Curriculum Vitae

Yunlong Li (Postdoctoral Research Fellow)

Department of Biology
Hong Kong Baptist University
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Education

Aug 2017 – Aug 2021: Doctor of Philosophy in Life Science, Division of Life Science, ***Hong Kong University of Science and Technology***, Hong Kong, China. **Supervisor: Prof. Wen-Xiong Wang**
Thesis: Molecular Basis of Metal Hyperaccumulation in Oysters: Revealed by Transcriptomics and Proteomics
Aug 2013 – June 2017: Bachelor of Science in Marine Science, School of Marine Science, ***Sun Yat-sen University***, Guangzhou, China.

Professional Experience

Nov 2025 – present: Postdoctoral Research Fellow, Department of Biology, **Hong Kong Baptist University**, China, **Supervisor: Prof. Jian-Wen Qiu**
Nov 2021 – Oct 2025: Postdoctoral Research Fellow, Institute of Evolution & Marine Biodiversity, ***Ocean University of China***, China. **Supervisor: Prof. Jin Sun**

Research Focus

- Genomics and transcriptomics (spatial and single-cell level)
- Chemosymbiosis in Mollusca
- Evolution (Phylogenomics and Synteny)
- Bioinformatic tools (development using Python)

Representative Peer-Reviewed Publications

(#: equal contribution; *: coresponding author)

1. Julia D. Sigwart[#]*, **Yunlong Li**[#]*, Zeyuan Chen, Katarzyna Vončina, Jin Sun*. Still waters run deep: Large scale genome rearrangements in the evolution of morphologically conservative Polyplacophora. ***eLife***, 2024, 13:RP102542
2. **Yunlong Li[#],** Xing He[#], Yuxuan Lin, Yi-Xuan Li, Gennady M. Kamenev, Jiying Li, Jian-Wen Qiu, Jin Sun*. Reduced chemosymbiont genome in the methane seep thyasirid and the cooperated metabolisms in the holobiont under anaerobic sediment. ***Molecular Ecology Resources***, 2023, 23: 1853–1867.

3. **Yunlong Li**, Wen-Xiong Wang*. Integrated transcriptomics and proteomics revealed the distinct toxicological effects of multi-metal contamination on oysters. ***Environmental Pollution***, 2021, 284: 117533
4. **Yunlong Li**, Karl Wah-Keung Tsim, Wen-Xiong Wang*. Copper promoting oyster larval growth and settlement: Molecular insights from RNA-seq. ***Science of the Total Environment***, 2021, 784: 147159
5. **Yunlong Li,** Wen-xiong Wang*. Protein molecular responses of field-collected oysters *Crassostrea hongkongensis* with greatly varying Cu and Zn body burdens. ***Aquatic Toxicology***, 2021, 232: 105749
6. **Yunlong Li**, Xinhui Zhang, Jie Meng, Jieming Chen, Xinxin You, Qiong Shi, Wen-Xiong Wang*. Molecular responses of an estuarine oyster to multiple metal contamination in Southern China revealed by RNA-seq. ***Science of the Total Environment***, 2020, 701: 134648

Processing manuscripts

(#: equal contribution; *: coresponding author)

1. **Yunlong Li[#]***, Xu Liu[#], Chong Chen, Jian-Wen Qiu, Kevin Kocot, Jin Sun*. VEHoP: A Versatile, Easy-to-use, and Homology-based Phylogenomic pipeline accommodating diverse sequences. ***bioRxiv***, 2024. doi: 10.1101/2024.07.24.604968 (under revision in ***Molecular Ecology Resources***)
2. **Yunlong Li[#]**, Chong Chen[#], Xu Liu, Menggong Li, Haiyun Zhou, Hui Wang, Xiaoshan Zheng, Xing He, Shanshan Liu, Jian-Wen Qiu*, Pei-Yuan Qian*, Jin Sun*. A multilamellar organelle for chemosymbiosis in an aplacophoran mollusc adapted to anoxic cold seep sediment. ***bioRxiv***, 2025. doi: 10.1101/2025.01.16.633305 (under revision in ***Nature Communications***)
3. Menggong Li[#], **Yunlong Li[#]**, Shi-Hai Mao[#], Zhixin Zhang, Chong Chen, Xueying Nie, Xu Liu, Hui Wang, Xiaoshou Liu, Guang-Chao Zhuang, Weipeng Zhang, Qiang Lin, Guang-Chao ZhuangJin Sun*. Shallow-water chemosymbiotic clams are a globally significant and previously overlooked carbon sink. ***bioRxiv***, 2025. doi: 10.1101/2024.02.25.581922v2 (under revision in ***Science Advances***)