JIE LI (SHE/HER/HERS)

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

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.

TEACHING EXPERIENCE

2017.06 | 2017.03 Mentoring undergraduate Intern from Southeast University

Department of Bioinformatics

Q BGI

- · Introduction of linux system operations.
- · Introduction of pipelines integrated within BGI.
- $\cdot \ \mathsf{Preliminary} \ \mathsf{bioinformatics} \ \mathsf{trainning}.$

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

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CONTACT ME

- **G** Google Scholar
- github
- **Ø** website
- in Linkedin
- **y** twitter

LANGUAGE SKILLS

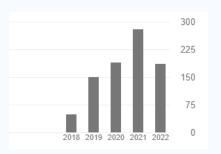
Python

Bash

R

Java

CITATION



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.

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

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

2015 | 2014

Annual Outstanding Staff

Department of Bioinformatics

♀BGI

 \cdot 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

 \cdot 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

2019

2021

2020

Beijing Institute of Genomics

↑ Chinese Academy of Science

· A highly competitive scholarship selectively awarded to excellent interns.

PUBLIC PRESENTATIONS

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

· <u>Jie Li</u>, Tao Liu, Gene W Tyson, Jianhua Guo

 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

PEER REVIEWED ARTICLES

• Non-antibiotic pharmaceuticals promote the transmission of multidrug resistance plasmids through intra-and intergenera conjugation¹

The ISME journal

· Yue Wang, Ji Lu, Shuai Zhang, <u>Jie Li</u>, Likai Mao, Zhiguo Yuan, Philip L Bond, Jianhua Guo

Selective enrichment and metagenomic analysis of three novel comammox Nitrospira in a urine-fed membrane bioreactor²

ISME Communications

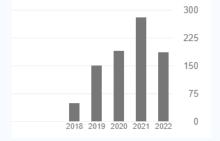
- · Jiyun Li, Zheng-Shuang Hua, Tao Liu, Chengwen Wang, <u>Jie Li</u>, Ge Bai, Sebastian Lücker, Mike SM Jetten, Min Zheng, Jianhua Guo
- Larger anammox granules not only harbor higher species diversity but also support more functional diversity³

Environmental Science & Technology

- · Hui Chen, Tao Liu, <u>Jie Li</u>, Likai Mao, Jun Ye, Xiaoyu Han, Mike SM Jetten, Jianhua Guo
- Simultaneous removal of dissolved methane and nitrogen from synthetic mainstream anaerobic effluent⁴

Environmental Science & Technology

· Tao Liu, <u>Jie Li</u>, 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 genera⁵

The ISME journal

· Yue Wang, Ji Lu, Likai Mao, <u>Jie Li</u>, Zhiguo Yuan, Philip L Bond, Jianhua Guo

2018

Triclosan at environmentally relevant concentrations promotes horizontal transfer of multidrug resistance genes within and across bacterial genera⁶

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 mutation7

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

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 systems⁹

Antibiotic Resistance in the Environment

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

REFEREES

Available upon request