JIE LI (SHE/HER/HERS)

I am currently pursuing a PhD under supervision of Associate Professor Jianhua Guo[1] and Professor Gene Tyson[2] with focus on microbial ecology study with financial support of UQ Research Training Scholarship. Pursuing a PhD is exiting and the journey will be finished around the **middle of 2022**.

I am very interested in microbial ecology and have participated in a few **projects**[3] and involved in **publications**[4]. I have worked in a wide range of different environments from molecular biology science at Hunan Agricultural University and Beijing Institute of Genomics, Chinese Academy of Science to bioinformatics at BGI and Australian Centre for Water and Environmental Biotechnology. I also have wet lab experience of molecular biology which aids in my data analysis a lots. For me, it's exciting to work with different people and to learn different stuff, these experiences largely diversified my background and enabled me a solid foundation as an independent researcher.

I am eager to continue my interests on **microbial ecology** after PhD and undertake **tools development**, **workflow integration and maintenance** tasks using my coding and statistical skills.

View this CV online with links at here

EDUCATION

2022 | 2018

DPhil, Microbiology, Bioinformatics
Supervisors: A/Prof Jianhua Guo, Prof Gene Tyson
Australian Centre for Water and Environmental Biotechnology
The University of Queensland

2014 | 2010

BSc, Bioinformatics
School of Plant Protection
Hunan Agricultural University

RESEARCH EXPERIENCE

2013.09 | 2013.04

Undergraduate Intern
Supervisors: Prof Qianfei Wang, Dr Bo Li
Beijing Institute of Genomics
Chinese Academy of Science

- Identifying whether three targeted regions in human genome are enhancers regulating PU.1 in MLL using PCR, Western-Blot and transfection experiment.

2012.12 | 2011.09

Undergraduate Intern/Research Assisstant
Supervisors: Prof Bida Gao, A/Prof Jie Zhong
Biology & Control of Plant Diseases and Pests Lab
Hunan Agricultural University

- Identifying virus infecting rice using RT-PCR and Sanger sequencing.

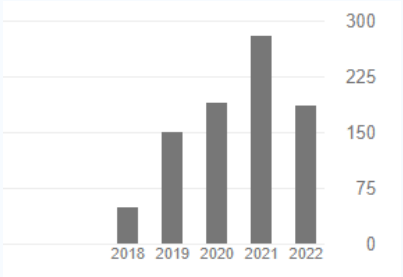
CONTACT ME

- Google Scholar
- github
- website
- Linkedin
- twitter

LANGUAGE SKILLS

- Python
- Bash
- R
- Java

CITATION



TEACHING EXPERIENCE

2017.06 | 2017.03

Mentoring undergraduate Intern from Southeast University
Department of Bioinformatics
BGI

- Introduction of linux system operations.
- Introduction of pipelines integrated within BGI.
- Preliminary bioinformatics trainning.

2016.12 | 2016.09

Mentoring undergraduate Intern from Southern Medical University
Department of Bioinformatics
BGI

2016.06 | 2016.03

Mentoring undergraduate Intern from Hunan Agricultural University
Department of Bioinformatics
BGI

I enjoy helping others to get deeper understanding of what they are interested and am looking forward to be engaged in teaching in the future.

INDUSTRY EXPERIENCE

2018.03 | 2014.08

Bioinformatics Engineer
Department of Bioinformatics
BGI

- Process and delivery of sequencing data and results.
- Pipelines maintenance.
- Modules development and integration of workflows using Python/Perl.

2014.07 | 2014.03

Undergraduate Bioinformatics Intern
Department of Bioinformatics
BGI

- Involved in sequencing data quality control pipeline reconstruction.

I value the experience with industry which advances the understanding of how knowledge being applied and more importantly, making research results benefit human beings in many perspectives.

AWARDS AND SCHOLARSHIPS

2022 | 2018

UQ Research Training Program scholarship
Australian Centre for Water and Environmental Biotechnology
The University of Queensland

- A highly competitive scholarship selectively offered for PhD study.

2016 | 2015

Annual Dedicated Star
Department of Bioinformatics
BGI

- A competitive award to reward outstanding staffs for their work of the past year

2015 | 2014

Annual Outstanding Staff
Department of Bioinformatics
BGI

- A competitive award to reward outstanding staffs for their work of the past year

2013 | 2012

National Motivated Scholarship

School of Plant Protection — Hunan Agricultural University

- A highly competitive scholarship to award students for their achievement during the study at university

2013 | 2012

Excellent Student Award

School of Plant Protection — Hunan Agricultural University

- A highly competitive honor to award students for their achievemnt during the past year.

2013

Excellent Intern Award

Beijing Institute of Genomics — Chinese Academy of Science

- A highly competitive honor selectively awarded to excellent interns.

2013

Excellent Intern Scholarship

Beijing Institute of Genomics — Chinese Academy of Science

- A highly competitive scholarship selectively awarded to excellent interns.

PUBLIC PRESENTATIONS

2021

Metabolic network analysis reveals microbial community interactions in two biofilm systems coupling anammox and n-DAMO processes

the 9th IWA Microbial Ecology and Water Engineering Specialist Conference (MEWE2021)

Oral presentation at TU Delft, Netherlands

- Jie Li, Tao Liu, Gene W Tyson, Jianhua Guo

2019

Understanding the dissemination of antibiotic resistance in water systems through metagenomic sequencing

DPhil Confirmation presentation at Australian Centre for Water and Environmental Biotechnology

The University of Queensland

I love to give public presentations and enjoy introducing work of team and expressing ideas on a stage. Exchanging ideas is an important part of research. It not only provoke inspirations but also move research forward faster.

PEER REVIEWED ARTICLES

2021

Non-antibiotic pharmaceuticals promote the transmission of multidrug resistance plasmids through intra-and intergenera conjugation[5]

The ISME journal

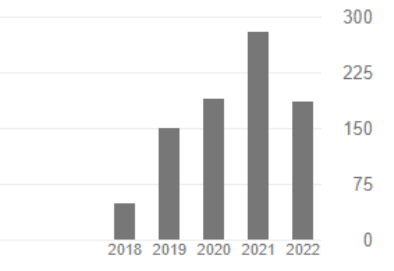
- Yue Wang, Ji Lu, Shuai Zhang, Jie Li, Likai Mao, Zhiguo Yuan, Philip L Bond, Jianhua Guo

2021

Selective enrichment and metagenomic analysis of three novel comammox Nitrospira in a urine-fed membrane bioreactor[6]

ISME Communications

- Jiyun Li, Zheng-Shuang Hua, Tao Liu, Chengwen Wang, Jie Li, Ge Bai, Sebastian Lücker, Mike SM Jetten, Min Zheng, Jianhua Guo



2020

Larger anammox granules not only harbor higher species diversity but also support more functional diversity[7]

Environmental Science & Technology

- Hui Chen, Tao Liu, Jie Li, Likai Mao, Jun Ye, Xiaoyu Han, Mike SM Jetten, Jianhua Guo

2020

Simultaneous removal of dissolved methane and nitrogen from synthetic mainstream anaerobic effluent[8]

Environmental Science & Technology

- Tao Liu, Jie Li, Zhuan Khai Lim, Hui Chen, Shihu Hu, Zhiguo Yuan, Jianhua Guo

2019

Antiepileptic drug carbamazepine promotes horizontal transfer of plasmid-borne multi-antibiotic resistance genes within and across bacterial genera[9]

The ISME journal

- Yue Wang, Ji Lu, Likai Mao, Jie Li, Zhiguo Yuan, Philip L Bond, Jianhua Guo

2018

Triclosan at environmentally relevant concentrations promotes horizontal transfer of multidrug resistance genes within and across bacterial genera[10]

Environment International

- Ji Lu, Yue Wang, Jie Li, Likai Mao, Son Hoang Nguyen, Tania Duarte, Lachlan Coin, Philip Bond, Zhiguo Yuan, Jianhua Guo

2018

Non-antibiotic antimicrobial triclosan induces multiple antibiotic resistance through genetic mutation[11]

Environment International

- Ji Lu, Min Jin, Son Hoang Nguyen, Likai Mao, Jie Li, Lachlan JM Coin, Zhiguo Yuan, Jianhua Guo

2017

Metagenomic analysis reveals wastewater treatment plants as hotspots of antibiotic resistance genes and mobile genetic elements[12]

Water Research

- Jianhua Guo, Jie Li, Hui Chen, Philip L Bond, Zhiguo Yuan

BOOK CHAPTERS

2020

Control strategies to combat dissemination of antibiotic resistance in urban water systems[13]

Antibiotic Resistance in the Environment

- Jianhua Guo, Yue Wang, Yunus Ahmed, Min Jin, Jie Li

REFEREES

- Available upon request