

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, C.A. 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-Uribe, 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-Uribe, 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, <i>Identity Based Field Safety Training</i> , Rocky Mountain Biological Laboratory
2023	Organizer, <i>Inclusive Mentorship Training</i> , Rocky Mountain Biological Laboratory
2023	Attendee, <i>Entering Mentoring: Mentoring Up + Down</i> (3-day training), Northwestern University Graduate School
2022	Organizer, <i>Entering Graduate School Discussion Panel</i> , 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.