

JACQUELYN LEE FITZGERALD

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EDUCATION

- 2025 **Ph.D., Plant Biology and Conservation**
Northwestern University, Evanston, IL, USA
Chicago Botanic Garden, Glencoe, IL, USA
Advisor: Dr. Paul J CaraDonna
- 2016 **B.S., Biological Sciences**
North Carolina State University, Raleigh, NC, USA
Concentration in Evolution, Ecology, and Conservation

ACADEMIC & RESEARCH APPOINTMENTS

- 2025- **Visiting Assistant Professor of Biology**
Williams College
Williamstown, MA, USA
- 2020- **Principal Investigator**
Rocky Mountain Biological Laboratory
Gothic, CO, USA
- 2019-24 **Graduate Research Fellow (NSF-GRFP)**
National Science Foundation

PUBLICATIONS

Refereed journal articles

- 2024 **Fitzgerald, J.L., J.E. Ogilvie, P.J. CaraDonna.** *Intraspecific body size variation across distributional moments reveals trait filtering processes.* Journal of Animal Ecology, 94, no 3: 394-409. Special issue on intraspecific variation in evolution and ecology.

- 2022 **Fitzgerald, J.L.**, J.E. Ogilvie, P.J. CaraDonna. 2022. *Ecological drivers and consequences of bumble bee body size variation*. Environmental Entomology, 51, no 6: 1055-1068.
- 2021 **Fitzgerald, J.L.**, K.L. Stuble, L.M. Nichols, S.E. Diamond, T.R. Wentworth, S.L. Pelini, N.J. Gotelli, N.J. Sanders, R.R. Dunn, CA. Penick. 2021. *Abundance of spring- and winter-active arthropods declines with warming*. Ecosphere, 12, no. 4: e03473.
- 2020 Pinilla-Gallego, M.S., E.E. Williams, A. Davies, **J.L. Fitzgerald**, S. McArt, R.E. Irwin. 2020. *Within-colony transmission of microsporidian and trypanosomatid parasites in honey bee and bumble bee colonies*. Environmental Entomology, 49, no. 6: 1393-1401.
- 2019 Beasley, D.E., **J.L. Fitzgerald**, A. Fowler, K. Keleher, M.M. Lopez-Urbe, S.D. Frank, D.R. Tarpy, R.R. Dunn. *Do Bee Wings Adapt for Flight in Urban Environments?* 2019. Southeastern Naturalist , 18, no. 2:183–191

Manuscripts in preparation

- in press* **Fitzgerald, J.L.**, *The Near Future of Field Notes*. American Philosophical Society conference proceedings: "The Future of Field Work: The Promise and Perils of Research in the Twenty-First Century."
- in revision* **Fitzgerald, J.L.**, J.E. Ogilvie, P.J. CaraDonna. *How do morphological integration and trait scaling influence foraging specialization in bumble bees?*
- in review* Schenker, O.J. *, K.C. Arrowsmith, **J.L. Fitzgerald**. *Allometric scaling and variation in proboscis length across Rocky Mountain bumble bees (Bombus spp.)*.
* = undergraduate student
- in prep* Godtfredsen, E.B., et al, including **J.L. Fitzgerald**. *Phenological change does not have clear demographic consequences across taxa*. [in preparation for PNAS]
- in prep* **Fitzgerald, J.L.**, J.E. Ogilvie, P.J. CaraDonna, *Expansion and packing of trait-driven niche space in subalpine bumble bees*. [analysis phase]

GRANTS, FELLOWSHIPS, & AWARDS (total = \$162,186)

2024	Theodore Roosevelt Memorial Research Grant	\$1,000
	Rocky Mountain Biological Laboratory Fellowship Enderlein Fund	\$800
	Northwestern University Plant Biology and Conservation Research Award	\$1,650
2023	Rocky Mountain Biological Laboratory Fellowship Hunter Endowment	\$1,450
	Northwestern University Plant Biology and Conservation Research Award	\$900
2022	Lewis and Clark Fund for Exploration and Field Research	\$4,800
	Rocky Mountain Biological Laboratory Fellowship Hunter Endowment	\$1,200

	Northwestern University Plant Biology and Conservation Research Award	\$750
	Colorado Mountain Club Foundation	\$500
2021	Rocky Mountain Biological Laboratory Fellowship Snyder Endowment	\$1,500
	Northwestern University Plant Biology and Conservation Research Award	\$1,200
	American Alpine Club Research Grant	\$750
	Northwestern University Data Visualization Contest (1 st place)	\$250
2020	Rocky Mountain Biological Laboratory Fellowship Hunter Endowment	\$1,200
2019	National Science Foundation Graduate Research Fellowship Award	\$138,000
2015	National Science Foundation / Society for the Study of Evolution Travel Grant	\$2,256
	Atlantic Coast Conference Inter-Institutional Academic Collaborative Fellowship	\$2,980
2014	North Carolina State University Undergraduate Research Award	\$1,000
2013	Gamma Sigma Delta recognition of Outstanding Academic Achievement	
	Sigma Xi Undergraduate Research Award	

CONFERENCE PRESENTATIONS

Contributed talks

- 2025 **Fitzgerald, J.L.**, J.E. Ogilvie, P.J. CaraDonna. *Intraspecific trait filtering across distributional moments*. Ecological Society of America Annual Meeting, Baltimore, MD, USA.
- 2024 **Fitzgerald, J.L.**, J.E. Ogilvie, P.J. CaraDonna. *Trait scaling and foraging in bumble bees*. Entomological Society of America Annual Meeting, Phoenix, AZ, USA.
* 1st place Student Competition for the President's Prize, Graduate SysEB: Morphology and Phylogenetics
- 2023 **Fitzgerald, J.L.**, P.J. CaraDonna. *Intraspecific variation of thermal tolerance in bumble bees*. Ecological Society of America Annual Meeting, Portland, OR, USA.
- 2022 **Fitzgerald, J.L.**, J.E. Ogilvie, P.J. CaraDonna. *Drivers and Consequences of Bumble Bee Body Size Variation*. Ecological Society of America Annual Meeting, Montréal, Québec, CA.
- 2016 **Fitzgerald, J.L.**, M. Lopez-Urbe, D. Beasley, D. Tarpy. *Morphometric Wing Analysis of Urban Bees*. Southern Appalachian Honeybee Research Consortium, Clemson, SC, USA.
- 2015 **Fitzgerald, J.L.**, T. Wentworth, C. Penick, K. Stuble, R. Dunn. *Seasonal Effects of Climate Warming on Forest-Floor Arthropod Communities*. Association of Southeastern Biologists Annual Meeting, Chattanooga, TN, USA.

Forthcoming talks

Oct '25 **Fitzgerald, J.L.**, *The Near Future of Field Notes*. Selected for themed section on Models for the Future, "The Future of Field Work: The Promise and Perils of Research in the Twenty-First Century", American Philosophical Society, Philadelphia, PA, USA.

TEACHING

Instructor

2025 *Conservation Biology* (BIOL 329/ENVI 339), Williams College

2022-23 *Analytical Toolkit for Ecologists* (PBC 470/499), Northwestern University

Guest Lecture

2025 "Pollination in a changing world," *Plant-Animal Interactions* (BIO 333/PBC 410), Northwestern University

2025 "Mutualism," *Population & Community Ecology* (BIO 349/PBC 402), Northwestern University

2024 "Ecological Responses to Climate Change," *Critical Topics in Ecology and Conservation* (PBC 451), Northwestern University

2022 "Evolution of Pollination," *Pollination Ecology* (BIOL_SCI 101), Northwestern University
"Pollinators and Climate Change," *Pollination Ecology* (BIOL_SCI 101), Northwestern University

"Bumble Bees and Climate Change," *Critical Topics in Ecology and Conservation* (PBC 451), Northwestern University

Teaching Assistant

2025 *Plant-Animal Interactions* (BIO 333/PBC 410), Northwestern University

Population & Community Ecology (BIO 349/PBC 402), Northwestern University

2020 *Evolutionary Processes* (BIO 342), Northwestern University

2016 *Ecology* (BIO 360), North Carolina State University

MENTORING

Undergraduate research advisor

2025 Sasha DeCosta, Williams College
Emily Salinas Romero, Williams College

2024-25 Olivia Schenker, Northwestern University & Rocky Mountain Biological Laboratory
2023 Hannah Burke, Florida State University & Rocky Mountain Biological Laboratory
2022-23 Brayden Saunders, Lake Forest College & Rocky Mountain Biological Laboratory

High school research advisor

2023 Megan Li, Hockaday School & Rocky Mountain Biological Laboratory
2023 Savannah Chun, Hockaday School & Rocky Mountain Biological Laboratory

PROFESSIONAL SERVICE & LEADERSHIP

2022-24 Graduate Student Coordinator, Rocky Mountain Biological Laboratory
2021-23 Graduate Student Representative to the Science Department, Chicago Botanic Garden
2020-21 Graduate Mentor, NSF-GRFP workshop, Botanical Society of America
2019- Manuscript reviewer (* = multiple assignments)
*Global Change Biology**, *Ecology**, *Functional Ecology**, *Journal of Animal Ecology**, *Journal of Pollination Biology**, *Ecology Letters*, *Journal of Ecology*, *Oikos*, *Ecosphere*, *Oecologia*, *Plant Biology*, *Western North American Naturalist*

PROFESSIONAL DEVELOPMENT

2024 Workshop, *Integrating Theory and Data in Plant Pollinator Interactions*, Rocky Mountain Biological Laboratory, Gothic, CO, USA
2024 Workshop, *Communicating Science*, National Institute for Theory and Mathematics in Biology, Chicago, IL, USA
2020 Workshop, *Public Writing Workshop*. Center for Civic Engagement, Northwestern University, Evanston, IL, USA
2019 Workshop, *Bee Diversity and Identification in North Carolina*, North Carolina State University, Raleigh, NC, USA
2017 Workshop, *Storytelling for Science Communication*, Story Collider, Raleigh, NC, USA.
2017 Workshop, *Elements of Visualization Design*, North Carolina State University, Raleigh, NC, USA.

EDUCATIONAL EQUITY & ACCESS

2025 Speaker, *How to Go to Grad School*, Rocky Mountain Biological Laboratory
2024 Attendee, *Centering Identities in STEM*, Searle Center for Advancing Learning and Teaching at Northwestern University
2022-24 Organizer, *RMBL Buddies Mentoring Program*, Rocky Mountain Biological Laboratory

- 2024 Attendee, *Identity Based Field Safety Training*, Rocky Mountain Biological Laboratory
- 2023 Organizer, *Inclusive Mentorship Training*, Rocky Mountain Biological Laboratory
- 2023 Attendee, *Entering Mentoring: Mentoring Up + Down* (3-day training), Northwestern University Graduate School
- 2022 Organizer, *Entering Graduate School Discussion Panel*, Rocky Mountain Biological Laboratory

SELECT SCIENCE COMMUNICATION & OUTREACH

- 2022-25 Expert Hike Leader, Crested Butte Wildflower Festival, Crested Butte, CO, USA.
- 2018-25 Program on Bees and Pollination
 - 1. DelaWild, Winterthur Museum, Winterthur, DE, USA, 2025
 - 2. sustainNU, Evanston, IL, USA, 2024
 - 3. Amigos International, Gothic, CO, USA, 2022
 - 4. Citizens Climate Lobby Wildlife Action Team, Virtual, 2022
 - 5. Crested Butte Land Trust, Rocky Mountain Biological Laboratory, Gothic, CO, USA, 2021
 - 6. College First, Chicago Botanic Garden, Glencoe, IL, USA, 2020
 - 7. Appalachian State University Academy at Middle Fork, Walkertown, NC, USA, 2019
 - 8. Erwin Montessori School, Greensboro, NC, USA, 2018
- 2016 Opening Remarks, "*Celebrating the Intersection of Art and Science*," College of Sciences Donor Dinner, North Carolina State University, Raleigh, NC, USA.
- 2015 Co-organizer, The Insects of M.C. Escher. College Night at the North Carolina Museum of Art, Raleigh, NC, USA.