## Kenji T. Hayashi

#### Curriculum Vitae

# Ph.D Candidate Department of Ecology and Evolutionary Biology University of California, Los Angeles

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## **EDUCATION**

## Ph.D. in Ecology and Evolutionary Biology

2018 - Present

University of California, Los Angeles

Advisor: Dr. Nathan Kraft

**B.S. in Biology** 2014 - 2018

**Brown University** 

Advisors: Dr. Dov Sax, Dr. Brian Enquist

## **FUNDING**

#### **Grants**

### **Departmental Conference Grant**

2023

University of California, Los Angeles

\$1,500 to attend Ecological Society of America conference

#### **Departmental Research Grant**

2022

University of California, Los Angeles

\$650 for dissertation research

#### Mildred E. Mathias Graduate Student Research Grant

2020 - 2021

University of California Natural Reserve System

\$2,000 for field work at UC Santa Barbara Sedgwick Reserve: "Quantifying the effect of competitive interactions on the landscape-scale distributions of annual plant species in a California grassland"

Departmental Research Grant University of California, Los Angeles \$500 for dissertation research	2020
Departmental Research Grant University of California, Los Angeles \$2,000 for dissertation research	2019
Fellowships & Scholarships	
Vavra Fellowship University of California, Los Angeles	2018-2022
Halde Quarter Fellowship University of California, Los Angeles	2022
Summer Mentored Research Fellowship University of California, Los Angeles	2021
Vavra Quarter Fellowship University of California, Los Angeles	2021
Palevsky Fellowship University of California, Los Angeles Awarded to one incoming student in recognition of an outstanding record	2018
Barclay Scholarship Rocky Mountain Biological Laboratory	2017
BrownConnect LINK Award Brown University	2016
HONORS & AWARDS	
Winner, ESIIL Environmental MosAlc Hackathon  For the group project "Biodiversity and ecosystem function: predicting resistance to wildfire from spectral diversity" in the 2023 Environmental Data Science Innovation & Inclusion Lab hackathon	2023
Departmental Graduate Teaching Award University of California, Los Angeles For Teaching Assistant roles in EE BIOL 161 (Plant Ecology) and EE BIOL 167 (Natural History Collections in the Biological Sciences)	2023

Honorable Mention, NSF Graduate Research Fellowship	2022
National Science Foundation	
Elected to Sigma Xi	2023
Brown University	
	0010
Honors in the Biological Sciences	2018
Brown University	

## **PUBLICATIONS**

## **Journal Articles**

- \* indicates equal contribution
  - McGuire, RM\*, Hayashi, KT\*, Yan, X\*, Caritá Vaz, M, Cinoğlu, D, Cowen, MC, Martínez-Blancas, A, Sullivan, LL, Vazquez-Morales, S, Kandlikar, GS. (2022). EcoEvoApps: Interactive apps for theoretical models in ecology and evolutionary biology. *Ecology and Evolution*, 12, e9556. <a href="https://doi.org/10.1002/ece3.9556">https://doi.org/10.1002/ece3.9556</a>
  - 1. Miller, EC, **Hayashi, KT**, Song, D, Wiens, JJ. (2018). Explaining the ocean's richest biodiversity hotspot and global patterns of fish diversity. *Proceedings of the Royal Society B: Biological Sciences*, 285, 20181314. <a href="https://doi.org/10.1098/rspb.2018.1314">https://doi.org/10.1098/rspb.2018.1314</a>

## **PRESENTATIONS**

#### **Invited Presentations**

- 2. **Hayashi, KT**. (April 27, 2021). Understanding the distributions of annual plant species in a California grassland. University of California, Santa Barbara, Sedgwick Reserve, Lunch & Learn Seminar (virtual).
- 1. **Hayashi, KT**. (October 7, 2020). Community assembly and species distributions in a California grassland: insights from population dynamics and functional traits. University of Texas at Austin, Department of Integrative Biology, EcoLunch Seminar (virtual).

## **Contributed Presentations**

5. **Hayashi, KT**, Kraft, NJB. (August 9, 2023). Competition along a water supply gradient: towards scaling competition to species distributions with California annual plants. Ecological Society of America, Portland, OR, USA.

- 4. **Hayashi, KT**, Kraft, NJB. (August 3, 2021). Spatially-variable competitive interactions shape the performance and distributions of annual plant species in a California grassland. Ecological Society of America (virtual).
- 3. **Hayashi, KT**, Van Dyke, MN, Kandlikar, GS, Kraft, NJB. (August 3-6, 2020). How does functional composition of the species pool impact plant performance locally? Ecological Society of America (virtual).
- 2. **Hayashi, KT**. (April 20, 2018). Functional traits, elevation, and the assembly of Rocky Mountain meadow communities. Brown University, Department of Ecology and Evolutionary Biology, Undergraduate Thesis Talks, Providence, RI, USA.
- 1. **Hayashi, KT**. (August 3, 2017). Assessing plant community assembly along an elevational gradient: a functional trait hypervolume approach. Rocky Mountain Biological Laboratory, Undergraduate Research Symposium, Gothic, CO, USA.

## **TEACHING & MENTORING**

## **Teaching Assistantships**

#### University of California, Los Angeles

Plant Ecology (EE BIOL 161)	2019, 2021 - 2023
<ul> <li>Natural History Collections in the Biological Sciences (EE BIOL 167)</li> </ul>	2023
Plant Physiology (EE BIOL 162)	2020, 2022
Tropical Ecology (EE BIOL 151A)	2020
<ul> <li>Plant Diversity and Evolution (EE BIOL 103)</li> </ul>	2020
Community Ecology (EE BIOL 155)	2019

#### **Brown University**

•	Evolutionary Biology (BIOL 0480)	2017
•	Conservation Biology (BIOL 1470)	2016
•	Intermediate Japanese (JAPN 0040/0050)	2015 - 2016

#### **Guest Lectures**

Plant diversity in ecological communities
 Plant Diversity and Evolution (EE BIOL 103), University of California, Los Angeles

## Workshops

• R for Reproducible Scientific Analysis (Software Carpentry)

Instructor/helper, University of California, Los Angeles

Undergraduate Researcher Sax Lab, Brown University	2016 - 2017
Research Assistant Enquist Lab, Rocky Mountain Biological Laboratory Assisted with field work on functional turnover of subalpine plant communities along an elevational gradient in the Rocky Mountains	2017
Undergraduate Honors Thesis Brown University Conducted an independent research project using functional traits to study community assembly of subalpine plant communities in the Rocky Mountains	2017 - 2018
OTHER RESEARCH EXPERIENCE	
<ul> <li>Instructor, The Carpentries</li> <li>Associate, Center for the Integration of Research, Teaching, and Learning at UCLA</li> </ul>	2022
Teaching Certifications	2022
Other  • Biology Peer Advisor, Brown University	2017 - 2018
Timothy Foster, University of California, Los Angeles	2020 - 2021
<ul> <li>Fidel Negrete, University of California, Los Angeles</li> <li>Soline Grimbert, University of California, Los Angeles</li> <li>Jinsuh Jung-Aum, University of California, Los Angeles</li> </ul>	2022 - 2023 2022 2021 - 2022
<ul> <li>Undergraduate Students</li> <li>Julie Yang, University of California, Los Angeles         Awarded the 2022 Departmental Park S. Nobel Prize in Plant Biology     </li> </ul>	2021 - 2023
Mentorship	
The Unix Shell (Software Carpentry)     Helper, University of California, Los Angeles	2022
Helper, University of California, Los Angeles	2022

Contributed to a meta-analysis of plant invasions in grasslands

#### **Undergraduate Researcher**

2016

### Wiens Lab, University of Arizona

- (1) Contributed to data collection and analysis of marine fish biogeography
- (2) Compiled data on the biogeography of squamate limb reduction from the primary literature

Research Assistant 2015 - 2016

Sax Lab, Brown University

Compiled data on plant species distributions from herbaria records

Research Assistant 2015

Matter Lab, University of Cincinnati

Assisted with lab experiments and field work on metapopulation dynamics

## **PUBLIC & PROFESSIONAL SERVICE**

#### Outreach

• Invited use case post for Ocean Biogeographic Information System

2020

## **Departmental Service**

• Co-Organizer, "Hacky Hours" (departmental co-working space)

2019 - 2023

## **Peer Review**

- The American Naturalist
- Functional Ecology
- Plant Ecology

## **Professional Associations**

Ecological Society of America
 2019 - Present

• Sigma Xi 2018 - 2020

• International Biogeography Society 2017