

HAOYU LI

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300 Buck Island Ranch Road, Lake Placid, Florida, 33852, USA

Education

- May 2019
Master of Science, Department of Biology, University of Central Florida (UCF), USA
Thesis: **Does 'quirks' or abundance dominate impacts of an invader? Uncovering context-dependent associational effects** (*Advisor: Professor Pedro. F. Quintana-Ascencio*)

- June 2015
B.Sc. Environmental Science, Sun Yat-sen University, China
Dissertation: **The spatial and temporal distributions and influence factors of macrobenthos in coastal wetlands of Shantou City, Guangdong Province.** (*Advisor: Associate Professor Yisheng Peng*)
(Department Outstanding Dissertation Award)

Employments

- Environmental Specialist at Agroecology Lab, Archbold Biological Station (ABS)
Supervisor: Dr. Elizabeth Boughton **Dec 2020 - Current**
Project manager:
 - ❖ NEPES (North-Everglades Payment for Environmental Services), South Florida Water Management District funded - Dispersed water storage and nutrient management program
 - ❖ Chemistry Laboratory Usage/Maintenance/Training**Supervising/Coordinating field instrument maintenance and troubleshooting:**
 - ❖ Weather Stations/Water Auto Samplers:
For project USDA - LTAR (Long-term Agricultural Research)
- Envisions a future where agricultural production is sustained in prosperous and diverse farms across the US providing carbon and nutrient storage, habitat for wildlife, and clean water and air.
 - ❖ Greenhouse Gas Eddy Covariance Towers:
For project Sugarcane – UIUC CABBI (Center for Advanced Bioenergy and Bioproducts Innovation)
*- Environmental impacts of land use change from pastures to sugarcane***Providing GIS software and map support**

- Research Assistant (III) at Agroecology Lab, Archbold Biological Station
Supervisor: Dr. Elizabeth Boughton **May 2019 – Dec 2020**
Leading field data collection, database management and quality control, also performing data analysis
 - ❖ USDA - LTAR (Long-term Agricultural Research) Network
 - ❖ USDA – NIFA (National Institute of Food and Agriculture) Project:
- Manipulating fire and grazing to enhance the delivery of ecosystem services from subtropical humid grasslands

- Graduate Research Intern, Archbold Biological Station
Supervisor: Dr. Elizabeth H Boughton **May 2017 - May 2019**
Assisting field data collection and data management in:
 - ❖ NEPES Project – North Everglades Payment for Environmental Services
 - ❖ USDA - LTAR (Long-term Agricultural Research) Network
 - ❖ USDA – NIFA (National Institute of Food and Agriculture) Project

- Research Assistant, Chongxi Wetland Research Center, East China Normal University, Shanghai, China
Supervisor: Associate Professor Lef Liu **June 2015 - October 2015**
 - ❖ Establishment of floral, macrobenthic and ichthyological biodiversity database in the Yangtze River Estuary.
 - ❖ Editorial work on *Field Guides to Wetland Plants of the Yangtze River Estuary* (2nd Edition)

Academic Publications

Google Scholar Profile Link: <https://scholar.google.com/citations?hl=en&user=WDwAlbYAAAAJ>

(* corresponding author)

- Daniel F. Petticord*, Elizabeth Boughton, ***Haoyu Li***, Jiangxiao Qiu, Amartya Saha, Ran Zhi, Jed Sparks. Phytoremediation of Legacy Phosphorus: Forage Cover Species Controls Soil P Uptake and Loss as Leachate. **Ecological Applications** (*In Review*)
- Amartya Saha*, Elizabeth Boughton, Nuria Gomez-Casanovas, ***Haoyu Li***, Nic McMillan, Xukai Zhang. Evapotranspiration in a Subtropical wetland savanna using low-cost Lysimeter, Eddy Covariance and Modeling approaches. **Ecohydrology** 15, no. 8 (2022): e2475.
- Elizabeth H. Boughton*, Nuria Gomez-Casanovas, Hilary Swain, Carl Bernacchi, Raoul K. Boughton, Keith Brinsko, ***Haoyu Li***, Alan Rivero, Evan DeLucia, Jed Sparks. Patch-burn grazing impacts forage resources in subtropical humid grazing lands. **Rangeland Ecology and Management** 84 (2022): 10-21.
- Amartya Saha*, Elizabeth Boughton, Nuria Gomez-Casanovas, ***Haoyu Li***, Nic McMillan, Xukai Zhang. 2022. Evapotranspiration in a Subtropical wetland savanna using low-cost Lysimeter, Eddy Covariance and Modeling approaches. **Proceedings of the Seventh Interagency Conference on Research in Watersheds**. Nov 16-19, 2020. 117-120 p.
- ***Li, H.****, Boughton, E.H., Jenkins, D.G. et al. Multiple spatial scales affect direct and indirect interactions between a non-native and a native species. **Plant Ecology** (2021), 222, 1335-1346.
<https://link.springer.com/article/10.1007/s11258-021-01182-w>
- Pedro F. Quintana-Ascencio*, Stephanie M. Koontz, Brad Ochocki, Vivienne L. Sclater, Federico López-Borghesi, ***Haoyu Li*** and Eric S. Menges*. Assessing the role of seed bank and seed dispersal for the metapopulation persistence of a pyrogenic herb. **Journal of Ecology** (2019), 107(6), 2760-2771. (Editors' Choice for Volume 107 Issue 6) <https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2745.13206>
- ***Haoyu Li***, YS Peng*, JJ Liu, SG Wang and GZ Chen. Current state of mangrove floristic composition and characteristics of communities on the eastern coast of Guangdong Province. **Acta Ecologica Sinica**, 2016, 36(1): 252-260. Doi: 10.5846/stxb201408031548. (In Chinese)
<http://www.ecologica.cn/stxb/article/abstract/stxb201408031548>
- YS Peng*, ***Haoyu Li***, Y Zeng, SH Peng and H Xiao. Evaluation on current state of mangrove and its site conditions at the Hanjiang River Delta, Guangdong Province. **Scientia Silvae Sinicae**, 2015, 51(12): 103-112. Doi: 10.11707/j.1001-7488.20151213. (In Chinese)
<http://www.linyekexue.net/CN/10.11707/j.1001-7488.20151213>
- YS Peng*, ***Haoyu Li***, ZX Zheng, JG Zhou and GZ Chen. Distribution and Conservation Strategy of *Lumnitzera racemosa* in Huidong County, Guangdong Province. **Wetland Science and Management**, 2016 12(4): 36-38. (In Chinese) <http://www.cqvip.com/qk/97658a/20164/671146972.html>

Instrumental Working Experience

- Water Quality and Flow Monitoring - **Participating water management related work since July 2017**
 - ❖ Troubleshooting and repairing for datalogger, transducer and ISCO water sampler
 - ❖ Construction and design of water monitoring structure, assembling datalogger, transducer, solar panel and water sampler
 - ❖ Lab chemistry analysis of water and soil nutrients
 - ❖ Water monitoring database basic management
 - ❖ Groundwater well data downloading and monitoring
- Greenhouse Gas Eddy Covariance tower
 - ❖ Flux instrumental system maintenance, assemble and troubleshooting (including Campbell Scientific datalogger, LI-COR CH4 methane sensor, CO2 Carbon Dioxide open gas analyzer, Sonic anemometer)
 - ❖ Carbon Flux data processing from 30-minutes frequency raw data (by using Software EddyPro)
 - ❖ Weather tower instruments maintenance and troubleshooting (Including Phenocam, PAR sensor, rain gauge, radiometer)

Awards

- UCF Graduate Teaching Assistantship (6 Academic semesters)
- UCF Graduate Research Assistantship (2 Academic semesters)
- UCF Graduate Dean's fellowship (\$5000, Fall 2016 semester)
- UCF Graduate Presentation Fellowship (\$800, Fall 2018 semester)
- Archbold Biological Station Travel Fund (\$500, Fall 2018 semester)
- UCF Department of Biology Graduate Travel Grant (\$450, Fall 2018 semester)
- UCF Student Government Association Travel Award (\$250, Fall 2018 semester)
- UCF Student Government Association Graduate International Students Scholarship (\$500, Fall 2018 semester)

Graduate Teaching and Research Experience

- Teaching Assistant for Plant Ecology class of Burnett Honors College for Spring 2017 semester
- Teaching Assistant for College of Science Bio I class (**BSC2010**) (Introductory lecture-based class to general biology)
Fall 2016, Fall 2017, Summer 2018 & Spring 2019 semesters
- Teaching Associate for College of Science Bio II class (**BSC2011**) (Advanced lab-based introduction class to general biology)
Spring 2018 semester
- Research Assistant for Dr. Pedro F. Quintana-Ascencio on NSF (National Science Foundation) DEB 1347247 (Using long-term data, experiments and modeling to assess demographic effects of fire and complex interactions in Florida scrub).
Summer 2017 & Fall 2018 Semesters

Professional Activities

- Aug 14-19th, 2022. Contributed poster, Ecological Society of America Annual Conference, Montreal, Canada.
- April 24-25th, 2019. Archbold-UF LTAR Eddy Flux Data Workshop
- Dec. 16-19, 2018. Contributed Oral Talk, British Ecological Society 2018 Annual Conference, Birmingham, UK
"Does 'quirks' or abundance dominate impacts of an Invader? Uncovering the context-dependent associational effects."
- Aug. 05-10, 2018. Attendee, 2018 Annual Conference of Ecological Society of America, New Orleans, USA
- June 22, 18. Poster presentation on Master project at South Florida Graduate Symposium
- Manuscript reviewing for Academic Journal *BioScience*
- April 12-15, 2017, Attendee, FLEPPC (Florida Exotic Pest Plant Council) Annual Conference
- March 14, 2017. Attendee, FWC (Florida Fish and Wildlife Conservation Commission) Annual Conference
- March 04-10, 2017. Population and community parameter estimation workshop. Department of Wildlife Ecology and Conservation, University of Florida.
- August 07-15, 2016. Attendee, 2016 Annual Conference of Ecological Society of America, Fort Lauderdale, USA

Undergraduate Research Experience

Provincial Key Laboratory of Environmental Pollution Control and Remediation, Sun Yat-sen University

Supervisor: Assistant Professor Yisheng Peng

2012 - 2015

- Dynamics of organic carbon in different layers of mangrove sediments in Zhenhai Gulf. (*August 2014*)
- Dispersal of *Sonneratia apetala* at mangrove plantation in an estuary, a modelling approach. (Nov. 2013)
- Mangrove planting and aquaculture ecological coupling system. (*July 2013 - June 2015*)
- Macrobenthos and their environmental indications in Shawan Waterway, Guangzhou
(*July 2013-June 2014*)
- Current states of mangroves and their habitats characteristics on the east coast of Guangdong Province.
(*June 2012 - April 2013*)