

Heng-Xing Zou

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hengxingzou.github.io

Education

Rice University

Sep 2019 – Present

Ph.D. candidate, Department of BioSciences, Rice University

Houston, TX

- Advisor: Dr. Volker H.W. Rudolf

The University of Chicago

Sep 2015 – Jun 2019

B.Sc. in Biological Sciences, Specialization in Ecology and Evolution

Chicago, IL

- Advisors: Dr. Catherine A. Pfister and Dr. Alison E. Anastasio
- Thesis: Primary Succession on Slag and Uncontaminated Soil in the Calumet Region: A Comparison
- Cumulative GPA: 3.93/4.00

Publications

Zou, H.-X., and V.H.W. Rudolf. Bridging theory and experiments of priority effects. Accepted, *Trends in Ecology and Evolution*. Link to preprint:

<https://www.biorxiv.org/content/10.1101/2022.12.05.519211v1>.

Zou, H.-X., and V.H.W. Rudolf. 2023. Priority effects determine how dispersal affects biodiversity in seasonal metacommunities. *The American Naturalist*.

<https://www.journals.uchicago.edu/doi/10.1086/725039>.

Liu, J., **H.-X. Zou**, B. Bachelot, T. Dong, Z. Zhu, Y. Liao, A. Plenković-Moraj, and Y. Wu. 2021. Predicting the responses of subalpine forest landscape dynamics to climate change on the southeastern Tibetan Plateau. *Global Change Biology*. <https://doi.org/10.1111/gcb.15727>.

Zou, H.-X., A.E. Anastasio and C.A. Pfister. 2019. Early succession on slag compared to urban soil: A slower recovery. *PLoS ONE* 14(12): e0224214.

<https://doi.org/10.1371/journal.pone.0224214>.

* Featured in PLoS Collections: Urban Ecosystems

Preprints

Zou, H.-X., S.J. Schreiber, and V.H.W. Rudolf. 2022. Stage-mediated priority effects and species life history shape long-term competition dynamics. *bioRxiv*.

<https://www.biorxiv.org/content/10.1101/2020.08.14.251926v2>.

In revision, *Proceedings of Royal Society B: Biological Sciences*.

Presentations

Zou, H.-X., and V.H.W. Rudolf. 2023. Bridging theory and practice of priority effects. 2023 *Annual Meeting, Ecological Society of America*. Portland, OR.

* Invited. In Inspire Session: When the window is a mirror: How do dominant theories limit our understanding of nature?

Zou, H.-X., Xinyi Yan, and V.H.W. Rudolf. 2023. Time-dependent interaction modifications: Insights from plant-soil feedback. *2023 Annual Meeting, Ecological Society of America*. Portland, OR.

Zou, H.-X., S.J. Schreiber, and V.H.W. Rudolf. 2023. Stage-mediated priority effects and species life history shape long-term competition dynamics. *ASN Asilomar 2023, American Society of Naturalists*. Pacific Grove, CA.

Zou, H.-X., and V. H. W. Rudolf. 2022. Priority effects determine how dispersal affects biodiversity in metacommunities. *2022 Annual Meeting, Ecological Society of America*. Montréal, Canada.

Zou, H.-X., and V. H. W. Rudolf. 2022. Priority effects determine biodiversity patterns in metacommunities. *Ecolunch Seminar Series Spring 2022, University of Texas, Austin (Virtual)*.

Posters

Zou, H.-X., and A. E., Anastasio. 2019. Primary succession on slag and uncontaminated soil: A slower recovery. *2019 Annual Meeting, Ecological Society of America*. Louisville, KY.

Zou, H.-X. 2019. Primary succession on slag and uncontaminated soil: A comparison. *University of Chicago BSCD Undergraduate Research Symposium*. Chicago, IL.

Grants, Awards, Fellowships, and Honors

Leadership Award

Department of BioSciences, Rice University

Aug 2023

Best Student Paper Award

Sino-Ecologists Association Overseas (Sino-Eco)

Aug 2023

Small Research Grant, British Ecological Society (£3,920)

May 2023

Student Research Award, American Society of Naturalists (\$2,000)

Apr 2023

Joe Davies Prize for Excellence in Teaching

Department of BioSciences, Rice University

Aug 2021

Inquiry-Based Learning (IBL) Teaching Fellowship (\$3,000)

Department of BioSciences, Rice University

Aug 2020, Aug 2021

East-DeMarco Fellowship for Natural Science (\$2,500)

Department of BioSciences, Rice University

Sep 2019

CSCLF Scholarship for Undergraduates (\$12,500)

China Soong Ching Ling Foundation

Jun 2019

Phi Beta Kappa

University of Chicago Beta Chapter

May 2018, May 2019

Ecology and Evolution Fellowship (\$4,000)

Department of Ecology and Evolution, The University of Chicago

Apr 2018

Teaching and Employment

Teaching Assistant, Rice University

BIOS 341: Cell Biology

Houston, TX

Aug 2023 – Present

- Graded assignments and administered exams

BIOS 431: Biology of Infectious Diseases

Aug 2020 – Nov 2020, Aug 2021 – Nov 2021

- Developed coding assignments in R
- Led computational lab sessions that involved live coding in R
- Assisted independent final coding projects

EBIO 338/538: Analysis and Visualization of Biological Data

Jan 2020 – May 2020

- Graded coding assignments in R
- Led one lecture on data visualization

Lab Teaching Assistant, The University of Chicago

Chicago, IL

BIOS 201: Core Biology

Oct 2018 – Jun 2019

- Led lab sessions, including basic wet lab techniques (plating, PCR, handling fruit flies)
- Graded lab reports and quizzes

Research Assistant, The University of Chicago

Chicago, IL

Kreitman Lab, Department of Ecology and Evolution

Nov 2016 – Oct 2018

- Collected and prepared samples, including extraction, purification, and quantification of DNA
- Managed experimental populations

Research Assistant, Paulson Institute

Beijing, China

Climate and Sustainable Urbanization Team

Jun 2017 – Aug 2017

- Contributed to planning an initiative for sustainable development of the Yangtze River basin

Community Service

Theoretical Ecology Section, Ecological Society of America

Secretary

Aug 2022 – Aug 2023

Student Liaison

Aug 2021 – Aug 2022

- Managed Twitter account of the Theory Section ([@esatheory](https://twitter.com/esatheory))
- Managed section web page
- Reviewed submissions for the Best Paper award in 2022 and 2023
- Helped planning social events during ESA 2022

Rice University EEB Graduate Student Association

Houston, TX

Co-President

May 2022 – May 2023

Treasurer

Jul 2021 – May 2022

- Organized Professional Development Seminar Series for graduate students
- Helped organizing student-led activities during recruitment of PhD students
- Helped organizing several student events, including crawfish boil

EEB Outreach Program

Houston, TX

BIOS 589: EEB Outreach Development

Jan 2021 – May 2021, Jan 2022 – May 2022

- Developed ecology and evolution course material for K-12 student
- Taught the course module on food webs to three elementary school classes