

Curriculum Vitae

Hao Zhang, PhD

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Personal Information

Gender: Male Birth date: Oct. 20th, 1987
Nationality: China Birthplace: Shandong Province, China

Education/Employment

Sept., 2011---Oct., 2015, **PhD**, Environmental Science Major, Group of Marine Proteomics, College of the Environment & Ecology, Xiamen University, China

Thesis: Metaproteomic study of marine phytoplankton blooms

Sept., 2009---Jun., 2011, **Master**, Environmental Science Major, Group of Marine Proteomics, College of the Environment & Ecology, Xiamen University, China

Thesis: Metaproteomic study of marine phytoplankton blooms

Sept., 2005---Jun., 2009, **Bachelor**, Environmental Engineering Major, College of the Environment and Materials Engineering, Yantai University, China

Professional Experience

Apr., 2016---Present, **Postdoctoral Scholar**, State Key Laboratory of Marine Environmental Science, Xiamen University, China

Oct., 2015---Mar., 2016, **Research assistant**, Group of Marine Proteomics, College of the Environment & Ecology, Xiamen University, China

Mar., 2011---Sep., 2011, **Research assistant**, Department of Biology and Chemistry/State Key

Publications

1. **Hao Zhang**, Jiuling Liu, Yanbin He, Zhangxian Xie, Shufei Zhang, Yong Zhang, Lin Lin, Siqi Liu, Dazhi Wang*. Quantitative proteomics reveals the key molecular events occurring at different cell cycle phases of the *in situ* blooming dinoflagellate cells. *Science of the Total Environment*, 2019. (accepted)
2. Shufeng Zhang, Ying Chen, Zhangxian Xie, **Hao Zhang**, Lin Lin, Dazhi Wang*. Unraveling the molecular mechanism of the response to changing ambient phosphorus in the dinoflagellate *Alexandrium catenella* with quantitative proteomics. *Journal of Proteomics*, 2019, 196: 141-149.
3. Xiaohuang Chen, Yuanyuan Li, **Hao Zhang**, Jiuling Liu, Zhang-Xian Xie, Lin Lin, Dazhi Wang*. Quantitative proteomics reveals common and specific responses of a marine diatom *Thalassiosira pseudonana* to different macronutrient deficiencies. *Frontiers in Microbiology*, 2018, 9: 2761.
4. Zhangxian Xie, Feng Chen, Shufeng Zhang, Minghua Wang, **Hao Zhang**, Lingfen Kong, Minghan Dai, Huasheng Hong, Lin Lin, Dazhi Wang*. Metaproteomics of marine viral concentrates reveals key viral populations and abundant periplasmic proteins in the oligotrophic deep chlorophyll maximum of the South China Sea. *Environmental Microbiology*, 2018, 20(2): 477-491.
5. Dongxu Li, **Hao Zhang**, Xiaohuang Chen, Zhangxian Xie, Yong Zhang, Shufeng Zhang, Lin Lin, Feng Chen, Dazhi Wang*. Metaproteomics reveals major microbial players and their metabolic activities during the blooming period of a marine dinoflagellate *Prorocentrum donghaiense*. *Environmental Microbiology*, 2017, 20(2): 632-644.
6. **Hao Zhang**, Dazhi Wang*, Zhangxian Xie, Shufei Zhang, Minghua Wang, Lin Lin. Comparative proteomics reveals highly and differentially expressed proteins in the field-collected and laboratory-cultured blooming cells of the diatom *Skeletonema costatum*. *Environmental Microbiology*, 2015, 17(10): 3976-3991.
7. Shufei Zhang, Yong Zhang, Zhangxian Xie, **Hao Zhang**, Lin Lin, Dazhi Wang*. iTRAQ-based quantitative proteomic analysis of a toxigenic dinoflagellate *Alexandrium catenella* and its non-toxic mutant. *Proteomics*, 2015, 15: 4041-4050.
8. Dazhi Wang*, **Hao Zhang**, Yong Zhang, Shufeng Zhang. Marine dinoflagellate proteomics:

Current status and future perspectives. *Journal of Proteomics*, 2014, 105: 121-132.

Funds and Programs

1. Carbon assimilation mechanism and its roles during the occurrence of marine dinoflagellate bloom, China, 2017-2019, Funded by the National Natural Science Foundation of China (41606132). **Principle Investigator;**
2. Molecular mechanism of urea metabolism in marine dinoflagellates, China, 2017-2019, Funded by the China Postdoctoral Science Foundation. **Principle Investigator;**
3. Metatranscriptomics and metaproteomics of key dinoflagellates during the occurrence of harmful algal bloom, China, 2013-2017, Funded by the State Key Program of National Natural Science Foundation of China (41230961). **Participant;**
4. Marine environmental proteomics, 2015-2019, Funded by the National Natural Science Foundation of China (41425021). **Participant;**
5. The evolution mechanism and ecological security of algal blooms in the coastal waters of China, 2010-2014, Funded by National Program on Key Basic Research Project of China (2010CB28700). **Participant.**

Conference Presentation

1. Oral presentation: Metaproteomics reveals metabolic activities of pre-blooming and blooming cells of *Prorocentrum donghaiense* collected at the coastal East China Sea, the 15th International Marine Biotechnology Conference, Baltimore, Maryland, USA, Sept., 2016.
2. Oral presentation: Metaproteomic analysis of early and middle blooming cells of *Prorocentrum donghaiense* collected at the Coastal East China Sea, the 6th International Conference on Prevention and Management of Harmful Algal Blooms in the South China Sea, Hongkong, Nov., 2015.
3. Oral presentation: Comparative proteomics reveals highly and differentially expressed proteins in field-collected and laboratory-cultured blooming cells of the diatom *Skeletonema costatum*, the 2nd International Conference on Environmental OMICS, Seoul, Korea, Jul., 2013
4. Poster presentation: Comparative proteomic analysis reveals proteins putatively involved in toxin

biosynthesis in the marine dinoflagellate *Alexandrium catenella*, the 15th International Conference on Harmful Algae, Gyeongnam, Korea, Oct., 2012

Skills/Training

1. Microalgae culture, DNA, RNA and protein extraction of pure and marine phytoplankton (Microbe) samples;
2. q-PCR and 2D-DIGE techniques; Training of MALDI TOF/TOF and LC-MS/MS; Basic proteome and transcriptome bioinformatics skills;
3. Attend six times of the field investigation project, and one time as the project chief.

Scholarships and Awards

1. 2017-2018: Outstanding Postdoctoral Fellowship, State Key laboratory of Marine Environmental Science, Xiamen University
2. 2013: 2nd Prize Winner for Young Oral Presenter at the International Conference on Environmental OMICS, Seoul, Korea
3. 2011-2015: The first Prize Scholarship, Xiamen University