# **LAIBIN HUANG**

Assistant Professor (2023.8-) Microbial Ecology/ Microbiology

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### GRANTS AND PROPOSAL WRITING

Ungranted
3

\$649,962/3 yrs:

Dahlke Helen [PI], Rodrigues Jorge L. Mazza, Daniel Geisseler, Isaya Kisekka, Levintal Elad,

**Granted** 

Cuiliang Cheng [PI],

--\$3,000/2 yrs:

3

\$600,000/3 yrs:

. Jorge L. Mazza

Rodrigues [PI],

William R. Horwath,

Helen Dahlke, and Xia Zhu-Barker (University of Wisconsin-Madison)

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### RESEARCH PROJECTS

## Microbial controls on nitrogen/carbon cycling in Agricultural soil ecosystems

- Understanding managed aquifer recharge effects on soil N cycling and health in the agricultural ecosystems, California [University of California, Davis; Gordon and Betty Moore Foundation] --
- Plant and Microbial Indicators of Soil Health: The effects of nitrogen fertilization on rhizosphere and soil microbiomes [University of California, Davis; USDA-NIFA-AFRI] –
- Bio-stimulants and specialty nutrients for use in agriculture applications-Tomato filed test [University of California, Davis; Valagro USA]
- Understanding shifts in the microbial N cycle with the inclusion of cover crops into long-term agricultural experiments and their links to soil health and productivity in the agricultural area, Illinois [University of Illinois at Urbana-Champaign; USDA-NIFA-AG 2018-67019-27807] --
- Microbial N/C cycles link to soil fertility in Everglades agricultural soil, Florida [University of Florida; USDA-NIFA- 2022-67019-36501] --

### Microbial controls on nitrogen cycling in coastal water ecosystems

Coastal SEES (Track 1): Planning for hydrologic and ecological impacts of sea-level rise on the sustainability of coastal water resources [University of Florida; US National Science Foundation-OCE-1325227] --

- 12. ., Bai, J., Chen, B., Zhang, K., Huang, C., Liu, P. . Two-decade wetland cultivation and its effects on soil properties in salt marshes in the Yellow River Delta, China. , 10, 49-55.
- 13. Bai, J., Yan, D., Chen, B., Xiao, R., Gao, H. Changes of wetland landscape patterns in Dadu River catchment from 1985 to 2000, China. , 1-13.

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## **SELECTED PRESENTATIONS**

## **Invited speaker/Seminar**

- 1. Microbial Adaptation and Nitrogen Controls in Wetland Restoration. 2023 The International Symposium on Coastal Wetland Ecological Conservation and Restoration" |Aug. 18-20| Dongying city, Shangdong Province, China.
- Conservation and Restoration" |Aug. 18-20| Dongying city, Shangdong Province, China.

  2. Exploring Microbial Nitrogen and Carbon Cycling through Bioinformatics. BCB 5810 Bioinformatics Colloquium, |Sep. 8| Saint Louis University, Sanit Louis, MO, USA

**Oral presentations**