Ruizhe Wang

Mobile: +86-18874228780

Email: ruizhewang7627@outlook.com;   u7627829@anu.edu.au

Education Background

- Shandong University (SDU)
  - ➢ Bachelor of Biological Science (GPA: 86.09/100)
- The Australian National University
  - ➢ Master of Science in Quantitative Biology (GPA: 6.3/7)
- Relevant coursework: Molecular biology, Bioinformatics , Biochemistry, Genetics, Mathematical analysis , Linear regression, Machine learning, Structured programming, Statistics, R

Publication Information

1. Yu, S., **Wang, R.**, Jiang, C., Jiang, C., Liu, Y., Zhu, Q*. Molecular characterization and functional analysis of a Fucose-binding Lectin Isolated from *Trachidermus fasciatus* (TfFBL) Involved in Antibacterial Defense. Fish & shellfish Immunology (Submitted to the journal)

Research Projects

Molecular characterization and functional analysis of a Fucose-binding Lectin

from roughskin sculpin *Trachidermus fasciatus*

- Supervisor: Dr. Shanshan Yu (Marine College, SDU)
- Research Methods: gene cloning, sequence analysis, structural prediction, tissue distribution, expression profiling, stimulus-induced changes, and *in vitro* bioactivity tests
- Finished 1 academic paper as co-author

Application of GAN model integrating evolutionary information

in RNA secondary structure prediction

- Supervisor: Brian Parker and Jiayu Wen (John Curtin School of Medical Research, ANU)
- Intergrating conserved RNA structure information into RNA structure prediction.

Identification and analysis of antimicrobial peptide gene from *Rapana venosa*

- Supervisor: Dr. Shanshan Yu (Marine College, SDU)
- Identified and cloned the antimicrobial peptide gene
- Utilized bioinformatics techniques to predict the structure and functional domain
- Applied MEGA to explore phylogenetic relationships

Plant Diversity Survey and Ecology Study of Weihai city

- Supervisor: Prof. Zhao Hong (Marine College, SDU)
- Conducting field surveys of plant diversity, distribution and quantity in mountains of Weihai city
- Completed the work and reports and found more than 70 species, more than 50 specimens of plants have been prepared
- Providing basic data for plant diversity research and conservation

Coastal animal diversity study of Golden Beach of Weihai city

- Supervisor: Dr. Liu Xu (Marine College, SDU)
- Collected more than 40 different specimens of marine organism

- Provided data support and theoretical basis for the protection of wild Marine animal resources, and provides reference for the Marine resources research of Weihai City

Awards and Accomplishment

Shandong University and Australian National University Joint Science College 2021

- Ranked top 15%

Director's Scholarship for Academic Excellence 2023

- Ranked 1% in the program, received scholarship of A$15,000

Skills

- **Analytics and Coding:** Proficient in Excel, R programming language, Python, Java, SQL
- **Languages:**
  Chinese (Mother tongue level)
  English (Proficient)