## 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 targeted regions in human genome are enhancers regulating PU.1 in MLL using Western-Blot, PCR, vector construction and transformation 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 sequencing.

## ♣☐ 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 **♀**BGI Department of Bioinformatics

2016.06 2016.03

Mentoring undergraduate Intern from Hunan Agricultural University **₽** BGI

Department of Bioinformatics



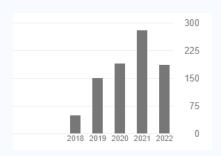
View this CV online

#### CONTACT ME

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

#### LANGUAGE SKILLS

#### 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 conjugation<sup>1</sup>

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 bioreactor<sup>2</sup>

ISME Communications

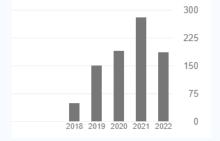
- · Jiyun Li, Zheng-Shuang Hua, Tao Liu, Chengwen Wang, <u>Jie Li</u>, Ge Bai, Sebastian Lücker, Mike SM Jetten, Min Zheng, Jianhua Guo
- Larger anammox granules not only harbor higher species diversity but also support more functional diversity<sup>3</sup>

**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 effluent<sup>4</sup>

**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 genera<sup>5</sup>

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 genera<sup>6</sup>

**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 systems<sup>9</sup>

Antibiotic Resistance in the Environment

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

#### REFEREES

Available upon request