Jill T. Oberski, Ph.D.

Senckenberg Gesellschaft für Naturforschung
Entomology / Dr. Jill Oberski
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EDUCATION

Doctor of Philosophy, Entomology
September 2017 – July 2023
Advised by Dr. Philip S. Ward // University of California, Davis, CA

Bachelor of Arts, Biology
Bachelor of Arts, German Studies
September 2012 – May 2016, *cum laude* // Macalester College, Saint Paul, MN

PROFESSIONAL APPOINTMENTS

Postdoctoral Researcher | 2024 – 2026 | Senckenberg Society for Nature Research
- Developing an independent research program on the following topics:
  - evolution of social parasitism in eusocial insects
  - historical biogeography of the Nearctic region
  - population genetics of selected species complexes
- Pursuing and managing third party funding.
- Providing curatorial support to the Senckenberg entomological collections in Frankfurt.
- Participating in museum-run public outreach events and assisting educators as needed.

Postdoctoral Visiting Scientist | 2023–2024 | Smithsonian National Museum of Natural History
- Utilized the NMNH ant collection to advance my Nearctic *Dorymyrmex* taxonomic revision
- Received hands-on training in specimen macrophotography (MacroPod)
- Photographed type specimens and coordinated their upload to open access databases

Graduate Student Researcher | 2017 – 2023 | University of California Davis
- Curated, databased, and imaged ant specimens for the UC Davis insect collection.
- Extracted DNA and prepared samples for high-throughput next-generation sequencing.
- Delimited species by integrating traditional morphological taxonomy with phylogenomics.
- Manipulated genomic data, operated bioinformatics software, and ran intensive phylogenetic analyses on remote servers.
- Wrote and ran code in Linux/Unix terminal, R, and Python.

Research Intern | 2016 – 2017 | University of Wisconsin Madison
- Completed the first molecular phylogenetic analysis of Assamiidae harvesters (Opiliones).
- Implemented lab organization schemes and maintained arthropod colonies.

Research Assistant | 2014 – 2016 | Macalester College
- Investigated the phylogeny and divergence dates of *Austropurcellia* mite harvesters.
- Independently performed Sanger sequencing techniques including PCR, gel electrophoresis, and DNA quantification.
- Taught myself ML and Bayesian phylogenetics software including MrBayes and BEAST.

Lab Inventory Assistant | 2014 – 2016 | Macalester College
- Performed curatorial work sprucing up Macalester College's neglected insect collection.
- Reorganized drawers, added student collections, and identified specimens to family.

TEACHING EXPERIENCE

Instructor, Senckenberg School | 2024 | Senckenberg Natural History Museum
- Co-teaching Entomology for a two-year degree program in museum curatorial assistantship.
- Topics: Insect identification, field collection tools and methods, and laboratory skills.

Pedagogy Training: Seminar on College Teaching | 2022 | University of California Davis
- Learned how to implement evidence-based, DEI-infused teaching practices.
- Applied integrated course design and active learning principles to traditional lessons.
- Created essential elements of a teaching portfolio, including a course syllabus.

Instructor, Vineyard Ant Identification | 2022 | UC Cooperative Extension, Sonoma & Napa Co.
- Led six workshops in Sonoma and Napa counties for vineyard managers, growers, and integrated pest management specialists.
- Introduced students to technical taxonomic information at an accessible level.
- Emphasized cooperative, hands-on practice using dissecting microscopes and an ID key.

Teaching Assistant, Intro Bio: The Tree of Life | 2021 – 2023 | University of California Davis
- Independently taught two lab sections per quarter of BIS 002C introductory biology.
- Led students through lab manual activities and taught presentation skills.
- Coordinated Zoom meetings with many participants, breakout rooms, and screen sharing.
- Gently evaluated student mental health and barriers to learning during the COVID-19 pandemic and responded appropriately.

Teaching Assistant, Natural History of Insects | 2018 – 2023 | University of California Davis
- Helped facilitate Natural History of Insects, an entomology course taught by grad students.
- Integrated classroom technologies such as TopHat and remote access.
- Lectured 1-2 times per quarter on the following topics:
    - Cultural Entomology (2018, 2019, 2020)
    - Insects of Davis / Household and Garden Arthropods (2019, 2020)

Course Development, Natural History of Insects | 2017 – 2018 | University of California Davis
- Reviewed pedagogical techniques with other graduate students and a faculty advisor.
- Worked together to bring ENT 010 from course concept to syllabus to fruition.
- ENT 010, Natural History of Insects, was first offered Winter Quarter 2018.

Teaching Assistant, Biodiversity and Evolution | 2015 – 2016 | Macalester College
- Guided students through complex material in BIOL 270.
- Led exam review sessions, recorded video tutorial screencasts, and graded assignments.

Pedagogy Training: Education & Emerging Technologies | 2015 | Macalester College
- Learned to use 15+ classroom and learning technologies, e.g., Kurzweil and OCR
- Course content emphasized accessibility aids for students with disabilities

Student Manager, Digital Resource Center | 2014 – 2016 | Macalester College
- Trained faculty and students to use and troubleshoot creative media software, e.g. the Adobe suite, SketchUp, Final Cut Pro, iMovie, Audacity, GarageBand, and input from MIDI devices.

PUBLICATIONS

Boudinot, B.E., B.L. Bock, D. Tröger, M. Weingardt, J.U. Hammel, V. Grabe, M.M. Solórzano-Kraemer, K. Jandausch, **J.T. Oberski,** T. Schmuck. Discovery of Goethe's amber ant: its phylogenetic and evolutionary implications. 2026, ***Scientific Reports*** 16(1): 2880. https://doi.org/10.1038/s41598-026-36004-4

Boudinot, B.E., C. Xu, D. Li, **J.T. Oberski**, A. Richter, C. Luo, R.G. Beutel. Fossil gaps, ghost lineages, and 'major extinction events'. 2026, ***Current Biology*** 36(2): R48–R49. https://doi.org/10.1016/j.cub.2025.11.008

Oberski, J.T.*, Z.H. Griebenow*****, R.M.M. Adams, A. Andersen, J. Andrade-Silva, P. Barden, M. Borowiec, S. Brady, S. Csősz, A.M. Dias, R.K.S. Dias, R.M. Feitosa, F. Fernandez, A. Casadei-Ferreira, B.L. Fisher, D.E.M. General, K. Gomez, M. Janda, A. Khalife, N. Ladino, Z. Lieberman, M. Menchetti, L. Pires do Prado, R.S. Probst, A. Punnath, A. Richter, R.R. Silva, S. Salata, A.F. Sánchez-Restrepo, E. Schifani, T.R. Schultz, J. Sosa-Calvo, M.C. Tocora, M.A. Ulysséa, W. Wang, J. Williams, G.P. Camacho**, B.E. Boudinot**. Ant Systematics: Past, present, and future. 2025, ***Insect Systematics and Diversity*** 9(4):11. https://doi.org/10.1093/isd/ixaf025 (*****Co-first authors. **Co-last authors.)

Oberski, J.T. UCE phylogenomics illuminates the evolutionary history and biogeography of *Dorymyrmex* pyramid ants. 2025, ***Systematic Entomology*** 50(2): 325-348. https://doi.org/10.1111/syen.12658

Oberski, J.T. A first phylogenomic assessment of the amphitropical New World ant genus *Dorymyrmex* (Hymenoptera: Formicidae), a longstanding taxonomic puzzle. 2022, ***Insect Systematics and Diversity*** 6(1): 1-8. https://doi.org/10.1093/isd/ixab022

Godfrey, R.K., T. Allmark, C. Givens, J. Hernandez-Rivera, **J.T. Oberski**, and W. Gronenberg. Olfactory system morphology suggests colony size drives trait evolution in odorous ants (Formicidae: Dolichoderinae). 2021, ***Frontiers in Ecology and Evolution*** 9:733023. https://doi.org/10.3389/fevo.2021.733023

Oberski, J.T. Translation from German of Remane, A. (1956), Die Grundlagen des natürlichen Systems der vergleichende Anatomie und der Phylogenetik. The fundamentals of the natural systems of comparative anatomy and phylogenetics, Chapter 2: The concept of homology and the criteria for homology. 2019, *Available upon request.*

Oberski, J.T., S.L. Boyer, K.A. Lemon, J.R. Johnson, K.R. Jay, M.J. Coblens, and P.P. Sharma. A dated molecular phylogeny of mite harvestmen (Arachnida, Opiliones, Cyphophthalmi) from Queensland, Australia. 2018, ***Molecular Phylogenetics and Evolution*** 127: 813-822. https://doi.org/10.1016/j.ympev.2018.06.029

Sharma, P.P., C.M. Baker, J.G. Cosgrove, J.E. Johnson, **J.T. Oberski**, R.J. Raven, M.S. Harvey, & S.L. Boyer. A revised dated phylogeny of scorpions: Phylogenomic support for ancient divergence of the temperate Gondwanan family Bothriuridae. 2018, ***Molecular Phylogenetics and Evolution*** 122: 37-45. https://doi.org/10.1016/j.ympev.2018.01.003

Sharma, P.P., **J.T. Oberski**, M.A. Santiago, R. Kriebel, S.M. Lipps, P.A.C. Buenavente, A.C. Diesmos, M. Janda, S.L. Boyer, R.M. Clouse, and W.C. Wheeler. There is no evidence that Podoctidae carry eggs of their own species: Reply to Machado and Wolff. 2017, ***Molecular Phylogenetics and Evolution*** 129: 349-353. https://doi.org/10.1016/j.ympev.2017.03.026

Jay, K.R., Z.R. Popkin-Hall, M.J. Coblens, **J.T. Oberski**, P.P. Sharma, and S.L. Boyer. New species of *Austropurcellia*, cryptic short-range endemic mite harvestmen (Arachnida, Opiliones, Cyphophthalmi) from Australia's Wet Tropics biodiversity hotspot. 2016, ***ZooKeys*** 586: 37-93. https://doi.org/10.3897/zookeys.586.6774

FELLOWSHIPS & GRANTS

2024	$ 2,500	Ernst Mayr Grant in Insect Taxonomy	Harvard MCZ
2022	$ 3,000	Professors For The Future Fellowship	UC Davis Grad. Studies
2022	$ 250	Graduate Student Assoc. Travel Grant	UC Davis GSA
2019	$ 3,000	George H. Vansell Scholarship	UC Davis Entomology
2019	$ 1,250	Ernst Mayr Grant in Insect Taxonomy	Harvard MCZ
2019	$ 250	Graduate Student Assoc. Travel Grant	UC Davis GSA
2017-20	$ 90,000	Dean's Distinguished Graduate Fellowship	UC Davis Grad. Studies
2012-16	$ 60,000	DeWitt Wallace Merit Scholarship	Macalester College
2013	$ 500	Language Learning Video Contest	Vista Higher Learning
	$ 160,750	**Sum Total 2012–2026**	

NSF CONTRIBUTING PROJECTS

- AToL: Collaborative Research on Ant Phylogeny: A Comprehensive Evolutionary Tree for the World's Premier Social Organisms (2004). #DEB-0431330. Philip Ward, Brian Fisher, Ted Schultz, Séan Brady
- Collaborative Research: Camponotine Ants and their Little Helpers: Phylogenomics of a Hyperdiverse Insect Clade and its Bacterial Endosymbionts (CAnBE) (2019). #DEB-1856539. Philip Ward, Jennifer Wernegreen, Bonnie Blaimer, Brian Fisher
- Collaborative Research: Ants of the World (2019). #DEB-1932062. Philip Ward, Bonnie Blaimer, Brian Fisher, John Longino, Michael Branstetter

MAJOR FIELD WORK

May–June 2025	USA: Texas, Oklahoma, Kansas	4 weeks
August 2021	USA: Utah and Nevada: Swasey Peak, Crystal Peak, Pine Valley	2 weeks
February 2020	Brazil: São Paulo, SP and Curitiba, PR	2 weeks
July 2019	USA: Nevada and California: White Mts, Esmeralda County	2 weeks
July 2018	USA: California and Nevada, broadly (Sagehen Field Station)	5 weeks

August 2018 French Guiana: Nouragues Field Station, Inselberg Camp 2 weeks

HONORS & CERTIFICATES

2024	**Presentation Award for Women Scientists**	**Intl. Congress of Entomol., Kyoto**
2024	Presentation Award for Young Scientists	Intl. Congress of Entomol., Kyoto
2023	Nominated: John Henry Comstock Award	Pacific Branch Ent. Soc. Amer.
2023	**National Champion, Entomology Games**	**Entomological Society of America**
2022	Nominated: John Henry Comstock Award	Pacific Branch Ent. Soc. Amer.
2022	Branch Champion, Entomology Games	Pacific Branch Ent. Soc. Amer.
2020	President's Prize, First Place: Infographic	Entomological Society of America
2019	President's Prize, Second Place: Seminar	Entomological Society of America
2019	President's Prize, Second Place: Infographic	Entomological Society of America
2019	GRFP (Graduate Research Fellowship): Hon. Mention	Natl. Science Foundation (NSF)
2018	National Champion, Entomology Games	Entomological Society of America
2018	Graduate of the 17th Ant Course	California Academy of Sciences
2016	Induction into Delta Phi Alpha	National German Honor Society
2016	Virginia McKnight Binger Prize for Excellence	Macalester Coll. German Studies
2014	German Fluency Goethe-Zertifikat C1	Goethe Institut Berlin

GUEST AND INVITED SEMINARS

2025	**Workshop: Diverg-ENT: Neurodiversity in Entomology**	**Entomology 2025 Conf.**
2025	Systematics and Biogeography of *Dorymyrmex* ants	British Museum of Natural History
2024	The Charismatic "Pyramid Ants" and Their Impact	Hope College
2024	Neotropical *Dorymyrmex:* Evol. & Taxonomy	Grupo de Estudio de Hormigas Neotropicales
2023	Insights from *Dorymyrmex* Phylogenomics	Entomol. Society of Washington
2023	Professors for the Future – Host of 3 panels on mental illness	UC Davis Graduate Studies
2022	BIOL 476: Research in Biodiversity and Evolution	Macalester College Biology
2020	Symposium: Global Advances in Ant Phylogenomics	Entomology 2020 Conf.
2020	Systematics and Biogeography of *Dorymyrmex* ants	Universidade Federal do Paraná
2018–23	ENT 010: Nat. Hist. of Insects – 2 lectures annually	UC Davis Ento. & Nem.
2018	Q&A Panelist: Mental Illness and Disability	UC Davis Mental Health Conference
2016	BIOL 476: Research in Biodiversity & Evolution	Macalester College Biology

SERVICE & PROFESSIONAL DEVELOPMENT

2025	Leibniz Leadership Academy online programme: Starting Leadership
2025	Workshop on Population and Speciation Genomics, Český Krumlov, Czech Republic
2024 – 2025	**Mentor, Entomological Society of America "EntoMentos"**
2024	German Studies Alumni Panel, Macalester College
2021 – 2023	Graduate Student Advisor, UC Davis Transfer Research Society
2022 – 2023	Dept. Committee on Faculty Mentorship, UCD Ento. & Nem.
2022	Faculty Hiring Committee, Agricultural Nematologist, UCD Ento. & Nem.
2020 – 2022	**President, UC Davis Entomology Graduate Student Association**
	Liaison to faculty and hiring committees; coordinating events incl. Picnic Day
2021	Mentor, Ecology and Evolutionary Biology (EEB) Mentor Match

2019 – 2020 Graduate Admissions Committee, UCD Ento. & Nem.
2018 – 2020 Treasurer, UCD Entomology Graduate Student Association
2018 – 2019 Dept. Retreat Committee, UCD Ento. & Nem.
2018 California Academy of Sciences Ant Course, French Guiana

OUTREACH, EQUITY, & #SciComm

2024 – 2025 Girls' Day, Senckenberg Natural History Museum
2024 Skype A Scientist: 3 presentations to a variety of audiences
2018 – 2023 Picnic Day, UC Davis
Campus-wide annual event drawing thousands of people to our exhibits.
In 2021 (virtual), created "Ants of Davis" YouTube video.
2017 – 2023 Developed and maintained a "survival guide" for new Entomology graduate students in Davis
2020 – 2022 Dept. Committee on Diversity, Equity, Inclusion, and Belonging, UCD Ento. & Nem.
2020 – 2022 Graduate Committee on Diversity, Equity, and Inclusion, UCD Ento. Graduate Group
2017 – 2022 Girls' Outdoor Adventure in Leadership and Science (GOALS) @ UC Davis
yearly, immersive, FREE summer science backpacking trip for diverse high school girls and non-binary youth. Personally developed the public website and design.
2021 Program Leader, GOALS @ UC Davis
citizen science projects, birds and pollinators, data analysis, outdoor experiences and privileges to access, indigenous history, college apps and financial aid
2021 UC Davis Envision program
meeting with first-generation / underrepresented minority prospective students
2021 Podcast guest: "Ant-Man" subject expert on "The Marvels of Science"
2020 – 2021 Skype A Scientist: 10 presentations to a wide variety of audiences
2019 California Honey Festival

CONFERENCE PRESENTATIONS

* *Prize recognition*

2025 **Seminar**: "Notes from the field: Ant-ing through the central U.S. plains states." International Society of Hymenopterists, Hymathon 24-Hour Virtual Conference.
2025 **Seminar**: "Puzzling taxonomy, ongoing speciation, and social parasitism: The case of the Nearctic pyramid ants (Formicidae: *Dorymyrmex*)." Entomological Society of America International Branch, Virtual Conference.
2024 **Seminar**: "Puzzling taxonomy, ongoing speciation, and social parasitism: The case of the Nearctic pyramid ants (Formicidae: *Dorymyrmex*)." International Society of Hymenopterists, Hymathon 24-Hour Virtual Conference.
*2024 **Seminar**: "Neotropical paleoclimate, Andean orogeny, and the Isthmus of Panama: UCEs illuminate the evolution of the 'pyramid ants' (Formicidae: *Dorymyrmex*)." International Congress of Entomology, Kyoto, Japan.
2024 **Seminar**: "Puzzling taxonomy, ongoing speciation, and social parasitism: The case of the Nearctic pyramid ants (Formicidae: *Dorymyrmex*)." International Union for the Study of Social Insects – Central European Section, Lausanne, Switzerland.
2023 **Seminar**: "Intercontinental range expansion in the arid-adapted pyramid ants (Formicidae: *Dorymyrmex*)." Entomology, National Harbor, MD, USA.
2023 **Seminar**: "*Dorymyrmex* evolution and taxonomy: UCE phylogenomics illuminates a persistent puzzle." XXVI Simpósio de Mirmecologia: An international ant meeting, Manaus, Amazonas, Brazil.

2022 **Seminar**: “Historical biogeography of the pyramid ants (Formicidae: *Dorymyrmex*).” International Union for the Study of Social Insects, San Diego, CA, USA.
2022 **Seminar**: “Intercontinental range expansion in the arid-adapted pyramid ants (Formicidae: *Dorymyrmex*).” Entomology, Vancouver, BC, Canada.
2022 **Seminar**: "UCE phylogenomics clarifies classical taxonomy in the pyramid ants, genus *Dorymyrmex* (Hymenoptera: Formicidae)." Pacific Branch Ent. Soc. Amer., Santa Rosa, CA.
2021 **Seminar**: "Arid-adapted pyramid ants (Formicidae: *Dorymyrmex*) show an amphitropical distribution and an ongoing radiation." Entomology, Denver, CO.
*2020 **Infographic Poster**: "Why do Museum Collections Matter?" Entomology (virtual).
*2019 **Seminar**: "Unraveling the Phylogeny and Biogeography of *Dorymyrmex*, a New World Amphitropical Disjunct." Entomology, St. Louis, MO.
*2019 **Infographic Poster**: "Discovery and Diversity: The Importance of Systematic Entomology in Today’s World." Entomology, St. Louis, MO.
2017 **Seminar**: "India as a 'Biotic Ferry': Systematics and Biogeography of the Harvestman Family Assamiidae." Oberski, J.T., P.P. Sharma, and S.L. Boyer. Society for Integrative and Comparative Biology, New Orleans, LA.
2016 **Group Poster**: "A dated molecular phylogeny for *Austropurcellia*, short-range endemic mite harvestmen (Cyphophthalmi, Pettalidae) from the Australian Wet Tropics." Int’l Congress on Arachnology, Golden, CO.
2016 **Group Poster**: "Systematics and Biogeography of Mite Harvestmen from Australia’s Wet Tropics." Society for Integrative and Comparative Biology, Portland, OR.

SCIENTIFIC SOCIETIES

Entomological Society of America (ESA)
    International Branch (IB)
    Systematics & Evolutionary Biology (SysEB)
International Union for the Study of Social Insects (IUSSI)
    North American Section (NAS)
    Central European Section (CES)
International Society of Hymenopterists (ISH)
Entomological Collections Network (ECN)
American Association of University Women (AAUW)
American Association for the Advancement of Science (AAAS)

PEER REVIEWS

Arthropod Systematics and Phylogeny 2
Biological Journal of the Linnean Society 1
Ecology and Evolution 1
European Journal of Taxonomy 1
Insect Systematics and Diversity 4
Journal of Biogeography 1
Myrmecological News 1
PeerJ 1
Proceedings of the Royal Society B 1
Systematic Biology 1
Zoological Research 1
ZooKeys 1
ZooTaxa 2