Paul David Nabity

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Academic Appointments

- Senior Lecturer in Biosecurity, January 2024 onward, School of Biosciences, University of Melbourne
- Associate Professor of Plant-Insect Ecology. July 2023-December 2023. Department of Botany and Plant Sciences.
- Assistant Professor of Plant-Insect Ecology. January 2017-Jun 2023. Department of Botany and Plant Sciences.

Cooperating Faculty Member. Department of Entomology, and Department of Evolution, Ecology, and Organismal Biology, University of California, Riverside. Affiliate, Graduate Program in Genetics, Genomics, and Bioinformatics

• Assistant Professor. 2015-2016. Department of Entomology. Washington State University. Affiliate, Molecular Plant Sciences Program

Professional Preparation

- USDA-NIFA Postdoctoral Fellow. 2012-2014. University of Arizona. Department of Ecology and Evolutionary Biology. Mentor: Noah K. Whiteman.
- Doctorate of Philosophy. 2012. University of Illinois at Urbana-Champaign. **Plant Biology**. Advisor: Evan H. DeLucia.
- Organization for Tropical Studies: Ecology of Plant-Animal Interactions. 2010. La Selva Biological Station. Coordinators: Katja Poveda, Andre Kessler.
- Master of Science. 2005. University of Nebraska, Lincoln. **Entomology**. Co-advisors: Leon Higley and Tiffany Heng-Moss.
- Bachelor of Science. 2002. University of Nebraska, Lincoln. **Majors: Environmental Studies, Water Science**. *Minors: Diversified Agriculture, Insect Science, Forestry/Fisheries* and Wildlife, Mathematics.

Grants, Fellowship, & Awards (Research Total = \$1,029,905; Education Total = \$279,247)

- 9/01/2021-8/31/2024 USDA-NIFA-SCRI \$789,141. Threat Assessment and Resistance Characterization of a Novel Ecotype of Woolly Apple Aphid
- 12/01/2021-4/30/2023 University of California Office of the President (UCOP)-HBCU Initiative \$52,247. UCR-VSU Summer GRaPEs: Graduate Research and Preparation Experiences
- 7/01/2021-6/30/2023 California Department of Food and Agriculture (CDFA-IAB) \$33,014. Development and validation of virulence markers for vineyard phylloxera
- 4/25/2021-12/31/2023 California Conservation Genetics Project (https://www.ccgproject.org) \$42,763. Genomic diversity of the manzanita gall aphid across California
- 2021-2022, Extra Funding Opportunity Preparation Award, UCR, \$23,856
- 1/1/2018-12/31/2019. University of California Office of the President (UCOP) Instructional Learning Technology Initiative (ILTI) \$227,000. Ecology and Conservation Biology; Global Change Ecology
- 3/1/2016-2/28/2019. Washington Tree Fruit Research Commission. PI. \$164,987. Assessment of apple immune responses to wooly apple aphid saliva
- Omnibus Travel and Research Awards, UC Senate 2020-2023, \$900/year
- 2012. AFRI-USDA-NIFA Postdoctoral Fellowship. \$130,000

Notable awards during graduate and undergraduate school

- 2012. Ecological Society of America Physiological Ecology Section: Billings Award (for best presentation)
- 2012. New Phytologist Trust Travel Award
- 2010. University of Illinois Robert Emerson Memorial Award (top biology award)
- 2010. American Society of Plant Biologists Travel Award
- 2007. University of Illinois Plant Biology Departmental Fellowship
- 2007. University of Illinois John R. Laughnan Travel Award
- 2001-2002. University of Nebraska Agricultural Research Division (ARD) Honors Undergraduate Thesis Grant for independent research. \$2500

Publications http://www.nabitylab.org/publications.html

35. Aguilar JM et al. The evolution of herbivory in Scaptomyza (Diptera: Drosophilidae)

- **34**. Li Z, Allen Z, Maeda GP, Li Y, **Nabity PD**, Moran NA. 2024. Phylloxera and aphids show distinct features of genome evolution despite similar reproductive modes
- 33. Peláez JN, Gloss AD, Goldman-Huertas B, Kim B, Lapoint RT, Pimentel-Solorio G, Verster KI, Aguilar JM, Nelson-Dittrich AC, Singhal M, Suzuki H, Matsunaga T, Armstrong EE, Charboneau JLM, Groen SC, Hembry DH, Ochoa CJ, O'Connor TK, Prost S, Zaaijer S, Nabity PD, Wang J, Rodas E, Liang I, Whiteman NK. 2023. Evolution of chemosensory and detoxification gene families across herbivorous Drosophilidae. *G3 Genes/Genomes/Genetics*, Volume 13, Issue 8, August 2023
- 32. MacWilliams JR, Nabity PD, Mauck K, Kaloshian I. 2023. Transcriptome analysis of aphidresistant and susceptible near isogenic lines reveals candidate resistance genes in cowpea (Vigna unguiculata) <u>BMC Plant Biology</u>. https://doi.org/10.1186/s12870-022-04021-w.
- MacWilliams J, Chesnais Q, Nabity P, Mauck K, Kaloshian I. 2022. Cowpea aphid resistance in cowpea line CB77 functions primarily through antibiosis and eliminates phytotoxic symptoms of aphid feeding. <u>J. Pest Science</u>. https://doi.org/10.1007/s10340-022-01529-w.
- **30.** Zhao C, Miao S, Yin Y, Zhu Y, **Nabity P**, Bansal R, Liu C. 2021. Tripartite parasitic and symbiotic interactions as a possible mechanism of horizontal gene transfer. <u>Ecology and Evolution</u>. DOI: 10.1002/ece3.7550.
- **29.** Nabity PD, Barron-Gafford G, Whiteman NK. 2021. Intraspecific competition for host resources in a parasitic plant. <u>Current Biology</u> 31:1344-1350.
- 28. Krey K, Nabity PD, Blubaugh C, Fu D, Van Leuven J, Reginald J, Berim A, Gang D, Jensen A, Snyder W. 2020. Organic farming sharpens plant defenses in the field. <u>Frontiers in Sustainable Food Systems</u> 4:97
- Rispe C, Legeai F, Nabity PD et al. 2020. The genome of the grape phylloxera provides insights into the evolution, adaptation and invasion routes of an iconic pest. <u>BMC Biology</u> 18:90.
- **26.** Rafferty NR, Agnew L, **Nabity PD**. 2019. Parasitism modifies the direct effects of warming on a hemiparasite and its host. <u>PLoS One</u>. doi.org/10.1371/journal.pone.0224482
- Zhao C, Rispe C, Nabity PD. 2019. Secretory RING finger proteins function as effectors in a grapevine galling insect. <u>BMC Genomics</u> 20:923
- 24. Zhao C, Nabity PD. 2017b. Phylloxerids share ancestral carotenoid biosynthesis genes of fungal origin with aphids and adelgids. <u>PLoS One</u> https://doi.org/10.1371/journal.pone.0185484

- Zhao C, Nabity PD. 2017a. Plant manipulation through gall formation constrains amino acid transporter evolution in sap-feeding insects. <u>BMC Evolutionary Biology</u> 17:153. DOI: 10.1186/s12862-017-1000-5
- Rafferty NE, Nabity PD. 2017. A global test for phylogenetic signal in shifts in flowering time under climate change. <u>Journal of Ecology</u>. DOI: 10.1111/1365-2745.12701. *Editor's Choice, cover photo*
- **21. Nabity PD**. 2016. Insect-induced plant phenotypes: Revealing mechanisms through comparative genomics of galling insects and their hosts. <u>American Journal of Botany</u> 103:979-981.



- 20. Nabity PD, MJ Haus, MR Berenbaum, EH DeLucia. 2013. Leaf-galling phylloxera on grapes reprograms host metabolism and morphology. <u>PNAS</u> 110:16663-16668.
- **19. Nabity PD**, JA Zavala, EH DeLucia. 2013. Herbivore induction of jasmonic acid and chemical defenses reduces photosynthesis in *Nicotiana attenuata*. <u>Journal of Experimental</u> <u>Botany</u> 64:685-694.
- **18.** Zavala JA, **PD Nabity**, EH DeLucia. 2013. An emerging understanding of mechanisms governing insect herbivory under elevated CO₂. <u>Annual Review of Entomology</u> 58:79-97.
- Zangerl AR, S Miresmailli, PD Nabity, A Lawrence, A Yanahan, CA Mitchell, KJ Anderson-Teixeira, MB David, MR Berenbaum, EH DeLucia. 2012. Role of arthropod communities in biofuel crop litter decomposition. <u>Insect Science</u> 20:671-678.
- **16.** DeLucia EH, **PD Nabity**, JA Zavala, MR Berenbaum. 2012. Climate change: resetting plant insect interactions. <u>Plant Physiology</u> 160:1677-1685.
- **15.** Donovan MD, **PD Nabity** EH DeLucia. 2012. Salicylic acid mediated reductions in yield in *Nicotiana attenuata* challenged by aphid herbivory. <u>Arthropod Plant Interactions</u> 7:45-52.
- **14. Nabity PD**, S Miresmailli, R Orpet, MR Berenbaum, EH DeLucia. 2012. Silica-based defenses of crops selected for biofuel production. <u>Journal of Economic Entomology</u> 105:878-883.
- **13. Nabity PD**, ML Hillstrom, RL Lindroth, EH DeLucia. 2012. Elevated CO₂ interacts with herbivory to alter chlorophyll fluorescence and leaf temperature in *Betula papyrifera* and *Populus tremuloides*. <u>Oecologia</u> 169:905-913.
- **12. Nabity PD**, AR Zangerl, MR Berenbaum, EH DeLucia. 2011. Bioenergy crops *Miscanthus x giganteus* and switchgrass (*Panicum virgatum*) reduce growth and survivorship of *Spodoptera frugiperda* (Lepidoptera: Noctuidae). Journal of Economic Entomology 104:459-464.
- De Freitas Bueno A, de Freitas Bueno RC, PD Nabity, LG Higley, OA Fernandes. 2009. Photosynthetic response of soybean to two-spotted spider mite (Acari: Tetranychydae) injury. <u>Brazilian Archives of Biology and Technology</u> 52:825-834.
- Zavala JA, CL Casteel, PD Nabity, MR Berenbaum, EH DeLucia. 2009. Role of cysteine proteinase inhibitors in preference of Japanese beetles (*Popillia japonica*) for soybean (*Glycine max*) leaves of different ages and grown under elevated CO₂. Oecologia 161:1432-1439.
- 9. Nabity PD, JA Zavala, EH DeLucia. 2009. Indirect effects of arthropod herbivory on leaf-level photosynthesis. <u>Annals of Botany</u> 103:655–663. (Cover photo)



- 8. DeLucía EH, CL Casteel, PD Nabity, BF O'Neill. 2008. Insects take a bigger bite out of plants in a warmer, higher carbon dioxide world. PNAS 105:1781-1782.
- **7.** Spomer SM, **PD Nabity**, ML Brust. 2008. Larval description of *Cicindela* (*Dromochorus*) *pruinina* (Casey) (Coleoptera: Carabidae: Cicindelinae) with notes on habitat and adult behavior <u>Coleopterists' Bulletin</u> 62:37-41.

- 6. Nabity PD, LG Higley, TM Heng-Moss. 2007. Light-induced variability in development of forensically important blow fly, *Phormia regina* (Diptera: Calliphoridae). Journal of Medical <u>Entomology</u> 44:351–358.
- Nabity PD, TM Heng-Moss, LG Higley. 2006. Effects of insect herbivory on physiological and biochemical (oxidative enzyme) responses of the halophyte *Atriplex subspicata* (Chenopodiaceae). <u>Environmental Entomology</u> 35:1677–1689.
- **4. Nabity PD**, LG Higley, TM Heng-Moss. 2006. Effects of temperature on development of *Phormia regina* and use of development data in determining time intervals in forensic entomology. Journal of Medical Entomology 43:1276–1286.
- **3. Nabity PD**, KD Hoagland. 2006. Seedbank viability of potential saline wetland restoration sites in agro-ecosystems. <u>Great Plains Research</u> 16:173–180.
- Brust ML, WW Hoback, SM Spomer, WJ Allgeier, PD Nabity. 2005. New county records for Nebraska tiger beetles. <u>Cicindela</u> 37:37–58.
- 1. Spomer, SM, WJ Allgeier, PD Nabity. 2004. A fall collecting trip to southwestern and western Nebraska and a new state record for *Cicindela decemnotata*. <u>Cicindela</u> 36:57–59.

<u>Teaching</u>

Teaching Interests: Plant-Insect Interactions, Global Change Biology/Ecology, Field Ecology **Teaching Experience (Instructor ratings UCR & WSU out of 5)**:

- Fall 2023, University of California-Riverside, Freshman Seminar, NASC 093, 2cr.
- Spring 2023, University of California-Riverside, Plant Ecology, BPSC 146, 4cr, undergraduate upper-level Plant Biology major course. Co-instructor.
- Winter 2021, University of California-Riverside, Colloquium, BPSC 250, 1cr. Rating 4.33
- Winter 2018-2020, 2022; Spring 2021, 2023, University of California-Riverside, Senior Seminar in Plant Biology, BPSC 193, 2cr, undergraduate capstone course for botany majors. Co-instructor. Rating 4.6, 4.67, *3**, *4.6**, 4.3 *Covid online version
- Fall 2017,2019-2020, Winter 2022-2023, University of California-Riverside, Foundations of Plant Biology, BIOL/BPSC 104, 4cr, undergraduate student course on plant form and function. Rating 4.07, 4.12, 3.61*, 3.12* *Covid online version
- Spring 2017, University of California-Riverside, Plant Biology Core, BPSC 200B, Co-Instructor, 2cr, graduate student course on professional development. Rating 4.43
- Fall 2016, Washington State University, General Entomology (Entomology 343), Co-Instructor: Dr. Nicole Rafferty. 3cr, upper-level undergraduate, writing intensive course required by majors related to agriculture, 65 students; Overall Instructor rating (mean/median) 4/4.4, Overall Course rating 3.7/4. Response ratio 55%.
- Fall 2015, Washington State University, General Entomology (Entomology 343) 3cr, upper-level undergraduate, writing intensive course required by majors related to agriculture, 67 students; Overall Instructor rating (mean/median) 3.6/4, Overall Course rating 3.2/3. Response ratio 86%.

Teaching experience as a graduate student:

- Spring 2010 and 2009, University of Illinois, Field Ecology (Integrative Biology 447)
- Fall 2009 and 2007, University of Illinois, Ecology (Integrative Biology 203)
- Spring 2007, University of Illinois, CSI Biology (Integrative Biology 199)
- Spring 2007, University of Illinois, Introductory Plant Biology (Integrative Biology 103)
- Spring 2005, University of Nebraska, Forensic Entomology (Distance 414/814)
- Fall 2001 & 2004, Spring 2004, University of Nebraska, Insect Identification (Entomol. 116)
- Fall 2003, University of Nebraska, Aquatic Insect Identification (Entomol. 402/802)

Select Presentations

Invited Talks (Bold venues are Departmental Seminars)

- Host defense manipulation as an extended parasite phenotype. 8th International Plant Gall Symposium Plant galls July 13, 2023, Chico, CA.
- *Evolutionary ecology of host parasite systems*. Plants3D retreat. Lake Arrowhead, Nov 19, 2022. University of California-Riverside
- Deconstructing a complex, induced plant phenotype. Department of Plant Biology. Michigan State University. Nov 12, 2021.
- Insect effector evolution and function. Center for Infectious Disease and Vector Research (CIDVR) annual meeting, Apr 5, 2019, University of California-Riverside
- Molecular mechanisms underlying function and evolution of insect extended phenotypes. Pacific Branch Entomological Society of America. San Diego, CA. Apr 3, 2019 (JW Presenting)
- *Mechanisms underlying insect-induced phenotypes in plants.* **Department of Entomology. University of Georgia.** Mar 18, 2019.
- Manipulation of plant primary metabolism by a galling insect, grape phylloxera. Entomological Society of America. Vancouver, BC. Nov 11-14, 2019.
- Competition for resources between desert mistletoe on mesquite. Ecological Society of America, New Orleans, LA. Aug 11-16, 2018.
- Discovery and validation of plant-manipulating effector proteins in grape phylloxera. Entomological Society of America and International Aphid Genomics Consortium meeting. Denver, CO. Nov 5-8, 2017. (CZ presenting)
- Understanding how insects manipulate plant resources: Implications for resource use under climate-change. In the symposium: Insect-plant Interactions in a Changing Climate: Effects on Populations Dynamics and Biological Control, International Congress of Entomology, Orlando, FL. Sept 25-30, 2016.
- Mechanisms underlying insect-induced phenotypes in plants. Department of Botany and Plant Science, University of California-Riverside. Jun 27, 2016
- Genes underlying insect-induced phenotypes in the Phylloxeridae. **Department of Entomology, North Carolina State University.** Apr 18, 2016.
- *How do the Phylloxeridae co-opt plant form and function?* Pacific Branch Entomological Society of America. Honolulu, HI. Apr 5, 2016
- Defining the Cecidome: Mechanisms underlying insect-induced phenotypes in plants. Molecular Plant Science Recruitment Weekend, WSU. Mar 5, 2016
- Mechanisms underlying insect-induced phenotypes in plants. Molecular Plant Science Program, Washington State University. Feb 17, 2016.
- Genomic basis of insect-induced phenotypes within the Phylloxeridae. IN Insects, Pathogens, and Plant Reprogramming: From effector molecules to ecology. Tours, France. Oct 4, 2015.
- *Genomic basis of insect induced phenotypes*. Pacific Branch Entomological Society of America. Coeur d'Alene, ID. Apr 13, 2015.
- *Reduced antagonism by a galling parasite through a novel induced phenotype.* Entomological Society of America. Portland, OR. Nov 19, 2014.
- The extended phenotype of grape-phylloxera interactions. Department of Entomology, University of Arizona. Oct 3, 2013.
- The extended phenotype of gall forming insects. Department of Ecology and Evolutionary Biology, University of Arizona. Sept 25, 2012.

Presentations as a graduate student

 Nabity PD, MR Berenbaum, EH DeLucia. 2012. Testing the extended phenotype hypothesis as phylloxera induce stomata and reorganize metabolism in grapes. Ecological Society of America. Portland, OR.

- **Nabity PD**, MR Berenbaum, EH DeLucia. 2011. *The galling parasite Daktulosphaira vitifoliae induces novel morphological change in Vitis*. Entomological Society of America. Reno, NV.
- **Nabity PD**, JA Zavala, EH DeLucia. 2011. *Herbivore induction of jasmonate-dependent defenses reduces photosynthesis in Nicotiana attenuata* Ecological Society of America. Austin, TX.
- **Nabity PD**, M Hillstrom, R Lindroth, EH DeLucia. 2008. *Herbivory induced spatial patterns in plant physiology and gene expression under predicted future climate conditions*. Entomological Society of America. Reno, NV.
- Nabity PD, JA Zavala, IT Baldwin, EH DeLucia. 2007. *Guild-specific herbivory alters physiology and the induction of plant defenses in Nicotiana attenuata*. Ecological Society of America. San Jose, CA.

Posters

- Miller D, Nabity PD. Tamalia gall aphids and their host plants, Arctostaphylos spp., as part of California's landscape: The California Conservation Genomics Project (CCGP). 8th International Plant Gall Symposium Plant galls July 10-15, 2023, Chico, CA.
- Nabity PD, Zafar SA, Zhao C. *Host defense manipulation as an extended parasite phenotype.* (Poster) Gordon Research Conference. Plant Herbivore Interactions Feb 26-Mar 2 2023. Ventura, CA.
- **Nabity PD**, RT Lapoint, NK Whiteman. 2014. *How do insect herbivores live inside their plant hosts: genomic architecture underlying the transition to endophagy*. Pacific Branch Entomological Society of America. Tucson, AZ.
- Nabity PD, MR Berenbaum, EH DeLucia, RT LaPoint, NK Whiteman. 2013. *Physiological and genomic basis for herbivore induced phenotypes in plants*. Gordon Research Conference on Plant-Herbivore Interactions. Ventura, CA.
- **Nabity PD**, MJ Segura, MR Berenbaum, EH DeLucia. 2012. *Insect-induced stomata attenuate sink strength and enhance parasite fitness*. New Phytologist Symposium on Stomata. Manchester, England.

Post Doctoral Researcher and Visiting Scientist Mentoring

- Jasmine Taite, October 2022 July 2023, plant parasite macroecology and climate change
- Dr. Adeel Zafar, January 2021 April 2023, functional analysis of insect effector genes
- Dr. Liming Cai, 2020 2021, comparative genomics of insect herbivores
- Dr, Mohamed Ali, January 2020 2022; functional analysis of insect effector genes
- Jiri Skorepa, summer 2019, genes underlying plant hormone synthesis by insects
- Dr, Chaoyang Zhao, 2015-2019: aphidomorph effector functional genetics and evolution
- Lindsey Agnew, 2018-2019; plant parasite ecology under climate change
- Wenhua Tian, 2017-2018: aphidomorph effector functional genetics
- Eva Morton, 2016-2017: molecular ID of hosts and insects, and pollinator-herbivorephenology studies

Graduate Student Mentoring

- Rajesh Nupane, PhD student in EEOB, began Fall 2022-Fall 2023 (committee member)
- Andrea Romero, Rotation Student BPSC, 2022
- Nate Collison, PhD Student BPSC, Fall 2021-Fall 2023 (advisor)
- Conner Lay, PhD student in EEOB, Fall 2021-current (co-advisor)
- Miranda Buckley, PhD student in EEOB, Fall 2021-Fall 2023 (advisor)
- Ryan Traband, Rotation Student BPSC, 2020
- Fatma Celikli, MS in Botany & Plant Sciences 2020-2022 (committee member)

- Alex Valenzuela, PhD in Botany & Plant Sciences 2019-present (committee member)
- Alex Borowsky, Rotation Student BPSC, 2018
- Patrick Thomas, PhD in Botany & Plant Sciences 2017-2022 (committee member)
- Joshua Wemmer, MS in Entomology, 2016- 2019 (advisor)
- Karol Krey, PhD in Entomology, 2015-2017 (committee member)
- Léa Fléchon, PhD student in Entomology 2015-2016, left program.

Undergraduate Mentoring

- Gabrielle Shen, mentee for Graduate Student Conner Lay, SEEDs Program, 2023
- Makayla Drew, Kyra Harvey, Ebenezer Faidoo, Summer GRaPEs program 2022-2023
- Brandi Lofton REU student, CEPCEB: Center for Plant Cell Biology, 2022
- Jacob Jauregui molecular biology of effector genes, 2021-2023
- Jenni Kao gene family evolution, 2020-2021
- Kaitlin Chau-Giang plant care and histology of Vitis leaves, 2019-2020
- Ashil Koranne Buchnera genome analysis of a galling aphid, 2018-2019
- Marakee "Rocky" Tilahun REU student, CEPCEB: Center for Plant Cell Biology, 2018
- Tamara Taylor Phylloxerid effector identification and validation Honors Thesis, 2017-2019
- Timothy Dang DNA extraction and sequence phylogenetics, 2017-2018
- Emmanuel Cuevas, REU student, CEPCEB: Center for Plant Cell Biology, 2017
- Rachel Maughan plant care and DNA extraction, 2017
- Skyler Kim Bioinformatics: transcriptome analyses, 2017
- Richard Ellis carotenoid gene characterization and bioinformatics pipeline development, 2016
- Sierra Gallaway woolly apple aphid proteomics, 2016
- Madison Armstrong –natural history of Vitis species and COI primer design. 2016
- Angel Marquez (high school student) tested hypotheses on insect-induced phenotypes on grapes. 2013-2014
- Robert Orpet silica-based defenses in crops selected for biofuels. 2010-2011 (co-authored manuscript)
- Michael Donovan completed Honors project with Distinction on aphid-induced defenses in Nicotiana species. 2009-2011 (first-authored manuscript)

Professional Experience

Manuscript and Proposal Reviews:

2023: Annal Bot

2022: NSF ad hoc, Austral Ecol

2021: NSF panel, Molecular Ecology, OENO

2020: NSF panel, New Phytologist, Molecular Ecology, Arthropod-Plant Interactions

2019: Insect Molecular Biology, PLoS Genetics, Israel Science Foundation

2018: Journal of Economic Entomology, Environmental Entomology, Current Biology, Frontiers Plant Science, Genome Biology & Evolution, Molecular Plant Microbe Interactions, PLoS Genetics, Vitis, **NSF ad hoc (2), Israel Science Foundation**

2017: Environmental Entomology, Journal of Economic Entomology, Journal of Insect Science, Oecologia, Biological Control, Annales Botanici Fennici,

Previously Reviewed for:

 American Journal of Botany, Arthropod-Plant Interactions, Basic and Applied Ecology, Climatic Change, Ecological Entomology, Environmental Entomology, Global Change Biology, International Journal of Plant Science, Journal of Experimental Botany, New Phytologist, Oecologia, Photosynthesis Research, Plant, Cell & Environment, Plant Physiology, Plants, PLoS Biology, PLoS One, Scientific Reports

• Israel Science Foundation, Austria Science Foundation

Select Service, Outreach, & Extension:

Internal

- 2022-2023 Community Ecology faculty search committee, departmental
- 2022-2025 University of California, **UC Senate** Committee on Memorial Resolutions, Riverside Division. Charged with drafting memorial essays for colleagues
- 2022-present Graduate Recruitment Committee, departmental
- 2021-2022 Non-Senate Reappointment Committee, departmental
- 2020-present Diversity, Equity, and Inclusion Committee, **departmental**, inaugural member charged with climate survey, action plan, developing infrastructure to improve climate.
- 2019-present Greenhouse & Environmental Facilities Academic Advisory Committee, CNAS, charged with developing use guidelines, troubleshooting problems, and reviewing space proposals.
- 2018-2021 University of California, Riverside Division Committee on Memorial Resolutions, **UC Senate**, Charged with drafting memorial essays for colleagues
- 2018-2021 Undergraduate Education and Advisory Committee, departmental,
- 2018- Merit review committee; Coordinator/Scientist seeking advancement, departmental
- 2017-2018 Awards committee, departmental
- 2017 Merit review committee; Specialist seeking advancement, departmental
- 2017-2023, annually, Adhoc Merit review for faculty seeking advancement, departmental

External

- 2016 Co-organized (NK Whiteman, UC Berkeley) Pacific Branch ESA symposium *Strategies underlying the evolution of herbivory*
- 2015, 2016 WSU Showcase for Undergraduate Research Creative Activities (SURCA), Judge.
- 2013, UA Ecology and Evolutionary Biology Undergraduate Poster Session, Judge.
- 2009-2010, UIUC Plant Biology Association of Graduate Students, Chair.
- 2008-2009, UIUC Plant Biology Association of Graduate Students, Instructional Committee.
- 2009, National Pollinator Week in Champaign-Urbana, Co-organized all events, presented seminars and nature walks.
- 2008, UIUC Pollinatarium, Panel designer and editor.
- 2008, National Pollinator Week in Champaign-Urbana, Led nature walk identifying prairie plants and pollinators.
- 2007, UI Day at Chicago Public Schools, Presented four interactive lessons on forensic entomology to 7th and 8th grade students.
- 2005. Nebraska State Fair, Helped judge insect collections for various ages and skill levels of participants in the 4-H program.