

## Daniel S. Park Ph.D.

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### RESEARCH INTERESTS

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Broadly trained biologist with interests and expertise in investigating plant evolution and biodiversity patterns in an era of increasing anthropogenic influence using big data. My work focuses on i) the systematics and biogeography of plants, ii) elucidating the mechanisms of community assembly and biological invasions, and iii) predicting spatiotemporal distributions of biodiversity in response to climate change, using phylogenetic frameworks, biodiversity informatics, and machine learning approaches.

### PROFESSIONAL EXPERIENCE

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- 2020–** **Assistant Professor**, Department of Biological Sciences  
Purdue University, West Lafayette, IN, USA
- 2018–20** **Research Associate**, Department of Organismic and Evolutionary Biology  
Harvard University, Cambridge, MA, USA  
Faculty Adviser: Charles C. Davis  
Project: Harnessing the power of herbarium digitization, crowdsourcing, and phylofloristics to assess and predict phenological responses to climate change (NSF-DEB 1754584).
- 2017–18** **Postdoctoral Research Associate**, Department of Ecology and Evolutionary Biology  
University of Arizona, Tucson, AZ, USA  
Faculty Advisers: Brian J. Enquist; Laura López-Hoffman  
Project: Interdisciplinary project development and novel synthetic research bridging biodiversity and conservation science (BBCS).
- 2015–17** **Postdoctoral Fellow**, Harvard University Herbaria,  
Harvard University, Cambridge, MA, USA  
Faculty Adviser: Charles C. Davis  
Project: Examining and predicting plant responses to climate change using digitized herbarium specimens.

### EDUCATION

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- 2014** **Ph.D. in Plant Biology** (Environmental and Integrative Biology)  
University of California, Davis  
Faculty Adviser: Daniel Potter  
Dissertation: The Phylogenetic Structure of Biological Invasions: A Test of Darwin's Naturalization Hypothesis in the Asteraceae.
- 2007** **B.S. in Vocational Education & Workforce Development / Biology** (Cum Laude),  
Seoul National University, Korea

**Selected Publications**

1. [Cover Article] **\*Park, D. S.** and Feng, X. et al. (2023) "The colonial legacy of herbaria." *Nature Human Behaviour*, 7: 1059–1068.
2. Feng, X., Merow, C., Maitner, B. S., **\*Park, D. S.**, Roehrdanz, P., Liu, Z., Newman, E. A., et al. (2021) "How deregulation, drought and increasing fire impact Amazonian biodiversity." *Nature*, 597: 516–521.
3. **\*Park, D. S.**, Feng, X., Maitner, B. S., and Enquist, B. J. (2020) "Darwin's naturalization conundrum can be explained by spatial scale." *Proceedings of the National Academy of Sciences*, 117(20): 10904–10910. Direct submission.

**Additional Publications**

4. Xie, Y., Thammavong, H.T., Berry, L. G., Huang, C. H. and **\*Park, D. S.** (2022) " Sex-dependent phenological responses to climate vary across species' ranges." *Proceedings of the National Academy of Sciences*, accepted. <https://doi.org/10.1073/pnas.2306723120>.
5. **\*Park, D. S.**, Xie, Y., Ellison, A. M., Lyra, G. M., and Davis, C.C. (2023) "Complex climate mediated effects of urbanization on plant reproductive phenology and frost risk." *New Phytologist*, 239: 2153–2165.
6. Merow C., Boyle, B., Enquist, B. J., Feng, X., Kass, J. M., Matner, B. S., McGill, B., Owens, H., **Park, D. S.**, et al. (2023) "Better incentives are needed to reward academic software development." *Nature Ecology & Evolution*, 7(5): 626–627.
7. **\*Park, D. S.**, Xie, Y., Thammavong, H. T., UTulaiha, R., & Feng, X. (2023). "Artificial Hotspot Occurrence Inventory (AHOI)." *Journal of Biogeography*, 50(2): 441–449.
8. Xie, Y., Thammavong, H.T. and **\*Park, D. S.** (2022) "The ecological implications of intra- and inter-species variation in phenological sensitivity." *New Phytologist*, 236: 760–773.
9. **\*Park, D. S.**, Lyra, G. M., Ellison, A. M., Maruyama, R. K. B., Torquato, D. dos R., Asprino, R. C., Cook, B. I., & Davis, C. C. (2022). "Herbarium records provide reliable phenology estimates in the understudied tropics." *Journal of Ecology*, 111: 327–337.
10. **\*Park, D. S.**, Breckheimer, I. K., Ellison, A. E., Lyra, G. M., and Davis, C. C. (2022) "Phenological displacement is uncommon among sympatric angiosperms." *New Phytologist*. 233: 1466–1478.
11. Davis, C. C., Lyra, G. M., **Park, D. S.**, Asprino, R., Maruyama, R., Torquato, D., Cook, B. I. and Ellison, A. M. (2022) "New directions in tropical phenology." *Trends in Ecology & Evolution*, 37(8): 683–693.
12. Savage, J. A., Kiecker, T., McMann, N., **Park, D. S.**, Rothendler, M. and Mosher, K. (2022) "Leaf out time correlates with wood anatomy across large geographic scales and within local communities." *New Phytologist*, 235: 953–964.
13. Maitner, B. S., **Park, D. S.**, Enquist, B. J., and Dlugosch, K. M. (2022) "Both source- and recipient-range phylogenetic community structure can predict the outcome of avian introductions." *Ecography*, 2: e05934.
14. Molofsky, J., **Park, D. S.**, Richardson, D. M., Keller, S. R., Beckage B., Mandel, J. R., Boatwright, J. S., and Hui, C. (2022) Optimal differentiation to the edge of trait space (EoTS). *Evolutionary Ecology*, 36: 743–752.
15. Boyle, B. L., Maitner, B. S., Barbosa, G. G. C., Sajja, R. K., Feng, X., Merow, C., Newman, E. A., **Park, D. S.**, Roehrdanz, P. R., & Enquist, B. J. (2022). "Geographic name resolution service: A tool for the standardization and indexing of world political division names, with applications to species distribution modeling." *Plos One*, 17(11): e0268162.
16. **\*Park, D. S.**, Newman, E. A., and Breckheimer, I. K. (2021) "Scale gaps in landscape phenology: challenges and opportunities." *Trends in Ecology and Evolution*, 36(8): 709–721.

17. Maitner, B. S., **Park, D. S.**, Enquist, B. J., Dlugosch, K. M. (2021) "Where we've been and where we're going: the importance of source communities in predicting establishment success from phylogenetic relationships." *Ecography*, 6: e05406.
18. Jung, M, Arnell, A., de Lamo, X., García-Rangel, S., Lewis, M., Mark, J., Merow, C., Miles, L., Ondo, I., Pironon, S., Ravilious, C., Rivers, M., Schepashenko, D., Tallwin, O., van Soesbergen, A., Govaerts, R., Boyle, B. L., Enquist, B. J., Feng, X., Gallagher, R. V., Maitner, B. S., Meiri, S., Mulligan, M., Ofer, G., Hanson, J. O., Jetz, W., Di Marco, M., McGowan, J., Rinnan, D. S., Sachs, J. D., Lesiv, M., Adams, V., Andrew, S. C., Burger, J. R., Hannah, L., Marquet, P. A., McCarthy, J. K., Morueta-Holme, N., Newman, E. A., **Park, D. S.**, Roehrdanz, P. R., Svenning, J.C., Violle, C., Wieringa, J. J., Wynne, G., Fritz, S., Strassburg, B. B. N., Obersteiner, M., Kapos, V., Burgess, N., Schmidt-Traub, G., and Visconti, P. (2021) "Areas of global importance for conserving terrestrial biodiversity, carbon and water." *Nature Ecology and Evolution*, 5: 1499–1509.
19. Feng, X., Enquist, B. J., **Park, D. S.**, Boyle, B., Breshears, D. D., Gallagher, R., ... López-Hoffman, L. (2021). "A review of the heterogeneous landscape of biodiversity databases: opportunities and challenges for a synthesized biodiversity knowledge base." *Global Ecology and Biogeography*, 31, 1242–1260.
20. **\*Park, D. S.**, Willis, C. G., Xi, Z., Kartesz, J. T., Davis, C. C., and Worthington, S. (2020). "Machine Learning Predicts Large Scale Declines in Native Plant Phylogenetic Diversity." *New Phytologist*, 227: 1544–1556.
21. Davis, C. C., Champ, J., **Park, D. S.**, Breckheimer, I., Lyra, G. M., Xie, J., Joly, A., Tarapore, D., Ellison, A. E., and Bonnet, P. (2020) "A new method for counting reproductive structures in digitized herbarium specimens using Mask R-CNN." *Frontiers in Plant Science*, 11: 1129.
22. DeSisto, C., **\*Park, D. S.**, Davis, C. C., Ramananjato, V., Tonos, J., and Razafindratsima, O. H. (2020) "An invasive species spread by endangered lemurs impacts rainforest structure in Madagascar." *Biological Invasions*, 22(9): 2845–2858.
23. Ackerfield, J. R., Sussanna, A., Kelch, D., **Park, D. S.**, Thornhill, A. H., and Arabaci, T. (2020) "A Prickly Puzzle: Generic delimitations in the *Carduus-Cirsium* group (Compositae: Cardueae: Carduinae)." *Taxon*, 69(4): 715–738.
24. Zurell, D., Franklin, J., König, C., Bouchet, P. J., Dormann, C. F., Elith, J., Gusman, G. F., Feng, X., Guillera-Aroita, G., Guisan, A., Lahoz-Monfort, J. J., Leitão, P. J., **Park, D. S.**, Peterson, T., Rapacciuolo, G., Schmatz, D. R., Schröder, B., Serra-Diaz, J. M., Thuiller, W., Yates, K. L., Zimmermann, N. E. and Merow, C. (2020). "A standard protocol for reporting species distribution models." *Ecography*, 43: 1261–1277.
25. Hannah, L., Roehrdanz, P. R., Marquet, P. A., Enquist, B. J., Midgley, G., Foden, W., Lovett, J. C., Corlett, R. T., Corcoran, D., Butchart, S. H. M., Boyle, B., Feng, X., Maitner, B., Fajardo, J., McGill, B. J., Merow, C., Morueta-Holme, N., Newman, E. A., **Park, D. S.**, Raes, N. and Svenning, J.-C. (2020). "30% land conservation and climate action reduces tropical extinction risk by more than 50%." *Ecography*, 43: 943–953.
26. **\*Park, D. S.** (2020) "The invisible university is COVID-19 positive." *Trends in Genetics*, 36(8): 543–544
27. Ramananjato, V., Rakotomalala, Z., **Park, D. S.**, DeSisto, C., Raolinjanakolona, N. N., Guthrie, N., Fenosoa, Z. S., Johnson, S. E., and Razafindratsima, O. H. (2020) "Nocturnal omnivores assist in preserving plant diversity and rainforest structure." *Biotropica*, 00, 1–8.
28. Gallagher, R. V., Falster, D. S., Maitner, B., Salguero-Gómez, R., Vandvik, V., Pearse, W. D., Schneider, F. D., Kattge, J., Alroy, J., Ankenbrand, M., Andrew, S. C., Balk, M., Bland, L., Boyle, B., Bravo, C., Brennan, I., Carthey, A. J. R., Cavazos, B., Chown, S. L., Fadrigue, B., Feng, X., Gibb, H., Halbritter, A. H., Hammock, J., Hogan, J. A., Holewa, H., Hope, M., Iversen, C. M., Jochum, M., Kearney, M., Keller, A., Mabee, P., Madin, J., Manning, P., McCormack, L., Michaletz, S. T., **Park, D. S.**, Penone, C., Perez, T., PinedaMunoz, S., Poelen, J., Ray, C. A., Rossetto, M., Sauquet, H., Sparrow, B., Spasojevic, M. J., Telford, R. J., Tobias, J. A., Violle, C., Walls, R., Weiss, K. C. B., Westoby, M.,

- Wright, I. J., Enquist, B. J. (2020). "Open Science principles for accelerating trait-based science across the Tree of Life." *Nature Ecology and Evolution*, 4, 294–303.
29. Hedrick, B. P., Heberling, J. M., Meineke, E. K., Turner, K. G., Grassa, C. J., **Park, D. S.**, Kennedy, J., Clarke, J. A., Cook, J. A., Blackburn, D. C., Edwards, S. V., and Davis, C. C. (2020) "Digitization and the future of natural history collections." *Bioscience*, 70(3), 243–251.
  30. Feng, X. and **\*Park, D. S.**, Walker, C., Peterson, A. T., Merow, C., Papes, M. (2019) "A checklist for maximizing the reproducibility of ecological niche models." *Nature Ecology and Evolution*, 3(10): 1382–1395.
  31. Daru, B. H., le Roux, P. C., Gopalraj, J., **Park, D. S.**, Holt, B. G., & Greve, M. (2019). "Spatial overlaps between the global protected areas network and terrestrial hotspots of evolutionary diversity." *Global Ecology and Biogeography*, 28(6), 757–766.
  32. **\*Park, D. S.**, Breckheimer, I. K., Williams, A. C., Law, E., Ellison, A. E., and Davis, C. C., (2019) "Herbarium specimens reveal substantial and unexpected variation in phenological sensitivity across the eastern United States." *Philosophical Transactions of the Royal Society B*, 374(1763): 20170394.
  33. Enquist, B. J., Feng, X., Boyle B., Maitner, B. S., Newman, E. A., Jørgensen, P. M., Roehrdanz, P., Theirs, B. M., Burger, J. R., Corlett, R., Donoghue, J. C., Foden, W., Lovett, J. C., Marquet, P. A., Merow, C., Midgely, G., Morueta-Holme, N., Kraft, N. J. B., **Park, D. S.**, Peet, R. K., Pillet, M., Serra-Diaz, J. M., Sandel, B., Schildhauer, M., Šimová, I., Violle, C., Wisser, S., Hannah, L., Svenning, J., and McGill, B. J. (2019) "The commonness of rarity: Global and future distribution of rarity across land plants." *Science Advances*, 5(11), EAAZ0414.
  34. Feng, X., **Park, D. S.**, Liang, Y., Pandey, R., Papes, M. (2019) "Collinearity in ecological niche modeling: Confusions and challenges." *Ecology and Evolution*, 0: 1–12.
  35. **\*Park, D. S.**, Ellison, A. E., and Davis, C. C. (2018) "Mating system does not predict niche breadth." *Global Ecology and Biogeography*, 27(7): 804–813.
  36. Daru, B. H. and **\*Park, D. S.**, Primack, R. B., Willis, C. G., Barrington, D. S., Whitfield T. J. S., Seidler, T. G., Sweeney, P. W., Foster, D. R., Ellison, A. M., and Davis, C. C. (2018) "Widespread sampling biases in herbaria revealed from large-scale digitization." *New Phytologist*, 217(1763): 939–955.
  37. **\*Park, D. S.**, Worthington, S. and Xi, Z. (2018) "Taxon sampling effects on the quantification and comparison of community phylogenetic diversity." *Molecular Ecology*, 27(5): 1296–1308.
  38. Razafindratsima, O. H., Yacoby, Y., and **Park, D. S.** (2018) "MADA: Malagasy Animal trait Data Archive." *Ecology*, 99(4): 990.
  39. **\*Park, D. S.**, and Razafindratsima, O. H. (2018) "Anthropogenic threats have cascading homogenizing effects on the phylogenetic and functional diversity of tropical forests." *Ecography*, 42: 148–161.
  40. Park, CW., Bhandari, G. S., Won, H., Park JH., and **\*Park, D. S.** (2018) "Polyploidy and introgression in invasive giant knotweed (*Fallopia sachalinensis*) during the colonization of remote volcanic islands." *Scientific Reports*, 8(1): 16021.
  41. Kim, N. H., Jayakodi, M., Lee, J. K., Choi B. S., Jang, W., Lee, J., Kim, H. H., Waminal, N. E., Lakshmanan, M., Nguyen, B., Lee Y. S., Park, H., Koo, H. J., Park, J. Y., Perumal, S., Joh, H. J., Lee, H., Kim, J., Kim, I. S., Kim, K., Koduru, L., Kang, K. B., Sung, S. H., Yu, Y., **Park, D. S.**, Choi, D., Seo, E., Kim, S., Kim, Y., Hyun, D. Y., Park, Y., Kim, C., Lee, T., Kim, H. U., Soh, M. S., Lee, Y., In, J. G., Kim, H., Kim, Y., Yang, D., Wing, R., Lee, D., and Paterson, A. (2018) "Genome and evolution of the shade-requiring medicinal herb *Panax ginseng*." *Plant biotechnology journal*, 16(11): 1904–1917
  42. Seltmann, K. C., Lafia, S., Paul, D. L., James, S., Bloom, D., Rios, N., Ellis, S., Farrell, U., Utrup, J., Yost, M., Davis, E., Emery, R., Motz, G., Kimmig, J., Shirey, V., Sandall, E., **Park, D. S.**, Tyrrell, C., Thackurdeen, R. S., Collins, M., O’Leary, V., Prestridge, H., Evelyn, C., Nyberg, B. (2018) "Georeferencing for Research Use (GRU): An innovative geospatial training paradigm for biocollections researchers and data providers." *Research Ideas and Outcomes*, 4: e32449.
  43. **\*Park, D. S.**, and Davis, C. C. (2017) "Implications and alternatives of assigning climate data to geographic centroids." *Journal of Biogeography*, 44(10): 2188–2198.

44. Willis, C. G., Law, E., Williams, A. C., Franzone, B. F., Bernardos, R., Bruno, L., Hopkins, C., Schorn, C., Weber, E., **Park, D. S.** and Davis, C. C. (2017) "CrowdCurio: an online crowdsourcing platform to facilitate climate change studies using herbarium specimens." *New Phytologist*, 215: 479–488
45. Daru, B. H., Elliott, T. L., **Park, D. S.**, and Davies, T. J. (2017) "Understanding the Processes Underpinning Patterns of Phylogenetic Regionalization." *Trends in Ecology & Evolution*, 32(11): 845-860.
46. **\*Park, D. S.** and Potter, D. (2015) "A reciprocal test of Darwin's naturalization hypothesis in two Mediterranean-climate regions." *Global Ecology and Biogeography*, 24(9): 1049–1058.
47. [Cover Article] **\*Park, D. S.** and Potter, D. (2015) "Why close relatives make bad neighbours: phylogenetic conservatism in niche preferences and dispersal disproves Darwin's naturalization hypothesis in the thistle tribe." *Molecular Ecology*, 24(12): 3181–3193. [GBIF Science Review 2016]
48. **\*Park, D. S.** and Potter, D. (2013) "A test of Darwin's naturalization hypothesis in the thistle tribe shows that close relatives make bad neighbors." *Proceedings of the National Academy of Sciences*, 110(44): 17915–17920. Direct submission.
49. Chitwood, D. H., Headland, L. R., Filiault, D. L., Kumar, R., Jiménez-Gómez, J. M., Schrager, A. V., **Park, D. S.**, Peng, J., Sinha, N. R., and Maloof, J. N. (2012) "Native Environment Modulates Leaf Size and Response to Simulated Foliar Shade across Wild Tomato Species." *PLoS ONE*, 7(1): e29570.

### Preprints

50. Maitner, B., Santos-Andrade, P., Lei, L., Barbosa, G., Boyle, B., Castorena, M., Enquist, B., Feng, X., Kass, J., Owens, H., **Park, D. S.**, Paz, A., Pinilla-Buitrago, G., Merow, C., and Wilson, A. (2023) "Code sharing increases citations, but remains uncommon." *Research Square*, <https://doi.org/10.21203/rs.3.rs-3222221/v1>.
51. Feng, X., Rocha, T., Thammavong, H. T., Tulaiha, R., Chen, X., Xie, Y., Park, D. S. (2022) "GridDER: Grid Detection and Evaluation in R." *EcoEvoRxiv*, <https://doi.org/10.32942/osf.io/6qy5u>.
52. Fuzessy, L., Balbuena, J. A., Nevo, O., Tonos, J., Papinot, B., **Park, D.S.**, Sol, D., Valenta, K., Razafindratsima, O. H., and Verdú, M. (2022) "Friends or foes? Plant-animal co-evolutionary history is driven by both mutualistic and antagonistic interactions." *Authorea*. <https://doi.org/10.22541/au.168190585.53405707/v1>.
53. Newman, E. A., Breckheimer, I. K., and **\*Park, D. S.** (2021) "Disentangling the effects of climate change, landscape heterogeneity, and scale on phenological metrics." *bioRxiv*. 2021.02.05.429398

## SELECTED PRESENTATIONS

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### Select Invited Talks

- "The colonial legacy of herbarium collections" Field Safety and Ethics in Evolution and Ecology Symposium, Evolution, 2022
- "Herbarium collections reveal wide variation in plant phenological responses to climate" University of Michigan Department of Ecology and Evolutionary Biology's 16th Annual Early Career Scientists Symposium, 2021
- "Digitized herbarium collections reveal wide variation in phenological responses to climate" Korean Association of Biological Sciences Annual Symposium, 2021
- "Herbarium collections reveal wide variation in plant phenological responses to climate" University of Michigan Annual Early Career Scientists Symposium, 2021
- "Plants in time: Digital herbaria uncover phenological complexity across the landscape" Purdue University, Botany and Plant Pathology Seminar Series, 2021
- "Understanding Plant Responses to Global Change" University of Pennsylvania, 2020
- "Plant Biodiversity in a Changing World: the evolution of plant communities in the Anthropocene" Texas A&M University, 2018

### Conference Oral Presentations

- “Sex-dependent phenological responses to climate vary across species’ ranges” Ecology/ESA Annual Meeting, 2023
- “Elucidating the imprint of colonialism in the herbarium: past, present, and future” Botany/BSA Annual Meeting, 2021
- “Plants in time: Uncovering phenological complexity across the landscape with digital herbaria” Ecology/ESA Annual Meeting, 2021
- “Scale dependence in Darwin’s Naturalization Conundrum” Botany (Tucson, AZ), 2019
- “Digitized herbaria reveal substantial variation in plant phenological responses to climate across the eastern United States” Botany/BSA Annual Meeting (Tucson, AZ), 2019
- “Adaptation and variation of phenological responses to climate” Ecology/ESA Annual Meeting (New Orleans, LA), 2018
- “Selfing species exhibit diminished niche breadth over time despite larger geographic ranges” International Botanical Congress (Shenzhen, China), 2017
- “Does mating system predict the breadth of a plant’s niche?” Botany/BSA Annual Meeting (Savannah, GA), 2016
- “The Perils and Pitfalls of Community Phylogenetics” Botany/BSA Annual Meeting (Edmonton, Canada), 2015
- “Close Relatives Make Bad Neighbors in the Thistle Tribe” Botany/BSA Annual Meeting (New Orleans, LA), 2013
- “Weed Profiling” Botany/BSA Annual Meeting (Columbus, OH), 2012

### Conference Posters

- Urban heat islands accelerate changes in flowering phenology, Ecology (ESA), 2020
- The invasive strawberry guava (*Psidium cattleianum*) reshapes rainforest community structure in Madagascar, ATBC (Antananarivo, Madagascar), 2019
- Assessing fine-scale sampling bias in herbarium specimens, Botany (Savannah, GA), 2016
- Why Close Relatives Make Bad Neighbors in the Thistle Tribe Botany (Boise, ID), 2014

## TEACHING & ADVISING EXPERIENCE

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### Instructor of Record

- Building the tree of life: Phylogenetic Methods and Applications (2021–)
- Biodiversity and museum research (2022–)
- Advanced Ecology and Evolution Discussion (2023–)

### Teaching Assistant, UC Davis

Responsibilities included lecturing, leading discussions, overseeing labs, grading, and advising.

- Biodiversity and the Tree of Life, 2008-14 (also helped to develop the syllabus and materials)
- California Floristics, 2012

### Guest Lecturer

- Oral Presentations, Purdue University, 2021–
- Evolutionary Ecology, University of Arizona, 2018
- Plants and Human Affairs, Harvard University, 2016
- Conservation Biology, Harvard University, 2016

### Mentoring

- Advising 4 Ph.D. students at Purdue University, 2022–
- Emerging Leaders Science Scholars Faculty Mentor at Purdue University, 2021–
- Research mentor of 5 undergraduate students at Purdue University, 2021–  
> mentee Hanna Thammavong awarded 2021 Department of Biological Sciences Summer Research Fellowship

- > mentee Chingyan Huang awarded 2023 Department of Biological Sciences Summer Research Fellowship
- Science education mentor certificate awardee, 2019
- Research mentor of 4 undergraduate students at Harvard University, 2017–2020
  - > mentee Camille DeSisto awarded 2019 Hoopes prize for outstanding research
- Research mentor of 2 undergraduate students at the University of Arizona, 2018
- Undergraduate Research Mentoring Guide development for the Bridging Biodiversity and Conservation Science program, 2018
- Lab supervisor and mentor to 6 undergraduate interns from diverse ethnic and cultural backgrounds, University of California, Davis, 2009–2014
- Mentor, UC Davis Students Engaging, Exploring & Discovering Science (SEEDS), 2012
- Mentor, UC Davis Young Scholars Program, 2010

## **AWARDS, FELLOWSHIPS, & GRANTS**

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### **Select Fellowships and Awards**

- 1<sup>st</sup> place in the 2022 GBIF Ebbe Nielsen Challenge
- Inaugural Harvard University Herbaria Postdoctoral Fellowship, 2015–2017
- Henry A. Jastro Scholarship, 2011–13
- Botany 2012: BSA Ecology Section Graduate Student Best Presentation, 2012
- Young Generation Technical Leadership Conference: Best Technical Talk, 2011

### **Select Grants**

- NSF Division of Environmental Biology, 2023 (submitted)
- NSF Division of Biological Infrastructure, 2022 (submitted)
- NSF Division of Environmental Biology (DEB 1754584), 2018
- NSF Division of Environmental Biology Coupled Natural and Human Systems (DEB 1824796), 2018
- Rufford Small Grants for Nature Conservation, 2017
- Harvard University Herbaria Research Grant, 2015
- NSF Doctoral Dissertation Improvement Grant (DEB 1210526), 2013

## **PROFESSIONAL SERVICE**

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### **Professional service**

- Committee member: Haley Flickinger, Jonathan Jenkins, Andrew Mularo, Kliffi Blackstone, Yue Liu, Ian Rimer, Leah Veldhuisen
- Facilitator: Job Prospects for Postdocs in the Age of the COVID-19 Pandemic, University of Minnesota, 2020
- Associate Editor: Scientific Reports, 2019–
- British Ecological Society meeting session organizer, 2019
- Member: Open Traits Network Committee, 2018–
- Member: Botanical Information and Ecology Network (BIEN) Development Team, 2017–
- Editor-in-Chief, Harvard Postdoctoral Editors Association, 2016–
- Member: Davis Botanical Society Board, 2012–13
- Administrator: Korean Graduate Student Association, 2010–11
- Reviewer, 2015–

*Proceedings of the National Academy of Sciences, Ecology Letters, New Phytologist, Global Change Biology, Global Ecology and Biogeography, Evolution, Methods in Ecology and Evolution, American Journal of Botany, Journal of Ecology, Journal of Ecology, Diversity and Distributions, Journal of Biogeography, New Phytologist, Applications in Plant Sciences, Weed Research, Proceedings of the Royal Society B.*