment Research Council, United Kingdom
1995	Reviewer for grants in NSF Young Scientist Program

## INVITED SEMINARS

2024	“Systems Microbiology: From Genomes to Ecosystems”. Invited talk at Beijing Normal University (Zhuhai), Zhuhai, November 8, 2024.
2024	“Experimental and Computational Challenges in Omics-enabled Microbial Ecology”. Invited talk at mLife Research Conference, Shenzhen, November 7, 2024.
2024	“Microbes and Climate Change: Responses, Mechanisms, and Prediction”. Invited talk at Northwest Agricultural & Forestry University (NWA&FU), Yangling, October 30, 2024.
2024	“Searching for General Rules in Microbial Ecology”. Invited talk at Annual Microbial Ecology Meeting, Qingdao, October 28, 2024.
2024	“From Macroecology to Microecology: Challenges and Opportunities”. Invited talk at 100th Anniversary of Changmen Chen and Huiying Song, Hunan Agricultural University, Changsha, Oct 19, 2024
2024	“Systems Microbiology: From Genomes to Ecosystems”. Invited talk at Hunan Academy of Agricultural Sciences, Changsha, October 18, 2024.
2024	“Systems Microbiology: From Genomes to Ecosystems”. Invited talk at Institute of Microbiology, Chinese Academy of Sciences, Beijing, October 17, 2024 (Fangnan Dai Distinguished Series)
2024	“Omics-enhanced modeling of grassland ecosystem feedback responses to two decades of climate warming and biomass harvesting”, short talk on behalf of Zhifeng Yang, ISME-19, Cape Town, South Africa, August 22, 2024.
2024	“Searching for Rules Governing Microbial Community Dynamics”, Invited talk at The 109 <sup>th</sup> ESA Annual Meeting, Long Beach, CA, August 7, 2024

- 2024 “Microbes and Climate Change: Responses, Mechanisms, and Prediction”, invited talk at Southeastern Universities Research Association (SURA) Annual Conference, Washington DC, July 24, 2024
- 2024 “Global Wastewater Microbiome: Diversity, Biogeography and Future”, invited talk at King’s College, London, UK, June 11, 2024
- 2024 “Systems Microbiology: From Genomes to Ecosystems”, invited talk at King’s College, London, UK, June 10, 2024
- 2024 “Theoretical Challenges in Microbial Ecology”. Invited talk at Tsinghua Shenzhen International Graduate School, Shenzhen, April 15, 2024.
- 2024 “Omics-enabled Modeling Responses of Grassland Microbial Communities to Climate Warming”. Invited talk at The 12<sup>th</sup> GeoMicrobiology Conference, Wuhan, April 13, 2024.
- 2024 “Systems Microbiology: From Genomes to Ecosystems”. Invited talk at Wuhan Institute of Hydrobiology, Chinese Academy of Sciences, Wuhan, April 12, 2024
- 2024 “Traits-based Microbial Ecology: Challenges and Future Perspectives”. Invited talk at Huazhong Agricultural University, Wuhan, April 12, 2024.
- 2024 “Microbes And Climate Change: Insights From A Grassland Experiment”. Invited talk at University of Texas, Arlington, March 1, 2024
- 2023 “Microbial Network Ecology: Current Status, Challenges and Future Perspectives” Invited online talk at Central South University, December 26, 2023.
- 2023 “Omics-enabled Modeling of the Feedback Responses to Climate Warming and Biomass Harvesting in a Temperate Grassland”. Invited talk at AGU Annual Meeting, San Francisco, December 12, 2023.
- 2023 “Stochastic Community Assembly: Does It Matter In Microbial Ecology?”. Invited talk at University of Tennessee, Knoxville, November 30, 2023.
- 2023 “Microbes And Climate Warming: Insights From A Grassland Experiment”. Invited talked at Oak Ridge National Laboratory, Oak Ridge, TN, November 29, 2023.
- 2023 “Theoretical Challenges in Microbial Ecology”. Invited online talk at University of Florida, November 13, 2023.
- 2023 “Microbial Network Ecology: Current Status, Challenges and Future Perspectives”. Invited talked at Southern Marine Science and Engineering Guangdong Laboratory, Zhuhai, October 29, 2023.
- 2023 “Feedback Responses of Grassland Soil Microbial Communities to Climate Change”, Invited Talk at Beijing Normal University, Beijing, October 23, 2023.
- 2023 “Microbes And Climate Warming: Insights From A Grassland Experiment”. Invited talk at Nanjing Institute of Soil Sciences, Nanjing, October 19, 2023
- 2023 “Omics-Enabled Modeling of Soil Microbial Feedbacks in Response to Climate Change”. Invited plenary talk at The 11th International Symposium on Plant-Soil Interactions at Low pH (11<sup>th</sup> PSILPH), Nanjing, October 18, 2023.
- 2023 “Stochasticity in Microbiology: Implications for Microbiome Engineering and Management”. Invited Talk at Annual Meeting of Oversea Chinese Society of Microbiology (Sino\_Micro), Changchun, July 9, 2023
- 2023 “Microbial Ecology in Engineered Systems: Stochastic Community Assembly”. Invited Talk at Guangdong Institute of Microbiology, Guangzhou, China, July 7, 2023
- 2023 “Omics-enabled Modeling Responses of Grassland Microbial Communities to Climate Warming”. Invited Talk at 2023 ASM Annual Meeting, Houston, June 18, 2023
- 2023 “From a Cowboy to a Chaired Professor”. Invited Talk at Hunan Agricultural University, Changsha, May 19, 2023
- 2023 “Microbes And Climate Warming: Insights From A Grassland Experiment”. Invited Talk at Institute of Ecology, Peking University, Beijing, May 14, 2023
- 2023 “Stochastic Microbial Assembly: Is It Important In Engineered Systems?” Invited Talk at Hong Kong Polytechnic University, Hong Kong, May 11, 2023

- 2023 “Reduction of Bacterial Diversity By Eutrophication in Natural Grasslands”. Invited online seminar at The 4<sup>th</sup> conference on nitrogen biogeochemical cycles, Peking University, Beijing, March 31, 2023
- 2023 Stochastic Community Assembly: Does It Matter In Microbial Ecology? Invited online seminar at The Fifth Seabed Observation Science Conference, Zhuhai, March 18, 2023
- 2023 “Climate Warming Reduces Microbial Biodiversity in a Temperate Grassland”. Invited Talk at The 3rd Global Soil Biodiversity Conference, Dublin, Ireland, March 13, 2023
- 2023 Stochastic Microbial Assembly: Is It Important In Engineered Systems? Invited online seminar at Tianjin University, March 6, 2023
- 2023 “Stochastic Community Assembly: Does It Matter In Microbial Ecology?”. Invited online seminar at Central South University, Changsha, January 3, 2023.
- 2022 “Microbial Network Ecology: Current Status, Challenges and Future Perspectives”. Invited online seminar at Central South University, Changsha, December 27, 2022.
- 2022 “Omics-enabled modeling of grassland microbial communities feedback to climate change”. Talk at American Geological Union (AGU) Annual Meeting, Chicago, December 16, 2022.
- 2022 “Traits-based Microbial Ecology: Challenges and Needs”. Invited online seminar at MagiGene’s Workshop on Functional Traits-based Approaches and Applications to Microbial Ecology, Guangzhou, November 22, 2022.
- 2022 “Microbial Functional Traits and Soil Carbon Fluxes”. Invited online seminar at 7<sup>th</sup> International Conference of Indian Network for Soil Contamination Research (INSCR), India, November 8, 2022.
- 2022 “Stochastic Microbial Assembly: Is It Important In Engineered Systems?” Invited seminar at Department of Energy, Environmental & Chemical Engineering, Washington University, St. Louis, MO, November 4, 2022.
- 2022 “Microbial Feedbacks to Climate Warming: Current Status, Challenges, and Future Perspectives”. Invited seminar at Department of Biology, Washington University, St. Louis, MO, November 3, 2022.
- 2022 “Feedback Responses of Grassland Soil Microbial Communities to Climate Warming”. Invited seminar at 5<sup>th</sup> Annual Pathways in Biological Sciences Symposium: The Biology of a Changing Climate, University of California at San Diego, San Diego, October 14, 2022.
- 2022 “Stochastic Microbial Assembly: Is It Important In Engineered Systems?”. Invited talk for the ISME-IWA Biocluster Award at IWA Water Congress & Exhibition, Copenhagen, Denmark, September 11-15, 2022.
- 2022 “Microbial Functional Traits Explain and Predict Soil Carbon Fluxes”. Invited talk on behalf of Yunfeng Yang at ISME-18, Lausanne, Switzerland, August 19, 2022
- 2022 “Climate Warming Decreases Grassland Soil Microbial Biodiversity”. Invited online talk at Greater Bay Area Science Forum organized by Chinese Academy of Sciences, August 23, 2022.
- 2022 “From a Country Boy to a Chaired Professor”. Invited online talk at Biology Cosmos (BioCosmo), July 8, 2022
- 2022 “Feedback Responses of Grassland Soil Microbial Communities to Climate Warming” Invited plenary talk (Online Seminar), at the 8<sup>th</sup> International Symposium on Soil Organic Matter, Seoul, South Korea, June 27, 2022.
- 2022 “Higher Organic Loading Shifted Community Assembly Mechanisms Underlying Microbial Dynamics in Anaerobic Digesters”. Talk at The 17th World Conference on Anaerobic Digestion, Ann Arbor, University of Michigan, June 17-22, 2022.
- 2021 “Network Microbial Ecology: How to Distinguish Direct from Indirect Relationships?” Invited online talk at the Annual Microbial Ecology, China, November 18, 2021.
- 2021 “Stochastic Community Assembly: Does It Matter In Microbial Ecology?”. Invited online talk at INSCR conference "Microbes in Sustainable Development" India, November 17, 2021.

- 2021 “Systems Microbiology: From Genomes to Ecosystems” Invited online talk at Hunan Agricultural University, Changsha, China, November 15, 2021.
- 2021 “Stochastic Community Assembly: Does It Matter In Microbial Ecology?”. Invited online talk at Nankai University, Tianjin, November 17, 2021.
- 2021 “Climate Warming Decreases Microbial Biodiversity”. Talk at ASA, CSSA and SSSA Annual Meeting, Salt Lake City, UT, Nov. 7, 2021
- 2021 “Feedback Responses of Grassland Soil Microbial Communities to Climate Warming”. Invited online talk at the 2021 Annual Sino-Micro Meeting, October 26, 2021
- 2021 “Feedback Responses of Grassland Soil Microbial Communities to Climate Warming”. Invited online talk at the 61st Annual International Conference of The Association of Microbiologists of India, February 3, 2021.
- 2020 “Systems Microbiology: From Genomes to Ecosystems”. Invited online talk at Montclair State University, Montclair, New Jersey, September 28, 2020.
- 2020 “Microbial Ecology in Genomics Era: Challenges and Opportunities”. Invited online talk, Marine Laboratory, Duke University, Beaufort, NC, August 26, 2020
- 2020 “Systems Microbiology: From Genomes to Ecosystems”. Invited talk at Department of Biochemistry, Rutgers University, New Brunswick, NJ, February 12, 2020.
- 2020 “Stochastic Community Assembly: Does It Matter In Microbial Ecology?” Invited talk at Dental School, University of Southern California, Los Angeles, January 27, 2020
- 2020 “Systems Microbiology: From Genomes to Ecosystems”. Invited talk at Department of Veterinary & Biomedical Sciences, South Dakota State University, Brookings, SD, January 24, 2020.
- 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 2<sup>nd</sup> 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 2<sup>nd</sup> 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 Department of 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 16<sup>th</sup> 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 CO<sub>2</sub> 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 3<sup>rd</sup> 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 3<sup>rd</sup> Workshop on Marine Microbiology, The 2<sup>nd</sup> 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 1<sup>st</sup> 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, Changsha, 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 255<sup>th</sup> 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 15<sup>th</sup> IWA World Conference on Anaerobic Digestion, Beijing, October 20, 2017.
- 2017 “Global Wastewater Microbiomes: Diversity and Biogeography”. Invited Keynote Talk at The 15<sup>th</sup> 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 Keynote 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 1<sup>st</sup> 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 Sichuan 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 101<sup>st</sup> 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 Sichuan 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 Sichuan University, October 30, 2015.
- 2015 “Microbial Functional Diversity: Does It Matter To Ecosystem Functioning?”. Invited talk at Frontiers in Soil Microbiology, Beijing, October 26<sup>th</sup>, 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 25<sup>th</sup>, 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, Genomic 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 3<sup>rd</sup> 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 47<sup>th</sup> 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 2<sup>nd</sup> 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 Angeles, 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 5<sup>th</sup> 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 98<sup>th</sup> ESA Annual Meeting, Minneapolis, MN, August 7, 2013
- 2013 “Stochasticity, Succession and Ecosystem Characteristics”. Invited talk at The 98<sup>th</sup> ESA Annual Meeting, Minneapolis, MN, August 6, 2013
- 2013 “Recent Advances in Developing High Throughput Technologies for Microbial Community Analyses”. Invited talk at Sichuan 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 CO<sub>2</sub>”. 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 12<sup>th</sup> 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 Sichuan 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 3<sup>rd</sup> 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 77<sup>th</sup> 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 CO<sub>2</sub> 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 97<sup>th</sup> 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 97<sup>th</sup> 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, Sichuan 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 18<sup>th</sup> 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 2<sup>nd</sup> World Congress on Biotechnology, Philadelphia, November 30, 2011.
- 2011 “Systems Microbiology: From Genomes to Ecosystems”. Invited talk at The 14<sup>th</sup> 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 CO<sub>2</sub>”. Invited talk at The 3<sup>rd</sup> 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 19<sup>th</sup> 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 96<sup>th</sup> 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 CO<sub>2</sub> 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 2<sup>nd</sup> 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 Limnology 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 CO<sub>2</sub>”, 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 (E<sup>3</sup>C), Beijing, September 22-24, 2010.
- 2010 “Rapid Genome Evolution and Adaptation to Salt Selection”. The 18<sup>th</sup> 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 13<sup>th</sup> International Symposium on Microbial Ecology, Seattle, WA, August 23, 2010.
- 2010 “Microbial Mediation of Carbon Cycle Feedbacks to Climate Warming”. Invited talk at The 13<sup>th</sup> 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, 9<sup>th</sup> 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, Tongji 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 110<sup>th</sup> 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 CO<sub>2</sub>”, 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 CO<sub>2</sub>”, 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 CO<sub>2</sub>”, Invited talk at DIVERSITAS, Cape Town, South Africa, October 13-17, 2009
- 2009 “Comparative Genomics of Ethanol-Producing Clostridia”, Invited talk at 17<sup>th</sup> 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 CO<sub>2</sub>”, 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 109<sup>th</sup> 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 4<sup>th</sup> 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 4<sup>th</sup> 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 4<sup>th</sup> 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 CO<sub>2</sub>”. The 16<sup>th</sup> 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 12<sup>th</sup> 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 Angeles, CA, October 17-20, 2007.
- 2007 “Genomics of ethanol-producing bacteria”, The 2<sup>nd</sup> 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 15<sup>th</sup> 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, 161<sup>st</sup> 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 Eco-summit, 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 29<sup>th</sup> 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, Genomes 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 14<sup>th</sup> International Conference on Microbial Genomes. Lake Arrowhead, CA, September 24-28, 2006.
- 2006 “Functional Gene Arrays: Current Status, Challenges and Future”. The 4<sup>th</sup> 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 11<sup>th</sup> 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 6<sup>th</sup> International Symposium on Global Renaissance by Green Energy Revolution, The 21<sup>st</sup> Century COE (Center of Excellence) Program, Nagaoka, Japan, January 26-28, 2006.
- 2005 “Microbial Genomics, Genomic Technologies and Environmental Applications”, Keynote talk at the 2<sup>nd</sup> 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 13<sup>th</sup> 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 2<sup>nd</sup> International Workshop on Microbial Environmental Genomics, Shanghai, China, June 11–16, 2005.
- 2005 “Functional gene arrays: current status, challenges and future,” The 105<sup>th</sup> General Meeting of American Society for Microbiology, Atlanta, GA, June 4 – June 9, 2005.
- 2005 “Microarrays-based functional analysis of stress responses”. The 5<sup>th</sup> 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 8<sup>th</sup> 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 12<sup>th</sup> 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 10<sup>th</sup> International Symposium on Microbial Ecology, Cancun, Mexico, August 22-27, 2004
- 2004 “Microarrays-based analysis of stress responses”. The 10<sup>th</sup> 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 2<sup>nd</sup> International Workshop in Biochips and Environmental Biosensors, Gwangju, Korea, May 1-2, 2004.
- 2004 “Integrated Functional Analysis Of Environmentally Important Microorganisms”. The 5<sup>th</sup> 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 1<sup>st</sup> International Workshop on Microbial Environmental Genomics, Wageningen, The Netherlands, April 18–20, 2004.
- 2004 “Microarray-Based Genomic Technologies for Environmental Studies”. The 1<sup>st</sup> International Workshop on Microbial Environmental Genomics, Wageningen, The Netherlands, April 18–20, 2004.
- 2004 “Functional Gene Arrays for Studying Microbial Community Structure”. The 7<sup>th</sup> 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 5<sup>th</sup> 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 10<sup>th</sup> 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 6<sup>th</sup> 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 10<sup>th</sup> 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 X<sup>th</sup> 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 102<sup>nd</sup> 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 5<sup>th</sup> 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 9<sup>th</sup> 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 9<sup>th</sup> International Symposium on Microbial Ecology, August 26–31, 2001, Amsterdam, The Netherlands.
- 2001 “Functional gene arrays and community gene arrays”, The 101<sup>st</sup> 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 8<sup>th</sup> 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 7<sup>th</sup> Conference on Small Genomes, Washington, DC, November 13–17, 1999.
- 1999 “Molecular microbial diversity and controlling mechanisms in subsurface environments,” The 99<sup>th</sup> 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**

- 2024 DOE OBER’s Virtual Workshop: “Frontier Science for the Bioeconomy: Microbiome Research & Engineering Microbial Communities”, December 16-18, 2024
- 2021 AAM Virtual Colloquium Microbes and Climate Change, November 5, 2021
- 2018 Microbes and Climate Change Workshop, Woods Hole, September 17, 2018.
- 2018 Microbiome Soil Sensors Workshop, La Jolla, August 23, 2018
- 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.

### **STAFF SCIENTISTS AND TRAINEES**

Over the last three decades, he has mentored 18 (OU 15, Tsinghua 3) research scientists and staff, 39 (OU 18, Tsinghua 21) Ph.D. graduates, 20 MS students (OU 7, Tsinghua 13), 87 Postdocs (OU 83, Tsinghua 4), 11 post masters and BS (OU 11), 82 visiting Ph.D students, and 136 visiting scientists that now occupy positions in universities, industry, government and non-profits, 50% females across all years. Among these they have become leaders: Dean/Deputy Dean (5), Department Chairs or Section Heads (10), Editors of scientific journals (25), Endowed/Distinguished Professorships (12).

#### Current staff at OU

Name	From	Time	Position	E-mail address
Yajiao Wang	University of Oklahoma	2024.2	Research Associate	yajiao.wang-1@ou.edu
Xuanyu Tao	University of Oklahoma	2024.2	Research Scientist	xuanyu.tao@ou.edu; <a href="mailto:xuanyutao@gmail.com">xuanyutao@gmail.com</a>
Zheng Shi 施政	ORNL	2021.8	Research Scientist	<a href="mailto:zshi.grit@gmail.com">zshi.grit@gmail.com</a>
Daliang Ning 宁大亮	Tsinghua University	2016.7	Research Scientist	<a href="mailto:ningdaliang@gmail.com">ningdaliang@gmail.com</a>
Ying Fu 富莹	Nanjing University	2016.2	Laboratory Manager	yfu@ou.edu
Liyu Wu 吴力游	Hunan Agricultural Univ	2005.11	Research Professor	lywu@ou.edu; <a href="mailto:wuliyu63@gmail.com">wuliyu63@gmail.com</a>

#### Current postdocs at OU

Postdoctorals	From	Start time	E-mail address
Mengyuan Ji 嵇梦圆	University of Padova	2024.8	<a href="mailto:mengyuan.ji@studenti.unipd.it">mengyuan.ji@studenti.unipd.it</a>
Hui Li 李卉	Tennessee State University	2024.4	<a href="mailto:huili2567@gmail.com">huili2567@gmail.com</a>
Xiaonan Liu 刘晓楠	Peiking University	2023.9	xiaonan.liu@ou.edu; <a href="mailto:xiaonanliu0830@163.com">xiaonanliu0830@163.com</a>
Hanyan Li 李涵焉 (partially supported)	China Agricultural University	2021.8	<a href="mailto:hanyan.li@ou.edu">hanyan.li@ou.edu</a>
Shun Han 韩顺	Huazhong Agricultural University	2020.11-	<a href="mailto:shunhan@ou.edu">shunhan@ou.edu</a> ; <a href="mailto:670175131@qq.com">670175131@qq.com</a>
Siyang Jian 简思扬	Tennessee State University	2020.9	<a href="mailto:sjian@ou.edu">sjian@ou.edu</a>

#### Current graduate students at OU

Student	From	Start time			E-mail address
Yuxiang Zhang 张宇翔	Zhengzhou U	2023.8	Ph.D candidate		Yuxiang.Zhang-1@ou.edu
Qiuting Zhang 张秋亭	Tsinghua U	2020.1	PhD Candidate		qiuting.zhang@ou.edu
Zhifeng Yang 杨植峰	Shanghai Jiao Tong U	2020.1	PhD Candidate		Zhifeng.yang@ou.edu

**Current visiting students at OU (including incoming)**

Student	From	Start time			E-mail address
Jiaqi Lu 陆嘉祺	Ningbo University	2024.3	PhD Candidate		17855822589@163.com

**Current visiting scholars at OU (including incoming)**

Name	From	Start time	Position		E-mail address
Qiufang Zhang 张秋芳	Quanzhou Normal University	Incoming	Professor		qfzhang@163.com
Wen Yang 杨文	Ningbo University	2024.3	Associate Professor		yangwen@nbu.edu.cn

**Current staff at Tsinghua University**

Name	From	Start Time	Position		E-mail Address
Shuhong Zhang 张书红		2017.9	Administrative Assistant		hongzs@mail.tsinghua.edu.cn
Yunfeng Yang 杨云锋	Oak Ridge National Laboratory	2010.9	Professor		yangyf@sz.tsinghua.edu.cn; <a href="mailto:zfnews88@hotmail.com">zfnews88@hotmail.com</a>

**Current postdoc and graduate students at Tsinghua University**



Name	From	Start Time	Institute	Position	E-mail Address
Shuang Tan 檀爽	Wuhan University of Technology	2024.9		Master candidate	tans24@mails.tsinghua.edu.cn
Yuzhao Liu 刘玉卓	China University of Petroleum	2024.9		Master candidate	liuyuzhu24@mails.tsinghua.edu.cn
Ran Ma 马冉	Northeastern University	2024.9		Master candidate	maran24@mails.tsinghua.edu.cn
Sihang Deng 邓思行	Tsinghua University	2023.9		Ph.D candidate	1085630574@qq.com
Kun Zhang 章坤	Anhui University	2023.9		Master candidate	3217415916@qq.com
Quan Yuan 袁权	Civil Aviation University of China	2023.9		Master candidate	yuanq23@mails.tsinghua.edu.cn
Zhencheng Ye 叶振城	Northwest A&F University	2022.9		Ph.D candidate	yzc22@mails.tsinghua.edu.cn
Yilong Zhao 赵艺隆	Tsinghua University	2022.9		Ph.D candidate	zhaoyl24@mails.tsinghua.edu.cn
Zhengxiong Liang 梁振雄	Tsinghua University	2022.9		Ph.D candidate	liangzx24@mails.tsinghua.edu.cn
Yifan Su 苏亦凡	Tsinghua University	2021.9		Master candidate	suyifan9075@163.com
Zhengxiong Liang 梁振雄	University of Electronic Science and Technology of China	2021.9		Master candidate	liang-zx21@mails.tsinghua.edu.cn
Suo Liu 刘索	Tsinghua University	2021.9		Ph.D candidate	liusuo99@qq.com
Yufei Zeng 曾宇飞	Southern University of Science & Technologies of China	2019.9		Ph.D candidate	zengyf93@qq.com
Changyi Xie 谢昌益	Tsinghua University	2014.9		Ph.D candidate	xiecy14@mails.tsinghua.edu.cn

**Past staff scientists/staff**

<b>Name</b>	<b>From</b>	<b>Time period</b>	<b>Current institute</b>	<b>Current position</b>	<b>Current E-mail Address</b>
Naijia Xia 肖乃佳	Georgia Institute of Technology	2018.1-2024.9			naijia.xiao@gmail.com
Trevon L. Haddix		2023.5-2024.4	Admin/Financial Coordinator		Trevon.L.Haddix-1@ou.edu
Aifen Zhou 周爱芬	Shandong Univ	2010.7-2023.12	Texas A & M University	Research Associate Professor	<a href="mailto:aifenzhou@tamu.edu">aifenzhou@tamu.edu</a> ;
Xue Guo 郭雪	Central South Univ	2018.08-2023.03	Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences	Professor	xueguo@rcees.ac.cn; guoxue0601@sina.com
Lindsay Rice		2017.12-2022.5	Administrative Assistant		lrice@ou.edu
Joy Van Nostrand	Medical University of South Carolina	2010.07-2021.07	University of Utah/Officer		joy.vannostrand@gmail.com
Gangsheng Wang 王纲胜	Oak Ridge National Laboratory	2018.6-2021.3	Wuhan University	Professor	wanggs@whu.edu.cn; wang.gangsheng@gmail.com
Missy Lee		2007.5-2017.12	Administrative Assistant, Retired		
Zhili He 贺志理	Australian National Univ, Australia	2005.11-2017.5	Southern Marine Science and Engineering Guangdong Laboratory (Zhuhai)	Professor	<a href="mailto:hezili@sml-zhuhai.cn">hezili@sml-zhuhai.cn</a> ;

#### Ph.D. students mentored at OU

<b>Names</b>	<b>From</b>	<b>Time Periods</b>	<b>Current institute</b>	<b>Current position</b>	<b>Current E-mail Address</b>
Jonathan Michael	Middlebury College	2017.8-2024.7	PhD Candidate		jonathan.p.michael@ou.edu
Yupeng Fan 樊宇鹏	Zhejiang U	2016.8-2024.7	Ph.D candidate		Yupeng.Fan-1@ou.edu
Carolyn R. Cornell	University of Tulsa	2016.8 (Boris 2019.2-2022.5 (Zhou)	Rice University, Postdoc		
Colin Bates	Univ of Texas, Austin	2015.7-2021.12	Ph.D candidate	Ph.D candidate	

Xuanyu Tao 陶玄宇	Lanzhou University	2015.8-2020.12	The University of Oklahoma	Research Scientist	xuanyu.tao@ou.edu; <a href="mailto:xuanyutao@gmail.com">xuanyutao@gmail.com</a>
Jiajie Feng 冯佳界	Tsinghua Univ	2013.8-2019.12	Lunar Palace 1 team, Beihang University	Associate Professor	fengjiajie@buaa.edu.cn;
Yujia Qin 秦愈佳	Harbin Institute of Technology	2009.1-2018.12	University of Hawaii, Research Scientist		
Daniel Curtis	Georgia State Univ	2011.8-2018.12			
Wenbin Liu 刘文斌	Central South Univ, China	2008.1-2017.12	Tsinghua University MBA program		
Feifei Liu 刘飞飞	Central South Univ, China	2008.1-2017.8	R&D Magigene	Director	liufei106@gmail.com;
Mengting Yuan 袁梦婷	Tsinghua Univ	2011.8-2017.8	University of Hawai'i at Mānoa	Assistant Professor	myuan2@hawaii.edu; <a href="mailto:ymt.yuan@gmail.com">ymt.yuan@gmail.com</a>
Zhou Shi 石舟	Yunnan Univ	2010.8-2017.5	UC- San Francisco	Postdoc	<a href="mailto:jason.shi@gladstone.ucsf.edu">jason.shi@gladstone.ucsf.edu</a> zhoushihn@gmail.com
Tao Xu 徐涛	Chinese Academy of Agricultural Sciences	2011.8-2016.11	Joslin Diabetes Center, Harvard University		
Ming Xie 谢明	Central South Univ	2009.1-2016.11	U of Texas at Dallas		
Qichao (Philloid) Tu 屠奇超	Zhejiang Univ	2008.8-2014.8	Shandong University	Professor	tuqichao@sdu.edu.cn; tuqichao@outlook.com

**Ph.D. students mentored at Tsinghua U**

Names	From	Periods	Present address	Present position	
Jiesi Lei 雷杰斯	Tsinghua University	2020.9	Ph.D candidate		leijs16@mails.tsinghua.edu.cn
Jianmin Cheng 程静敏	Lund University	2017.9	Ph.D candidate		chengjm17@mails.tsinghua.edu.cn
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Ziyan Qin 秦紫焉	Tsinghua University	2016.9	Ph.D candidate		qzy15@mails.tsinghua.edu.cn
Qun Gao 高群	Shandong University	2014.9	Beijing Normal University	Associate Professor	gaoqun@bnu.edu.cn
Sihang Yang 杨思航	Shandong University	2014.9-2019.7	Ph.D candidate		
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	South China Normal University	Associate Professor	mmwang223@163.com
Haowei Yue 岳浩伟	Tsinghua University	2012.9-2017.7	EPA, Shengzhen City, China		
Junjun Ding 丁军军	Qingdao U	2012.9-2016.6	Institute of Environment and Sustainable Development in Agriculture, Chinese Academy of Agricultural Sciences	Associate Professor	Dingjunjun@caas.cn
Linwei Wu 吴林蔚	Tsinghua University	2012.9-2016.10	Peking University	Assistant Professor	linwei.wu@pku.edu.cn ; wulinyiwei@126.com
Mengxin Zhao 赵梦欣	China Agricultural University	2011.9-2016.8	Tsinghua University		
Ying Gao 高莹	Tsinghua University	2011.9-2015.12	Institute of Ecological Conservation and Restoration, Chinese Academy of Forestry	Associate professor	yinggao@caf.ac.cn;
Shuo Yang 杨硕	Tsinghua University	2011.9-2015.12	Tsinghua University		

**Master students mentored at OU**

<b>Names</b>	<b>From</b>	<b>Time period</b>	<b>Present Address</b>	<b>Present position</b>	<b>Current E-mail Address</b>
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Reece Lennon	Clemson U	2022.8-2024.7	MS candidate		rdiazlennon@ou.edu
Cong Wang 王丛	Tsinghua Univ	2013.8-2016.8	University of Michigan		
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		
Yue Huang 黄跃	Shanghai Institute of Plant Physiology and Ecology	2009.1-2013.5	Private company in China		
Yunyu (Irene) Chen	Nanjing Agricultural Univ	2007.8-2011.5	Baylor College of Medicine		
Jingrong Chen	Nanjing Univ, China	2006.8-2009.5	Oklahoma Medical Research Foundation		

#### Master students mentored at Tsinghua U

Names	From	Time periods	Present Address	Present position	Current E-mail Address
Qiuting Zhang 张秋亭	Jilin University	2016.9-2019.7	Tsinghua University		
Jianshu Zhao 赵建树	Nanjing Agricultural University	2016.9-2019.7	Georgia Institute of Technology		
Tengxu Wang 王腾旭	Tsinghua University	2013.9-2016.7	Civil Design Institute of Northern China		
Qiaoshu Zheng 郑乔舒	Tsinghua University	2013.9-2015.7	Yongchang Group Inc.		
Xin Sun 孙欣	Tsinghua University	2012.9-2015.7	University of Pennsylvania	Assistant Professor	xinsun12@gmail.com;
Shanshan Liu 刘珊珊	Tsinghua University	2011.9-2014.7	Zijin Mining Group Co., Ltd		
Houjuan Chu 褚厚娟	Tsinghua University	2011.9-2014.7	Beijing Kangpusheng Biotechnologies Inc		

**Postdocs trained at Tsinghua U.**

Qun Gao 高群	Shandong University	2020.09-2023.06	Beijing Normal University	Associate Professor	gaoqun@bnu.edu.cn;
Tianjiao Dai 代天娇	Beijing University	2019.08-2023.01	China University of Geosciences (Beijing)	Associate Professor	tianjiao.dai@cugb.edu.cn; tianjiaodai@126.com
Xue Guo 郭雪	Central South University	2019.05-2021.06	Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences	Professor	xueguo@rcees.ac.cn; guoxue0601@sina.com
Mengxin Zhao 赵梦欣	China Agricultural University	2016.9-2018.8		Postdoc	zhaomengxin@caas.cn

**POSTDOCTORAL TRAINED**

<b>Postdoctorals</b>	<b>From</b>	<b>Time period</b>	<b>current institution</b>	<b>current position</b>	<b>current e-mails address</b>
Xiaojun Liu 刘晓军	University of Massachusetts	2021.5-2024.12-			<a href="mailto:xj.allen.liu@gmail.com">xj.allen.liu@gmail.com</a>
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James Voordeckers	Rutgers University	2009.8-2016.5			
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Yuan Li 李元	University of Tsukuba, Japan	2012.1- 2014.12	Wuxi Nextcode (Part of Wuxi Apptec) , Shanghai, China	R & D Director	corin_li@hotmail.com
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Kai Xue 薛凯	Cornell Univ	2009.1- 2014.6	University of Chinese Academy of Sciences	professor	xuekai@ucas.ac.cn; xkluck@163.com
Christopher Hemme	Univ of Missouri, Columbus	2003.4- 2014.5	Bioinformatics Core Coordinator; University of Rhode Island		hemmecl@uri.edu
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Yi-Huei Jiang	National Tsinghua University, Taiwan	2009.8-2011.9	Private Firm		
Jin Zhang	Iowa State Univ	2010.10-2011.8	Private Firm		
Dongru Qiu 邱东茹	Keo Univ, Japan	2008.4-2011.3	, Institute of Hydrobiology, Chinese Academy of Sciences	Professor , 100 Scholar Plan	qiu@ihb.ac.cn
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Haichun Gao 高海春	Purdue Univ	2002.2- 2008.4	Zhejiang Univ	Professor	haichung@zju.edu.cn
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Soumitra Barua	Nagoya Univ Graduate School of Medicine	2003.9- 2006.9	Univ of Oklahoma Medical School	Postdoc	
Youlboong Sung	Georgia Institute of Technology	2004.8- 2006.8	Staff Scientist, Research Institute of Industrial Science and Technology, South Korea.	Staff Scientist	
Gene Wickam	Univ of Indiana	2003.8- 2005.11	Private firm		
Tingfen Yan 颜婷芬	Northeastern Forestry Univ., Harbin China	2003.1- 2005.11	Postdoc, Oak Ridge National Lab	Postdoc	
Zhili He 贺志理	Australian National Univ, Australia	2003.2- 2005.11	Southern Marine Science and Engineering Guangdong Laboratory (Zhuhai)	Professor	hezili@sml- zhuhai.cn;
Xichun Zhou 周曦春	Univ of Singapore	2001.8- 2005.11	Adatech Inc, Denver, CO	Staff Scientist	xichun.zhou@lifebios cience.com
Terry Gentry	Univ of Arizona	2003.8- 2005.11	Texas A&M Univ	Associate Professor	tjgentry@tamu.edu
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Yunfeng (David) Yang 杨云锋	Albert Einstein College of Medicine, Bronx, NY	2003.2-2005.11	Tsinghua Shenzhen International Graduate School, Tsinghua University	Professor	yangyf@sz.tsinghua.edu.cn; zfnews88@hotmail.com
Qiang He 何强	Univ of Illinois at Urbana-Champaign	2003.8-2005.8	University of Tennessee	Professor	qianghe@utk.edu;
Weimin Gao 高伟民	Penn State Univ	2001.9-2005.3	Barrow Neurological Institute	Research Assistant Professor	Weimin.Gao.2@asu.edu
Crystal Bickley McAlvin	Univ of Tenn, Knoxville	2003.3-2004.11	Univ of Tenn, Knoxville	Postdoc	
Jost Liebich		2003.1-2004.7	Institute of Chemistry and Dynamics of the Geosphere IV, Forschungszentrum Jülich GmbH, Germany	Postdoc	
Amudhan Venkateswaran	Uniformed Services University of the Health Sciences (USUHS), Bethesda, Maryland	2003.1-2004.2	Oak Ridge National Lab	Postdoc	
Ting Li 李婷	Univ of Kentucky	2002.3-2003.12	Univ of Georgia, Athens, GA	Postdoc	
Yongqing Liu 刘永庆	Noble Foundation, OK	2000.3-2003.12	University of Louisville, Louisville, KY	Assistant Professor	yongqing.liu@louisville.edu
Xiufeng Wan 万秀峰	Univ of Mississippi	2001.12-2003-11	Mississippi State university	Professor	Wan@cvm.msstate.edu
Song Chong	Oregon Polytech	2002.3-2003.9	private company, Korea	Scientist	
Adam Leaphart	Univ of South Carolina	2002.6-2003.9	State Department of Health, SC.	Staff Scientist	
Sung-Keun Rhee	Rutgers University	2002.3-2003.8	Chungbuk National University		rhees@chungbuk.ac.kr

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

**Postmasters or BS trained**

Name	From	Time period	Current institution	Current Position	Current e-mails address
Lina Shen	Tsinghua Univ	2012.1-2015.12			
Mark H. Pinkerton	Drexel Univ	2010.8-2011.7	Private firm		
Joy M. Pelfrey	BS, Univ of Oklahoma	2006.1-2007.1	Private firm		
Hongbin Pan		2003.4-2004.9	Oak Ridge National Lab		

Dawn Stanek	Univ of Georgia	2002.3-2004.3	Research scientist, Oak Ridge National Lab		
Lisa Fagan	BS, Univ of Tennessee	2002.1-2003.12	Technician, Oak Ridge National Lab		
Debra Beth Arnett	Univ of Tennessee	2001.4-2002.5	Private firm		
Julia Stair	Univ of Tennessee	2001.5-2001.11	Affymetrix Core Facility, Univ of Tennessee  Research Scientist/ Facility Director		
Heshu Huang 黄何素	Univ of Georgia	1997.3-2000.4	Private firm		
Patricia J. Waldron	Univ of Massachusetts	2006.8-2000.1	Private firm		
Xiaoyun Qiu 邱晓云	Fudan Univ, China	1998.8-1999.9	USDA, ARS, WRRC  Research Scientist		Michelle.Carter@ARS.USDA.GOV

**Past visiting Ph.D. or MS students mentored (Did thesis fully or partially in my lab)**

	<b>From</b>	<b>Time periods</b>	<b>Current institution</b>	<b>Current Position</b>	<b>Current e-mails address</b>
Suo Liu 刘索	Tsinghua U	2024.2-2024.8		PhD Candidate	liusuo99@qq.com
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Jie Yang 杨杰	Tsinghua U	2023.5-2023.12		Ph.D candidate	j-yang19@mails.tsinghua.edu.cn
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Mu Peng 彭木	Northeast Forestry Univ	2018.9-2020.9	Hubei Minzu University	associate professor	pengmu1025@hotmail.com;
Yu Xue 薛宇	Tsinghua University	2019.11-2020.9		Ph.D candidate	767562842@qq.com
Xiaolan Lin 林	Xiamen University	2018.11-2020.8		Ph.D candidate	21620150150528@stu.xmu.edu.cn

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Jiajing Guo 郭佳婧	Hunan University	2018.12- 2020.7	Hunan Academy of Agricultural Sciences	professor	guojiajing1986@163.com;
Jie Ma 马 杰	China Univ of Geosciences	2018.12- 2020.6	China University of Petroleum- Beijing		rubpmj@sina.com;
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Xinfei Xie 解欣斐	Jinan U	2015.6- 2016.12		Ph.D Candidat e	
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Jiang Zhou	China Univ of Geoscience, Wuhan, Hubei, China	2014.9- 2015.9		Ph.D student	

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Di Cui 崔迪	Harbin Institute of Technology	2012.9- 2013.9		Ph.D student	
Qiao Ma 马桥	Dalian Technology University	2012.9- 2013.8	Dalian University of Technology		
Caiyun Yang 杨彩云	Xiamen University	2011.9- 2013.7	Southwest Unive rsity	Post- doctoral	yangcyice@163.com
Yu Wang	Xianmen Univ	2011.12- 2013.5		Ph.D student	
Linfang Gao	Harbin Institute of Technology	2009.1- 2012.9		Ph.D candidate	
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Sharon Zhou	Central South University	2010.11- 2012.3		Master student	
Hamed Azarbad	VU University, Amsterdam	2012.3- 2012.4		Ph.D. candidate	
Arthur Escalas	Université Montpellier II	2012.2- 2012.3		Ph.D. candidate	
Shijie Bai 柏士杰	Xiamen University	2009.10- 2011.10	Institute of Deep-sea Science and Engineering, Chinese Academy of Sciences	associate professor	baishijie@idsse.ac.cn;
Su Xu	Wuhan Univ	2010.8- 2011.8			



Fabiana Paula	University of Sao Paulo	2010.10-2010.12		Ph.D candidate	
Wenzhong Liu 刘文忠	Harbin Institute of Technology	2008.4-2010.10	Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences	Associate Professor	wzliu@rcees.ac.cn
Hao Yu 于浩	Harbin Institute of Technology	2008.9-2010.10	Liaoning Technical University	Associate Professor	micro_yh@126.com;
Jinbo Xiong 熊金波	Huazhong Agricultural Univ	2008.9-2010.9	Ningbo University	Professor	xiongjinbo@nbu.edu.cn
Jianping Xie 谢见平	Central South Univ	2007.5-2010.9	Central South University	Professor	xiejianping@csu.edu.cn; 4288597@qq.com
Yanfei Chen	Zhejiang Univ	2010.2-2010.8		Ph.D candidate	
Lu Lin 林璐	Qingdao Institute of Biomass Energy and Bioprocessing Technology, Chinese Academy of Sciences	2008.7-2010.6	shandong university	professor	linlu2019@sdu.edu.cn ;
Xiaoyang Zhi 职晓阳	Yunnan Univ	2008.11-2010.5	Yunnan University  Research Assistant		xyzhi@ynu.edu.cn; zhixy@icloud.com
Shengmu Xiao	Donghua University	2009.4-2010.2	Donghua University, Shanghai		
Jian Wang 王坚	Tsinghua Univ	2008.10-2009.9	Ph. D Candidate at Tsinghua Univ		
Yuting Liang 梁玉婷	Tsinghua Univ	2006.12-2009.3	Institute of Soil Science, Chinese Academy of Sciences	Professor	ytliang@issas.ac.cn
Yili Liang 梁伊丽	Central South Univ	2006.3-2009.1	Central South University	Associate Professor	liangyili@hotmail.com

Guochun Ding 丁国春	Julius Kühn-Institut Bundesforschungsinstitut für Kulturpflanzen Institut für Epidemiologie und Pathogendiagnostik	2008.6- 2008.7	China Agricultural University Bundesforschungsinstitut für Kulturpflanzen Institut für Epidemiologie und Pathogendiagnostik, China Agricultural University		gc_ding@cau.edu.cn
Eiko Kuramae	Netherlands Institute of Ecology, The Netherlands	2008.7- 2008.7	Netherlands Institute of Ecology, The Netherlands		
Lur Epelde	Netherlands Institute of Ecology, The Netherlands	2008.7- 2008.7	Netherlands Institute of Ecology, The Netherlands		
Manuela di Lorenzo	Centre for Terrestrial Ecology, Netherlands Institute of Ecology	2008.5- 2008.5	Centre for Terrestrial Ecology, Netherlands Institute of Ecology		
Qichao (Philloid) Tu 屠奇超	Zhejiang Univ	2007.8- 2008.8	Shandong University	Professor	tuqichao@sdu.edu.cn; tuqichao@outlook.com
Olivia Mason	Oregon State Univ	2007.9- 2007.10	Oregon State Univ		
Huaquang Hua	Central South Univ	2004.5- 2007.5	Assistant prof, Central South Univ		
Ye Deng 邓焯	Zhejiang Univ	2005.12- 2007.12	Research Center for Eco- Environmental Sciences, Chinese Academy of Sciences	Professor	yedeng@rcees.ac.cn
Neslihan Tas	Wageningen Univ, The Netherlands	2006.12- 2007.5	Wageningen Univ, The Netherlands		
Etienne Yergeau	Netherlands Institute of	2005.12- 2006.2	Netherlands Institute of		

	Ecology, The Netherlands		Ecology, The Netherlands		
Feng Luo 罗峰	University of Texas, Dallas	2003.4-2004.12	Clemson Univ, SC, Associate Professor		luofeng@clemson.edu
Qi Ye 叶祁	Univ of Georgia	2003.1-2004.8	Univ of Georgia		
Xiaohu Wang 王小虎	Baylor College of Medicine	2004.3-2005.11	Beijing University of Chemical Technology	Associate Professor	xhwang@buct.edu.cn;
Yi Wen 文艺	Stanford Univ	2003.3-2005.9	Stanford Univ		
Laurel Crosby	Stanford Univ	2002.1-2003.12	Postdoc, Stanford Univ		
Matthew Wallenstein	Duke Univ	2002.6-2003.8			
Xueduan Liu 刘学端	Ph.D, Central South Univ	2000.8-2003.11	Professor Shenhua scholar, Central South Univ		xueduanliu@mail.csu.edu.cn
Liyou Wu 吴力游	Ph.D, Hunan Agricultural Univ	1997.11-2001.12	Research assistant Prof, Univ of Oklahoma		
Lara Martin	Virginia Tech	1998.8-1999.8			

#### Past visiting scholars

Name	From	Time periods	Current institution	Current Position	Current e-mails address
Lina Sun 孙丽娜	Shanghai Academy of Agricultural Sciences	2023.11-2024.12	Shanghai Academy of Agricultural Sciences	Associate Professor	slna@163.com;
Mattana Stefania	CREAF, <a href="https://www.creaf.cat/">https://www.creaf.cat/</a>	2023.11.6-2023.12.15		Postdoc	Stefania Mattana <s.mattana@creaf.uab.cat>
Xianjun Hao 郝鲜俊	Shanxi Agricultural University	2019.12-2020.9		Professor	haoxianjun660@.126.com
Fenghua Wang 王凤花	Shandong Agricultural University	2019.9-2020.9		Associate professor	wfh@sdau.edu.cn

Jiantao Liu 刘建涛	Jiangxi Science and Tech Normal Univ	2019.8-2020.9		Associate professor	liujtcn@163.com
Alin Song 宋阿琳	Chinese Academy of Agricultural Sciences	2019.12-2020.8	Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Science	Associate Professor	songalin@caas.cn;
Yingsong Liu 刘音颂	Northeast petroleum University	2019.5-2020.8	NEPU Sanya Offshore Oil&Gas Research Institute, Northeast Petroleum University	associate professor	18603695082@163.com;
Yumei Li 李玉梅	University of Jinan	2019.9-2020.8		Associate professor	mls_liym@ujn.edu.cn
Zhipeng Gao 高志鹏	Hunan Agricultural University	2019.1-2020.7	Hunan Agricultural University	professor	gaozhipeng627@163.com
Yufei Sun 孙宇飞	Guangxi Univ of Science and Tech	2019.4-2020.4		Associate Professor	sunyufei@gxust.edu.cn
Dongmei Deng 邓冬梅	Guangxi University	2019.3-2020.4		Associate Professor	deng-dongmei@163.com
Ning Hu 胡宁	Hezhou University	2017.5 - 2020.3	Hezhou University	Associate professor	2009huning@163.com
Dashuai Mu 穆大帅	xin	2019.3-2020.3	Shandong University	Professor	dashuai.mu@sdu.edu.cn;
Chong Zhang 张翀	Shengjing Hospital of China medical University	2019.2-2020.2		Lecturer, Attending	zhangchong_83@163.com
Xin Zhao 赵鑫	Northeastern University	2018.12-2019.11	Northeastern University	Professor	zhaoxin@mail.neu.edu.cn;
Yue Teng 滕跃	Jiangnan University	2018.11-2019.11	Jiangnan University	Associate professor	tengyue@jiangnan.edu.cn;
Peng Shi 史鹏	Northwest Agricultural & Forrest	2018.10-2019.10	Northwest Agricultural &	Associate professor	shipeng27@nwafu.edu.cn

	University		Forrest University		
Yamei Gao 高亚梅	Heilongjiang Bayi Agri Univer	2018.9-2019.9	Heilongjiang Bayi Agri Univer	Associate Professor	gaoym800@126.com
Hu, Yuanliang 胡远亮	Hubei Normal University	2018.9-2019.9	Hubei Normal University	Professor	yuanlianghu@yeah.net ;
Fan, Xiangyu 樊祥宇	University of Jinan	2018.6-2019.8	School of Biological Science and technology, University of Jinan	associate professor	fxysnd@126.com
Zhongfan Li 李忠芳	Hezhou University	2017.5 - 2019.5		Associate Professor	zhongfanggood2010@163.com
Xingxu Zhang 张兴旭	Lanzhou University	2018.3-2019.3	Lanzhou University	Professor	<a href="mailto:xxzhang@lzu.edu.cn">xxzhang@lzu.edu.cn</a> ; zxx723810@163.com
Yigang Hu 胡宜刚	Northwest Institute of Eco-Environment and Resources, CAS	2018.10-2019.1		Associate Professor	huyig@lzb.ac.cn
Weiwei Lu 卢伟伟	Nanjing Forestry University	2018.1-2019.1		Assistant Researcher	wwlu@njfu.edu.cn
Zhang, Honggang 张洪刚	Rsrch Ctr for Eco-Envir Sci, CAS, Beijing	2018.1-2019.1		Assistant Researcher	hgzhang@rcees.ac.cn
Gang Xu 徐刚	ning in China	2017.8-2019.1		Associate Professor	xugang@ou.edu
Wang, Chunming 王春铭	South China Agriculture University	2017.8-2018.11		Assistant professor	mirian88@126.com
Xiubin Ke 柯秀彬	Biotech Rsrch Instit, CAS	2017.11-2018.11	Biotechnology Research Institute, Chinese Academy of Agricultural Sciences	Associate professor	kexiubin@caas.cn; xiubinke@yahoo.com
Haishui Yang 杨海水	Nanjing Agri U	2017.11-2018.11	Nanjing Agricultural University	Professor	yanghaishui@njau.edu.cn;
Juan Ling 凌娟	South China Sea Institute of Oceanology	2017.11-2018.11	South China Sea Institute of Oceanology, Chinese	Professor	lingjuan@scsio.ac.cn

			Academy of Sciences		
Ningxin Wang 王宁新	Shandong Agri U	2017.8-2018.8	Shandong Agricultural University	Professor	nxwang@sdau.edu.cn; nxwang@126.com
Zheng Gao 高崢	Shandong Agri U	2017.8-2018.8	Shandong Agricultural University	Professor	gaozheng@sdau.edu.cn; gaozheng@sdau.edu.cn
Mingyang Zhou 周明扬	Qilu University of Technology	2017.8-2018.8	Qilu University of Technology	Associate Professor	myzhou@yic.ac.cn
Qian Li 李乾	U of South China	2017.7-2018.7	University of south China	Professor	liqian@usc.edu.cn; liqianusc@126.com
Enze Li 李恩泽	Academy of Sciences, Guangzhou, China	2018.1-2018.4	Academy of Sciences, Guangzhou, China	Research Assistant	70817015@qq.com
Enze Li	Guangdong Inst of Microbiology	2018.1-2018.4	Academy of Sciences, Guangzhou, China	Research Assistant	70817015@qq.com
He, Yan 何彦	Southern Medical Univ, Guangzhou, Guangdong	2017.9-2018.3	Southern Medical Univ, Guangzhou, Guangdong		bioyanhe@gmail.com
Xiaojun Li 李小军	CAS, Cold & Arid Regions Environ & Engineer Inst.	2017.7-2018.3	Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences	Professor	xiaojunli@lzb.ac.cn;
Wei Zhang 张伟	Xinjiang Normal University	2017.3-2018.3	College of Life Science, Xinjiang Normal University	Professor	zw0991@sohu.com
Shiqiong Luo 罗世琼	Guizhou Normal Univ, Guiyang, Guizhou, China	2016.10-2017.9	Guizhou Normal Univ, Guiyang, Guizhou, China	Professor	shiqiongluo@163.com
Jin Zeng 曾巾	Nanjing Institute of Geography & Limnology-CAS	2016.9-2017.9	Nanjing Institute of Geography and Limnology, Chinese Academy of Sciences	Professor	shiqiongluo@163.com ; jzeng@niglas.ac.cn

Xu, Meiying 许枚英	Guangdong Inst of Microbiology	2017.6	Institute of Microbiology, Guangdong Academy of Sciences	Professor	xumy@gdim.cn;
Zhigang Wang 王志刚	Qiqihar Univ, Jianhua, Qiqihar, China	2016.8- 2017.8	Qiqihar University	Professor	<a href="mailto:wangzhigang@qqhru.edu.cn">wangzhigang@qqhru.edu.cn</a> ; wzg1980830@sina.com
Yong Li 李勇	Western China Univ	2014.9- 2017.6	Southwest University	Associate professor	liyongwf@swu.edu.cn
Yan Chen 陈晏	ISS - Nanjing, Jiangsu, China	2016.10- 2017.4	Institute of Soil science, Chinese academy of Sciences, Chinese academy of sciences	Associate Professor	chenyan@issas.ac.cn
Jing Tian 田静	Inst of Geographic Sci & Natural Research; Beijing	2016.6- 2017-2	China Agricultural University	Associate d Professor	tianj@cau.edu.cn
Yuguang Zhang 张于光	Chinese Academy of Forestry	2016.11	Chinese Academy of Forestry	Professor	<a href="mailto:yugzhang@sina.com.cn">yugzhang@sina.com.cn</a> ; yugzhang@sina.com.cn
Tanguud Xininigen	Inner Mongolia Agricuilt/ Univ, Huhhot, Autonm. Region	2015.10- 2016.10	Inner Mongolia Agricultural University	Associate Professor	nndxng@163.com
Jiangang Pan 潘建刚	Inner Mongolia Univ of Sci & Tech, Baotou, China	2015.10- 2016.10	School of Life Science and Technology, Inner Mongolia University of Science & Technology	Professor	leopold611@163.com;
Junzhong Zhang 张俊忠	Southwest Forestry Univ, Kunming, Yunnan, China	2015.9- 2016.9	Southwest Forestry University	Professor	zhangjunzhong@foxmail.com;
Bin Feng 冯斌	Guangxi Forestry Department	2015.7- 2016.6	Guangxi Forestry Department	Scientist	fengbin733@163.com
Yongdong Xu 徐永东	Harbin Institute of Technology, WeiHai, Shandong	2014.3- 2016.4	Harbin Institute of Technology at Weihai	Associate professor	ydxu@hit.edu.cn;

Anyi Hu 胡安谊	Inst of Urban Development- CAS, Xiamen, China	2015.3- 2016.3	Xiamen University	Professor	ayhu@xmu.edu.cn
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Yi Liu 刘毅	Inst of Subtropical Agriculture, Changsha, Hunan	2015.3- 2016.3	Institute of Subtropical Agriculture Chinese Academy of Sciences	Professor	liuyi@isa.ac.cn
Xiaoxia Zhang 张晓霞	Chinese Acad of Agricultural Sciences, Beijing	2013.12- 2015.12	Institute of Agricultural Resources and Regiona, Chinese Academy of Agricultural Science s	Professor	zhangxiaoxia@caas.cn
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Kaihui Liu 刘开辉	Shaanxi University of Technology, China	2014.11- 2015.11	Shanxi SCI-Tech University	Associate Professor	kaihui168@hotmail.com
Acacio Navarrete	São Paulo Research Fdn (FAPESP)	2015.8- 2015.11		Postdoc	
Lebin Yin 尹乐斌	Shaoyang University, China	2014.10- 2015.10	Shaoyang University	Professor	yinlebin0451@163.com
Yonghua Zhu 朱咏华	Hunan Univ, Changsha	2014.9- 2015.9	Hunan University	Professor	1035758602@qq.com
Ze He 何泽	Chinese Acad of Geosciences	2015.3- 2015.8	Institute of Hydrogeology and Environmental Geology, Chinese Academy of		heze25@163.com



			Geological Sciences		
Zhongzheng Chen 陈忠正	South China Agricultural Univ, Guangzhou, China	2014.8-2015.8	College of Food Science, South China Agricultural University	Professor	zhongzhengch@scau.edu.cn
Juan Li 黎娟	Hunan agricultural Univ	2015.1-2015.7	College of Agronomy, Hunan Agricultural University	Professor	adalee619@163.com
Jing Zhang	Northeast Institute of Geography and Agroecology (IGA), Chinese Academy of Sciences	2014.12-2015.6	Northeast Institute of Geography and Agroecology, CAS	Associate Professor	zhangjing@neigae.ac.cn
Feiyan Pan 潘飞燕	College of Life Sciences, Nanjing Normal University	2014.4-2015.5	College of Life Sciences, Nanjing Normal University	Lecturer	
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Fenliang Fang 范芬良	Chinese Academy of Agricultural Sciences, Beijing	2013.12-2015.1	Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences	Professor	fanfenliang@caas.cn;
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Hua Qin 秦华	Zhejiang A & F University	2013.11- 2014.9	Zhejiang A&F University	Professor	qinhua@zafu.edu.cn; qinhjstx@126.com
Jiabao Li 李家宝	Chendu Institute of Biology, Chinese Academy of Sciences	2013.3- 2014.8	Southwest Forestry University, Professor, Chinese Academy of Sciences	Associate Professor	lijb@cib.ac.cn
Lian Ma	Coll of Life Science, Yangtze Univ, Hubei, China	2013.12- 2014.6	Yangtze University  Professor		1036407434@qq.com
Chongqing Wen 温崇庆	Guangdong Ocean University, Chin	2011.11- 2014.6	Guangdong Ocean University	Professor	chongqingwen@163.c om;
Yu Zhang 张昱	Research Center for Eco- Environmental Sciences, Chinese Academy of Sciences	2013.7- 2014.6	Chengdu Institute of Biology, Chinese Academy of Sciences, Chinese Academy of Sciences	Professor	zhangyu@rcees.ac.cn
Jing Li 李 静	Sichuan University	2013.4- 2014.5	Sichuan University	Associate Professor	
Hui Li 李慧	Inst of Applied Ecology; CAS; Shenyang China	2014.3- 2014.5	Institute of Applied Ecology, Chinese Academy of Sciences	Professor	huili@iae.ac.cn;
Qingyun YAN 颜庆云	Institute of Hydrobiology, Chinese Academy of Sciences, Wuhan	2013.4- 2014.5	Southern Marine Science and Engineering Guangdong Laboratory (Zhuhai)	Professor	yanqingyun@sml- zhuhai.cn
Wanpeng Wang	The third institute of Oceanography State Oceanic Administration, Xiamen China	2013.10- 2013.12	The Third Institute of Oceanography, SOA	Associate Professor	wangwanpeng2008@1 26.com
Xiaobo Wang 王晓波	Institute of Applied Ecology, Chinese Academy of Sciences	2013.4- 2013.11	Institute of Applied Ecology, CAS	Associate Professor	xbwang@iae.ac.cn
Yanying Zhang	South China Sea Institute of	2013.8- 2013.10	Yantai University	Professor	zhyanying@163.com;

张燕英	Oceanology, CAS				
Yuanyuan Qu 曲媛媛	Dalian Technology University	2012.9- 2013.8	Dalian University of Technology	Associate Professor	qyy@dlut.edu.cn
Yunfu Gu 辜运富	Sichuan University	2011.9- 2012.9	Sichuan Agricultural University	rofessor	guyf@sicau.edu.cn
Dongrui Zhou 周东蕊	Hehai University	2012.2- 2012.9	Southeast University, China	Associate Professor	junbai1013@seu.edu.c n
Xiaofei Lu 鲁晓飞	Chinese Academy of Agricultural Sciences	2011.1- 2012.8	Chinese Academy of Agricultural Sciences, China		xiaofeilu.g@gmail.co m
Shouwen Chen 陈守文	Huazhong Agricultural Professor	2012.1- 2012.5	Hubei University		chenshouwen@hubu.e du.cn
Xiaohui Wang 王晓慧	Tsinghua University	2011.9- 2012.4	Beijing University of Chemical Technology	Associate Professor	xhwang@buct.edu.cn;
Pigang Liu 刘皮刚	Harbin Institute of Technology	2009.11- 2011.8	Harbin Institute of Technology	Associate Professor	
Zhengmei Lu 吕镇梅	Zhangjiang Univ	2008.12- 2011.3	College of Life Sciences, Zhejiang University	Professor	lzhenmei@zju.edu.cn
Jiangtao Li	Tongji University	2010.10- 2011.3	Tongji University, School of Ocean and Earth Science	Associate Professor	
Xinyu Li 李新宇	Shengyang Institute of Ecology, CAS	2010.4- 2010.9	Institute of Applied Ecology, Chinese Academy of Sciences	Professor	xyli@iae.ac.cn;
Tuyong Yi 易图永	Huanan Agri Univ	2008.9- 2009.12	Hunan Agricultural University	Professor	<a href="mailto:yituyong@hunau.net">yituyong@hunau.net</a> ; <a href="mailto:yituyong@hotmail.com">yituyong@hotmail.co m</a>

Meiying Xu 许枚英	Guangzhou Institute of Microbiology	2006.8-2008.9	Institute of Microbiology, Guangdong Academy of Sciences	Professor	xumy@gdim.cn
Zhiguo Fang	Eco-Environmental Research Center, Chinese Academy of Sciences	2006.8-2008.5	Assistant Professor, Zhejiang Industrial Univ		
Jie Yu	Chinese Academy of Science (CAS)	2008.3-2008.5	Scientist, Institute of Microbiology, CAS		
Di Liu 刘迪	Institute of Microbiology, Chinese Academy of Science (CAS)	2008.2-2008.5	Scientist, Institute of Microbiology, CAS		
Zhiguo Fang 方志国	Eco-Environmental Research Center Chinese Academy of Science	2006.8-2008.4	Zhejiang University, Associate Professor, Hangzhou Industrial Univ		
Aijie Wang 王爱杰	Harbin Institute of Technology	2007.7-2007.8	Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences	Professor	ajwang@rcees.ac.cn
Gina La Spada	Istituto Sperimentale Talassografico, CNR, Messina, Italy	2006.12-2007.5	Istituto Sperimentale Talassografico, CNR, Messina, Italy		
Fengping Wang 王风平	The 3 <sup>rd</sup> Institute of Oceanography	2006.11-2007.3	Shanghai Jiao Tong University	Professor	fengpingw@sjtu.edu.cn
Huiwen Zhang 张惠文	Institute of Applied Ecology, Chinese Academy of Sciences	2004.11-2005.11	Institute of Applied Ecology, Chinese Academy of Sciences	Professor	hwzhang@iae.ac.cn

Zhijian Wang, 王志坚	Zhongshan University	2004.8-2005.10	Sun Yat-Sen University	Associate Professor	lsshzhj@mail.sysu.edu.cn;
Yimin Wang	Savannah River Ecology Laboratory, Aiken, SC.	2004.1-2004.12	Private firm		
Zhiyong Huang	Univ of Georgia	2004.4-2004.8	Univ of Georgia		
Tingfen Yan 颜婷芬	Northeastern Forestry University, Harbin, China	2000.11-2004.4	NIH/NIMHD Visiting Fellow		
Wen-Tso Liu,	Singapore University	2004.1-2004.4	University of Illinois at Urbana-Champaign  Professor		wtliu@illinois.edu
Beicheng Xia 夏北成	Zhongshan Univ	1998.8-2000.9	Zhongshan University		xiabch@mail.sysu.edu.cn, zsuxbc@163.com

**Past visiting undergraduate students and interns**

<b>Name</b>	<b>From</b>	<b>Time periods</b>	<b>Current institution</b>	<b>Current Position</b>	<b>Current e-mails address</b>
Josiah S Morgan	University of Oklahoma	Summer, 2023 (June 1 to July 28)	NSF REM program		
Thomas P Harvell	University of Oklahoma	Summer, 2023 (June 1 to July 28)	NSF REM program		
Abigail T Ren	University of Oklahoma	Summer, 2023 (June 1 to July 28)	NSF REM program		
Leif Olson	School of Civil Engineering and Environmental Sciences, OU	2022-23	Working on molecular community ecology for his Ph.D Dissertation		
Eman Ahmed	Norman North High School	Summer, 2022			
Felix Yang	Norman North High School	Summer, 2022			

Josiah Morgan	University of Oklahoma	Fall, 2022	NSF REM program		
Mikola Dearman	University of Oklahoma	Summer, Fall, 2022	NSF REM program		
Ainsley Jones	University of Oklahoma	Summer, 2022	<b>NSF REM (Research Experience and Mentoring) program</b>		
Hagan Matlock	University of Oklahoma	Spring, 2022	Honor research		
Anna Matlock	University of Oklahoma	Spring, 2022	Honor research		
Yupeng Fan	Zhejiang U	2015.9-2016.8	Ph.D. candidate at OU		
Aiyang Li	Tsinghua University	2016.2-2016.5	Ph.D. candidate at TU		
Lei Chen	Tsinghua University	2016.2-2016.5	Ph.D. candidate at TU		
Melissa Schuyler		2004.5-2004.8			
Rachel Lynch		2004.5-2004.8			
Funjun Zhou	Univ of Tennessee	2004.8-2004.12	Univ of Tennessee		
Scott J. Pesek	Univ of Tennessee	2003.8-2003.12	Univ of Tennessee		
Samantha Danielle		2002.5-2002.8			
Katie Bergman		2001.6-2001.8			
Shreni Keniya		2001.8-2001.12			
Roshitha V. Dunstan		2001.6-2001.8			
Daree Russell		2000.4-2001.3			
Kevin Kuhaida		2000.10-2000.12			
Nicholas Laszio		2001.9-12			
Jon Brooks Boroughs		2000.6-2000.8	High School Teacher		
Jestus Kim	Emory University	1999.6-1999.8	Emory Univ		
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		
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**Ph.D. committee members**

	From	Time periods	Current institution	Current Position	
Dongyu Wang	Dept of Microbiology and Plant Biology, Univ. of Oklahoma	2019 - 2024.12			
Chen Huang	Dept of Chemistry and Biochemistry, OU	2011-2017			
Yuchen Qiu	Electrical and Computer Engineering, Univ. of Oklahoma	2012			
Kangmei Zhao	Dept of Microbiology and Plant Biology, Univ. of Oklahoma	2012			
Huang Chen	Biochemistry, Univ of Oklahoma	2012			
Xia Xu	Microbiology and Plant Biology, Univ of Oklahoma	2008-2012			
Weiming Liu	Electrical and Computer Engineering, Univ. of Oklahoma	2006-2010			
Wim De Windt	Ghent University, Belgium	1999-2003			
Laurel Crosby	Stanford Univ	1999-2003			
Xiaoyun Qiu	Michigan State Univ	1999-2004			