

Who am I

Name: Weizhi (Willis) Song	DOB: March 14, 1987
Gender: Male	Nationality: Chinese (P. R. China)



Research interests

Microbiology	Microbial ecology	Horizontal gene transfer	Bioinformatics
Genomics	Metagenomics	Tree of life	Machine/Deep learning

My Software

1. MetaCHIP	Microbiome (under review)	https://github.com/songweizhi/MetaCHIP
2. Binning_refiner	Bioinformatics	https://github.com/songweizhi/Binning_refiner
3. HgtSIM	PeerJ	https://github.com/songweizhi/HgtSIM

Publications

2018

1.

Song WZ, Wemheuer B, Zhang S, Steensen K, Thomas T (2018) MetaCHIP: community-level horizontal gene transfer identification through the combination of best-match and explicit phylogenetic tree approaches. **Microbiome** (Under review).

2.

Song WZ, Thomas T, Edwards R (2018) Complete genome sequences of pooled genomic DNA from 10 marine bacteria using PacBio sequencing. **GigaScience** (Under review).

3.

Yu YP, Song WZ, Lau SCK (2018) Transcriptomic analysis of *E. coli* and cryptic *Escherichia* growing in the pore water provides insights into their survival strategy in coastal marine sediment. **Environmental Microbiology** (Under review)

2017

1.

Song WZ, Thomas T (2017) Binning_refiner: Improving genome bins through the combination of different binning programs. **Bioinformatics**, 33(12), 1873-1875.

2.

Song WZ, Steensen K, Thomas T (2017) HgtSIM: A simulator for horizontal gene transfer (HGT) in microbial communities. **PeerJ**, 5: e4015.

3.

Zhang S, Song WZ, Yu M, Lin XZ (2017) Comparative genomics analysis of five *Psychrobacter* strains isolated from world-wide habitats reveal high intra-genus variations. **Extremophiles**, 21(3), 581-589.

2013

1.

Che S, Song WZ, Lin XZ (2013) Response of heat-shock protein (HSP) genes to temperature and salinity stress in the antarctic psychrotrophic bacterium *Psychrobacter* sp. G. **Current microbiology**, 67(5), 601-608.

2.

Che S, Song L, Song WZ, Yang M, Liu GM, Lin XZ (2013) Complete genome sequence of Antarctic bacterium *Psychrobacter* sp. strain G. **Genome announcements**, 1(5), e00725-13.

2012

1.

Song WZ, Lin XZ, Huang XH (2012) Characterization and expression analysis of three cold shock protein (CSP) genes under different stress conditions in the Antarctic bacterium *Psychrobacter* sp. G. **Polar Biology**. 35: 1515-1524.

2.

Song WZ, Lin XZ, Che S (2012) Identification of regulatory sequences and expression analysis of OmpR gene under different stress conditions in the Antarctic bacterium *Psychrobacter* sp. G. **Current Microbiology**. 66(3): 259-65.

Conferences



- 1. International Symposium on Microbial Ecology (ISME17)**
 - August 12-17th, 2018
 - Leipzig, Germany
 - **Poster:** Towards the detection of horizontal gene transfer in metagenomics datasets.
- 2. Sydney Bioinformatics Research Symposium (SBRS)**
 - June 15th, 2018
 - Sydney, Australia
- 3. Australian Microbial Ecology Conference (AusME)**
 - February 13-15th, 2017
 - Melbourne, Australia
 - **Oral:** Binning_refiner: Improving genome bins through the combination of different binning programs.
- 4. Australian Microbial Genomics Symposium**
 - April 14-16th, 2015
 - Sydney, Australia
- 5. Gordon Research Conferences - Marine Molecular Ecology**
 - August 11-16th, 2013
 - Hong Kong, China
- 6. China Symposium on Polar Science**
 - September 22-25th, 2011
 - Wuhan, China
 - **Oral:** The expression patterns of stress related genes in Antarctic bacterium *Psychrobacter* sp. G.

Awards

1.	The University of New South Wales (UNSW), Tuition Fee Scholarship	2015 – 2018	\$ 147K
2.	China Scholarship Council (CSC)	2015 – 2018	\$ 61.2K
3.	UNSW, PhD Top-Up Scholarship	2018	\$ 2.5K
4.	UNSW, Graduate Research School, Conference travel funding	2018	\$ 2.6K
5.	UNSW, PhD Top-Up Scholarship	2017	\$ 5K
6.	UNSW, School of Biotechnology and Biomolecular Sciences, Conference travel funding	2017	\$ 0.75K

Education



 2005 – 2009 Bachelor of Engineering Biological Engineering
 Shandong Jianzhu University, ShanDong, China.



 2009 – 2012 Master of Science Marine Biology
 The First Institute of Oceanography, State Oceanic Administration, ShanDong, China.



 2015 – 2019 Doctor of Philosophy Microbiology and Bioinformatics
 The University of New South Wales, Sydney, Australia.

My Toolbox



Linux



GitHub