

# JIE LI (SHE/HER)

I am currently pursuing a PhD under supervision of Associate Professor Jianhua Guo<sup>1</sup> and Professor Gene Tyson<sup>2</sup> with focuses on microbial ecology study funded by Research Training Scholarship<sup>3</sup>. Pursuing a PhD is exiting and the journey has been estimated to be finished around the middle of 2022.

I am very interested in microbial ecology and have participated in a few projects<sup>4</sup>. 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 **pipelines/workflows/tools development** tasks.

## EDUCATION

2022  
|  
2018

### PhD., Microbiology, Bionformatics A/Prof Jianhua Guo, Prof Gene Tyson

Australian Centre for Water and Environmental Biotechnology  
📍 The University of Queensland

• With focus on microbial ecology.

2014  
|  
2010

### MSc, Bioinformatics

School of Plant Protection 📍 Hunan Agricultural University

## RESEARCH EXPERIENCE

2013.09  
|  
2013.04

### Undergraduate Intern Prof Qianfei Wang, Dr Bo Li

Beijing Institute of Genomics, Chinese Academy of Science  
📍 Beijing, China

• To Identify if sequence regions in human genome are enhancers with Western-Blot, PCR and transfection experiment.

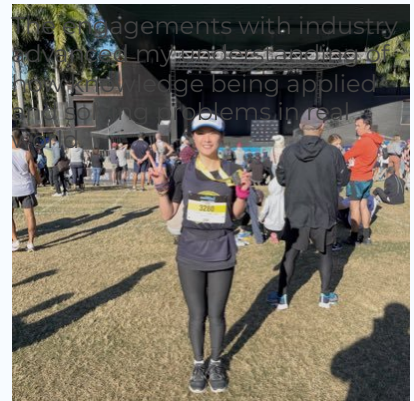
2012.12  
|  
2011.09

### Undergraduate Intern/Research Assistant Prof Bida Gao, A/Prof Jie Zhong

Biology & Control of Plant Diseases and Pests Lab 📍 Changsha, China

• To identify virus infecting rice with RT-PCR and Sanger sequencing.

## INDUSTRY EXPERIENCE



View this CV online with links at [here](#)

## CONTACT

Google Scholar

github

website

LinkedIn

ORCID

twitter

email

## LANGUAGE SKILLS



Python

Bash

R

perl

Java

- 2018.03 | 2014.08 • **Engineer**  
Department of Bioinformatics  BGI
- 2014.07 | 2014.03 • **Undergraduate Bioinformatician Intern**  
Department of Bioinformatics  BGI



## TEACHING EXPERIENCE

- 2017.07 | 2016.09 • **Undergraduate Intern training**  
 BGI  
• Walk Intern through the linux system



## AWARDS AND SCHOLARSHIPS

- 2022 | 2018 • **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 | 2016 • **Annual Dedicated Star**  
Department of Bioinformatics  BGI  
• A competitive award to reward outstanding staffs for their work of the past year
- 2015 | 2015 • **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 | 2013 • **Excellent Intern Award**  
Beijing Institute of Genomics, CAS  Beijing Institute of Genomics, CAS  
• A highly competitive honor selectively awarded to excellent interns.

Training undergraduate interns is one of my responsibilities of my work. I truly enjoyed passing on what I know to youngers and am looking forward to continue such teaching engagement.

The awards and honors I received are like medals and scars to a soldier.

- 2013  
|  
2013
- **Excellent Intern Scholarship**  
Beijing Institute of Genomics, CAS 📍 Beijing Institute of Genomics, CAS  
• A highly competitive scholarship selectively awarded to excellent interns.
- 2012  
|  
2011
- **Second Class Scholarship**  
School of Plant Protection 📍 Hunan Agricultural University  
• Scholarship received to award the achievement during the parst year.
- 2011  
|  
2010
- **Excellent Student Award**  
School of Plant Protection 📍 Hunan Agricultural University  
• A highly competitive honor to award students for their achievemnt during the past year.
- 2011  
|  
2010
- **Second Class Scholarship**  
School of Plant Protection 📍 Hunan Agricultural University  
• Scholarship received to award the achievement during the parst year.



## PUBLIC PRESENTATIONS

- 2021
- **the 9th IWA Microbial Ecology and Water Engineering Specialist Conference (MEWE2021)**  
TU Delft, Netherlands  
• Jie Li, Tao Liu, Gene W Tyson, Jianhua Guo



## PEER REVIEWED ARTICLES

- 2021
- **Non-antibiotic pharmaceuticals promote the transmission of multidrug resistance plasmids through intra-and intergenera conjugation<sup>7</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>6</sup>**  
ISME Communications  
• Jiyun Li, Zheng-Shuang Hua, Tao Liu, Chengwen Wang, Jie Li, Ge Bai, Sebastian Lückner, Mike SM Jetten, Min Zheng, Jianhua Guo
- 2020
- **Larger anammox granules not only harbor higher species diversity but also support more functional diversity<sup>7</sup>**  
Environmental Science & Technology  
• Hui Chen, Tao Liu, Jie Li, Likai Mao, Jun Ye, Xiaoyu Han, Mike SM Jetten, Jianhua Guo

I love to give public presentations. Just enjoy such feelings of introducing the work of your team and expressing ideas on a stage.

- 2020 ● **Simultaneous removal of dissolved methane and nitrogen from synthetic mainstream anaerobic effluent<sup>8</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>9</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>10</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>11</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>12</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>13</sup>**  
Antibiotic Resistance in the Environment  
• Jianhua Guo, Yue Wang, Yunus Ahmed, Min Jin, *Jie Li*

## REFEREES

- Available upon request