

# 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  
|  
2011.09

**Undergraduate Intern/Research Assistant**  
**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  
📍 BGI  

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

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



View this CV [online](#)

## CONTACT ME

[Google Scholar](#)

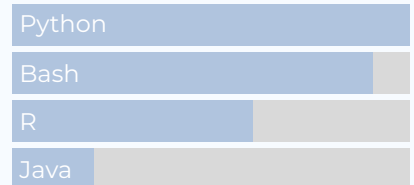
[github](#)

[website](#)

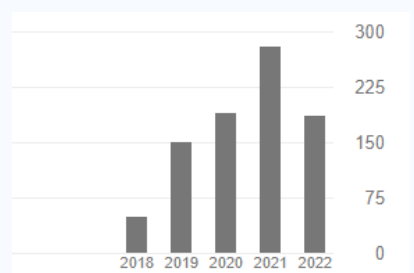
[in LinkedIn](#)

[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  
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2015

### Annual Dedicated Star

Department of Bioinformatics

📍 BGI

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

2015  
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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 achievement 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.

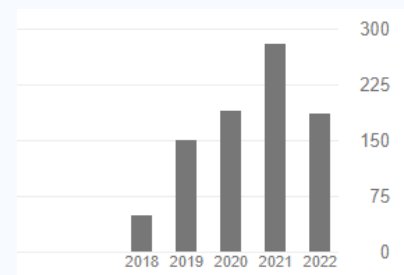
- 2013 • **Excellent Intern Scholarship**  
Beijing Institute of Genomics  Chinese Academy of Science  
• A highly competitive scholarship selectively awarded to excellent interns.

## 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

## PEER REVIEWED ARTICLES

- 2021 • **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, [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<sup>2</sup>**  
ISME Communications  
• Jiyun Li, Zheng-Shuang Hua, Tao Liu, Chengwen Wang, [Jie Li](#), Ge Bai, Sebastian Lucker, Mike SM Jetten, Min Zheng, Jianhua Guo
- 2020 • **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, [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<sup>4</sup>**  
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<sup>5</sup>**  
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<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 mutation<sup>7</sup>**  
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<sup>8</sup>**  
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