

Samuel Butler Fey

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EDUCATION

- Yale University, Postdoctoral Fellowship** 2014-2017
Department of Ecology and Evolutionary Biology. Advisor: David A. Vasseur
- Dartmouth College, Ph.D.** 2014
Ecology and Evolutionary Biology, Advisor: Kathryn L. Cottingham
- Hamilton College, B.A.** 2006
Major in Biology. Minor in Environmental Studies. Study abroad in Christchurch, New Zealand
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CURRENT APPOINTMENTS

- Associate Professor.** Reed College. Department of Biology 2022-Present

PRIOR APPOINTMENTS

- Assistant Professor.** Reed College. Department of Biology 2017-2022
- Postdoctoral Fellow.** Yale University. Department of Ecology and Evolution 2014-2017
- Honorary Fellow.** University of Wisconsin, Madison. Department of Zoology 2016-2017
- Visiting Postdoctoral Scholar.** Dartmouth College. Department of Biological Sciences 2014-2016
- Lecturer.** Dartmouth College. Department of Biological Sciences 2013
- Environmental Protection Agency (EPA) Science to Achieve Results (STAR) Fellow** 2012-2014
- NSF Integrative Graduate Education and Research Traineeship (IGERT) Fellow** 2010-2012
- Graduate Teaching Assistant.** Dartmouth College 2008-2010
- Postbaccalaureate Fellow.** National Institutes of Health 2006-2008
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GRANTS, FELLOWSHIPS, AWARDS

- University of Nevada Peter F. Brussard Memorial Lectureship in Conservation Biology 2024
- National Science Foundation (NSF) CAREER Award (DEB 2236526) 2023-2028
“CAREER: Resolving multi-scale ecological consequences of thermal refuges amidst climate warming”
PI. Total: \$1,080,000.
- NSF Division of Environmental Biology (DEB 1856415) 2019-2023
“RUI: Collaborative Research: Uncovering the population and community level consequences of phenotypic plasticity” PI with David A. Vasseur (Yale) and Collin T. Kremer (UCLA).
Total: \$693,078 + additional \$51,836 for supplemental post-baccalaureate support.
- Stillman Drake Faculty Development Awards at Reed College (\$950-\$1100) 2018-2023
- James S. McDonnell Foundation Postdoctoral Fellowship in Complex Systems (\$200,000) 2014-2017
- Environmental Protection Agency STAR (Science to Achieve Results) Fellowship (\$126,000) 2012-2014

Dartmouth Graduate Student Filene Teaching Award	2013
Neukom Institute 3 rd place prize for outstanding graduate research in computational science	2013
GLEON (Global Lake Ecological Observatory Network) Meeting Travel Fellowship	2009, 2011, 2013
National Science Foundation (NSF) Doctoral Dissertation Improvement Grant (\$11,926)	2011
Dartmouth Gilman Fellowship (\$1,500)	2011
David Cushing Prize: Best paper in <i>Journal of Plankton Research</i> by an early career scientist	2010
NSF IGERT Fellowship: Polar Environmental Change	2010-2012
Porter Foundation Grant for Research in Sustainability Science (\$5,000)	2009
Dartmouth Graduate Student Travel Fellowship (\$500)	2009
Woodstock Union Endowment Foundation (\$1,000)	2009
NIH Postbaccalaureate Intramural Research Training Award	2006-2008

PUBLICATIONS

=(co)equal authorship *undergraduate coauthor

1. Tye SP, **Fey SB**, Gibert JP, Siepielski AM. 2024. Predator mass mortality events restructure freshwater food webs via trophic decoupling. *Nature*. 626: 335-340.
2. Slein MA*, Bernhardt JR, O'Connor MI, **Fey SB**. 2023. Effects of thermal fluctuations on biological processes: a meta-analysis of experiments manipulating thermal variability. *Proceedings of the Royal Society B: Biological Sciences*. 290: 20222225.
3. Theus ME*, Michaels J, **Fey SB**. 2023. Interactive effects of temperature and Bisphenol A on phytoplankton growth and community structure. *Conservation Physiology*. 11: 1-13.
4. Gerhard M, Koussoroplis AM, and 18 others including **Fey SB**. 2022. Environmental variability in aquatic ecosystems: avenues for future experimental studies in a multifactorial world. *Limnology and Oceanography Letters*. 8: 247-266.
5. Meier HS*, Schuman IJ*, Layden TJ, Ritz A, Kremer CT, **Fey SB**. 2022. Temperature mediated transgenerational plasticity influences movement behavior in the green algae *Chlamydomonas reinhardtii*. *Functional Ecology*. 36: 2969-2982.
6. Tye SP, Siepielski AM, Bray A, Ryple AL, Phelps NBD, **Fey SB**. 2022. Climate warming amplifies frequency of fish mass mortality events across north temperate lakes. *Limnology and Oceanography Letters*. 7: 510-519.
7. Schuman IJ*, Meier HS*, Layden TJ, **Fey SB**. 2022. The relationship between thermal spatial variability and mean temperature alters movement and population dynamics. *Ecosphere*. 13: e4254.
8. Theus ME*, Layden TJ, McWilliams N*, Crafton-Temple S*, Kremer CT, **Fey SB**. 2022. Photoperiod regimes influence the shape and scaling of freshwater phytoplankton responses to light and temperature. *Oikos*. 6, E08839.

9. Shoemaker LG, Hallet LM, and 17 others including **Fey SB**. 2022. The long and the short of it: Decomposing synchrony and compensation across temporal scales. *Ecology*. 103, e3650.
10. **Fey SB**, Kremer CT, Layden TJ, Vasseur DA. 2021. Resolving the consequences of gradual phenotypic plasticity for populations in variable environments. *Ecological Monographs*. 91, E01478, 1-14.
11. Layden TJ, Kremer CT, Pietsch DB*, Kolk M*, Vasseur DA, **Fey SB**. 2021. Thermal acclimation influences the growth and toxin production of freshwater cyanobacteria. *Limnology and Oceanography Letters*. 7, 34-42.
12. Walter JA, Shoemaker LG, Lany NK, Castorani MCN, **Fey SB**, Dudney JC, Gherardi L, Reyes CP, Rypel AL, Cottingham KL, Suding KN, Reuman DC, Hallett LM. 2021. The spatial synchrony of species richness and its implications for ecosystem stability. *Ecology*. 102, e03486, 1-11
13. **Fey SB**, Theus ME*, Ramirez AR. 2020. Course-based undergraduate research experiences in a remote setting: two case studies documenting implementation and student perceptions. *Ecology and Evolution*. 10, 12528-12541.
14. **Fey SB**, Gibert JP, Siepielski AM. 2019. The consequences of mass mortality events for the structure and dynamics of biological communities. *Oikos*. 128, 1679-1690. **Selected as 'Editors' Choice' for October 2019 Issue**
15. AL Till*, AL Rypel, A Bray, **SB Fey**. 2019. Temperature extremes are concurrent with fish die-offs in north temperate lakes. *Nature Climate Change*. 9, 637-641.
16. **Fey SB**, Vasseur DA, Alujevic K, Kroeker KJ, Logan ML, DeLong JP, O'Connor MI, Peacor S, Rudolf VHW, Selden RL, Sih A, Clusella-Trullas S. 2019. Opportunities for behavioral rescue under rapid environmental change. *Global Change Biology*. 25, 3110-3120.
17. Woods HA, Kingsolver JG, **Fey SB**, Vasseur DA. 2018. Uncertainty in geographic estimates of performance and fitness. *Methods in Ecology and Evolution*. 1-13.
18. Culler LE, Wood ZT*, Diaz J, **Fey SB**, Ayres MP, Timmins D. 2018. Streams in an uninhabited watershed have predictably different thermal sensitivities to variable summer air temperatures. *Freshwater Biology*. 63, 676-686.
19. Collins SL, Avolio ML, Gries C, Hallett LM, Koerner SE, La Pierre KJ, Rypel AL, Sokol ER, **Fey SB**, Flynn DFB, Jones SK, Ladwig LM, Ripplinger J, Jones MB. 2018. Temporal heterogeneity increases with spatial heterogeneity in ecological communities. *Ecology*. 99, 858-865.
20. Kremer CT, **Fey SB**, Arellano AA*, Vasseur DA. 2018. Gradual plasticity alters population dynamics in variable environments: thermal acclimation in the green alga *Chlamydomonas reinhardtii*. *Proceedings of the Royal Society B: Biological Sciences*. 285, 1-9.
21. **Fey SB**, Wieczynski D. 2017. The temporal structure of the environment may influence range expansions during climate warming. *Global Change Biology*. 23, 636-645
22. KL Cottingham, **Fey SB**, Fritschie KJ, Trout-Haney JV. 2017. Advancing ecosystem science by promoting greater use of theory and multiple research approaches in graduate education. *Ecosystems*. 20, 267-273.

23. **Fey SB**, Vasseur DA. 2016. Thermal variability alters the impact of climate warming on consumer-resource systems. *Ecology*. 97, 1690-1699.
24. Dillon ME, Woods HA, Wang G, **Fey SB**, Vasseur DA, Telemeco RS, Marshall KE, Pincebourde S. 2016. Life in the frequency domain: the biological impacts of changes in climate variability at multiple time scales. *Integrative and Comparative Biology*. 56, 14-30.
25. **Fey SB**, Siepielski AM, Nusslé S, Cervantes-Yoshida K, Hwan JL, Huber ER, *Fey MJ, A Catenazzi, Carlson SM. 2015. Recent shifts in the occurrence, causes, and magnitude of animal mass mortality events. *Proceedings of the National Academy of Sciences, USA*. 112, 1083-1088.
26. Sanders RW, Cooke SL, Fischer JM, **Fey SB**, Heinze AW, Jeffrey WH, Macaluso AL, Moeller RE, Morris DP, Neale P, Olson M, Pakulsk JD, Porter JA, Schoener DM, Williamson CE. 2015. Shifts in plankton community structure and productivity after additions of naturally occurring dissolved organic matter: results from large-scale lacustrine mesocosms. *Limnology and Oceanography*. 60, 2130-2144.
27. **Fey SB**, Mertens AN*, Cottingham KL. 2015. Autumn leaf subsidies influence spring dynamics of freshwater plankton communities. *Oecologia*. 178, 875-885.
28. **Fey SB**, Mertens AN*, Beversdorf LJ, McMahon KD, Cottingham KL. 2015. Recognizing cross-ecosystem responses to changing temperatures: soil warming impacts pelagic food webs. *Oikos*. 124, 1473-1481.
29. **Fey SB**, Herren CM*. 2014. Temperature-mediated biotic interactions influence enemy release of non-native species in warming environments. *Ecology*. 95, 2246-2256.
30. Bertilsson S, Burgin A, Carey CC, **Fey SB**, Grossart H, Grubisic L, Jones I, Kirillin G, Lennon JT, Shade A, Robyn S. 2013. The below-ice microbiome of seasonally frozen lakes. *Limnology and Oceanography*. 58, 1998-2012.
31. O'Donnell D*, **Fey SB**, Cottingham KL. 2013. Nutrient availability influences kairomone-induced defenses in *Scenedesmus acutus* (Chlorophyceae). *Journal of Plankton Research*. 35, 191-200.
32. **Fey SB**, Cottingham KL. 2012. Thermal sensitivity predicts the establishment success of non-native species in a mesocosm warming experiment. *Ecology*. 93, 2313-2320.
33. **Fey SB**, Cottingham KL. 2011. Linking biotic interactions and climate change to the success of exotic *Daphnia lumholtzi*. *Freshwater Biology*. 56, 2196-2209.
34. **Fey SB**, Mayer ZA*, Davis SD*, Cottingham KL. 2010. Zooplankton grazing of *Gloeotrichia echinulata* and associated life history consequences. *Journal of Plankton Research*. 32, 1337-1347. **2010 David Cushing Prize winner for best paper in *JPR* by an early career stage scientist**

While at National Institutes of Health (2006-2008)

35. Schmeisser H, **Fey SB**, Horowitz J, Fischer ER, Miyake K, Balinsky CA, Miyake K, Bekisz J, Snow AL, Zoon KC. 2013. Type I interferons induce autophagy in certain human cancer cell lines. *Autophagy*, 9, 1-14.
36. Baron S, Finbloom F, Horowitz J, Bekisz J, Morrow A, Zhao T, **Fey S**, Schmeisser H, Balinsky C, Miyake K, Clark C, Zoon K. 2011. Near eradication of clinically relevant concentrations of human

tumor cells by interferon-activated monocytes in vitro. *Journal of Interferon and Cytokine Research*, 33, 276-282.

PRESENTATIONS (first author, oral presentations)

Presentations at National Meetings

Fey SB, Campbell E*, Meier HA*, Gibson D*, Smith A*, Layden T, Strecker A. 2023. Conceptions and determinants of freshwater pond thermal refuges. Ecological Society of America (ESA) annual meeting. Portland, OR.

Fey SB, Kremer CT, Layden T, Kolk M*, Alford H*, Vasseur DA. 2019. From nuisance to nuance: resolving the ecological consequences of gradual plasticity. Ecological Society of America (ESA) annual meeting. Louisville, KY.

Fey SB, Gibert JP, Siepielski AM. 2018. The consequences of mass mortality events for the structure and dynamics of biological communities. Ecological Society of America (ESA) annual meeting. New Orleans, LA.

Fey SB, Vasseur DA, Logan ML, Alujević K, O'Connor MI, Clusella-Trullas S. 2018. Constraints and opportunities for behavioral rescue in response to rapid environmental change. Society for Integrative and Comparative Biology (SICB) annual meeting. San Francisco, CA.

Fey SB, Vasseur DA, Logan ML, Alujević K, Clusella-Trullas S. 2017. Microclimatic variation, behavioral thermoregulation, and thermal sensitivity jointly mediate the response of ectotherms to rapid environmental change. Ecological Society of America (ESA) annual meeting. Portland, OR.

Fey SB. 2017. Species interactions in variable environments: How temporal patterns of temperature may influence competitive interactions. Oral Presentation. SICB annual meeting. New Orleans, LA.

Fey SB, Vasseur DA. 2015. Theoretical predictions for consumer-resource dynamics in variable thermal environments. Oral Presentation. ESA annual meeting. Baltimore, MD.

Fey SB, Herren CM*. 2014. Consequences of asymmetric responses to changes in temperature. Poster Presentation. Gordon Research Seminar: Unifying Ecology Across Scales. Biddeford, ME.

Fey SB, Mertens AN*, Cottingham KL. 2014. Inter-annual response of freshwater plankton communities to leaf additions: do autumn subsidies impact spring dynamics? Oral Presentation. Joint Aquatic Sciences Meeting. Portland, OR.

Fey SB, Mertens AN*, Beversdorf LJ, McMahon KD, Cottingham KL. 2013. Climate change consequences cross ecosystem boundaries: increase in soil temperature impact lake plankton communities through modifying terrestrial vegetation subsidies. Oral Presentation. ESA annual meeting. Minneapolis, MN.

Fey SB, Herren CM*. 2012. Predicting the impact of climate change on the establishment success of non-native species. Oral Presentation. ESA annual meeting. Portland, OR.

Fey SB, Cottingham KL. 2010. Climate change and the establishment of *Daphnia lumholtzi*. Oral Presentation. Association for the Sciences of Limnology and Oceanography (ASLO) summer meeting. Santa Fe, NM.

Invited Seminars

Fey SB. 2023. Lewis and Clark College. Department of Biology. Portland, OR

Fey SB. 2021. Reed College. Department of Biology. Portland, OR

Fey SB. 2021. Duke University. Department of Biology. Durham, NC.

Fey SB. 2019. University of Oregon, Oregon State University. Dept. of Env. Science and Management, and Portland State University. Student Research Colloquium Keynote Speaker. Portland, OR.

Fey SB. 2019. Mississippi State University. Dept. of Wildlife, Fisheries, & Aquaculture. Starkville, MS

Fey SB. 2019. Portland State University. Department of Biology. Portland, OR

Fey SB. 2018. Oregon State University. Department of Integrative Biology. Corvallis, OR.

Fey SB. 2017. Washington State University. School of Biological Sciences. Vancouver, WA.

Fey SB. 2016. University of Vermont. The Rubenstein School. Burlington, VT.

Fey SB. 2016. Reed College. Department of Biology. Portland, OR.

Fey SB. 2016. College of William and Mary. Department of Biology. Williamsburg, VA.

Fey SB. 2015. Hamilton College. Department of Biology. Clinton, NY.

Fey SB. 2011. Franklin and Marshall College: Department of Biology. Lancaster, PA.

Fey SB. 2011. Colby Sawyer College: Department of Natural Sciences. New London, NH.

Presentations by students and lab members

Meier HS*, Anderson DM, Vasseur DA, **Fey SB**, Kremer CT. 2023. Nutrient storage links past thermal exposure to current performance in phytoplankton populations. Ecological Society of America (ESA) annual meeting. Portland, OR.

Gurin KC*, **Fey SB**. 2023. The impact of urbanization on the trophic niche of coyotes. Ecological Society of America (ESA) annual meeting. Portland, OR.

Schuman IJ*, Meier HS*, Layden TJ, **Fey SB**. 2022. Dynamic thermal spatial variability can influence behavioral and population-level processes. Ecological Society of America (ESA) annual meeting. Montreal, Canada.

Meier HS*, Schuman IJ*, Layden TJ, Ritz A, Kremer CT, **Fey SB**. 2022. Temperature mediated transgenerational plasticity influences movement behavior in the green algae *Chlamydomonas reinhardtii*. Ecological Society of America (ESA) annual meeting. Montreal, Canada.

Theus ME*, Michaels J, Fey SB. 2021. Interactive Effects of Temperature and Bisphenol A on Phytoplankton Growth, Community Structure, and Bioremediation Capacity. Ecological Society of America (ESA) annual meeting. Virtual conference.

Meier HS*, Layden TJ, Ritz A, Fey SB. 2021. Phytoplankton on the go! Understanding the effects of thermal acclimation across scales on the movement behavior of *C. reinhardtii*. Ecological Society of America (ESA) annual meeting. Virtual conference.

Tye SP, Fey SB, Gibert JP, Siepielski AM. 2021. Mass mortality events of predators generate unique community dynamics. Ecological Society of America (ESA) annual meeting. Virtual conference.

Theus ML*, Layden TL, McWilliams N*, Kremer CT, Vasseur DA, Fey SB. The effects of temperature-light interactions on phytoplankton growth. 2020. Ecological Society of America (ESA) annual meeting. Poster Presentation. Salt Lake City, UT. Virtual conference.

Layden TJ, Brubaker DL*, Kolk MA*, Kremer CT, Trout-Haney JV, Vasseur DA, Fey SB. Thermal acclimation influences the growth and toxin production of freshwater cyanobacteria. 2020. Ecological Society of America (ESA) annual meeting. Poster Presentation. Salt Lake City, UT. Virtual conference.

Slein MA*, Layden TJ, Kremer CT, Vasseur DA, Fey SB. Temperature-dependent stoichiometry in *Chlamydomonas reinhardtii*. Ecological Society of America (ESA) annual meeting. 2020. Poster Presentation. Salt Lake City, UT. Virtual conference.

Lazarte AR*, Fey SB, Ritz A. 2019. Modeling phytoplankton movement and fitness in lakes. The 10th Association for Computing Machinery (ASM) International Conference on Bioinformatics, Computational Biology, and Health Informatics. Poster Presentation. September 2019.

Theus M*, Meier H*, Fey SB. 2019. The effects of temperature-light interactions for freshwater phytoplankton fitness. EVO-WIBO Annual meeting. Poster Presentation.

Layden TJ, Kremer CT, Kolk MA, Fey SB. 2019. Thermal acclimation influences fitness of freshwater phytoplankton species. Pacific Northwest Water Research Symposium. Corvallis, OR.

Presentations at International Meetings

Fey SB, Herren CM. 2012. Implications of temperature-sensitive enemy release for lake food webs. GLEON 14 meeting: Mulranny, Ireland.

Fey SB. 2011. Can thermal reaction norms predict the establishment success of non-native species in a warming world? GLEON 13 meeting: Sunapee, NH.

Fey SB. 2011. Changing temperatures and the movement of species. Polar Environmental Change Symposium. Public oral presentation. Nuuk, Greenland.

Fey SB, Cottingham KL. 2010. Temperature and cyanobacterial blooms mediate the future establishment of *Daphnia lumholtzi*. Poster presentation. GLEON 11 meeting: Nanjing, China.

Fey SB, Mayer ZA*, Davis SC, Cottingham KL. 2009. Zooplankton grazing of *Gloeotrichia echinulata* and associated life history consequences. Poster presentation. GLEON 9 meeting; Boulder Junction, WI.

Fey SB, Schmeisser H, Mejido J, Nie H, Tsuno T, Zoon KC. 2007. Influence of IFN- α 2c on growth arrest, apoptosis, and autophagy in Daudi cells. Poster presentation. ISICR Annual Meeting; Oxford, UK.

Presentations at Regional Meetings

Fey SB. 2017. Using quantitative ecology to resolve the response of organisms to rapid environmental change. Pacific Northwest Quantitative Biology Meeting. Portland, OR.

Fey SB. 2011. Does hotter mean more invasive species? Poster presentation. Understanding Rapid Environmental and Social Change in the Arctic meeting. Juneau, AK.

Fey, SB, Schmeisser H, Fischer B, Mejido J, Zoon KC. 2008. PCD induction induced by IFN-alpha. Poster presentation. Keystone Symposia: Cell Death in the Immune System; Breckenridge, CO.

Fey, SB. 2008. The effect of human interferon-alpha 2c on apoptosis and autophagy induction in Daudi Burkitt's Lymphoma cells. Oral presentation. Postbaccalaureate Seminar Series; Bethesda, MD.

Fey, SB, Schmeisser H, Mejido J, Zoon KC. 2007. Influence of IFN-a2c on growth arrest, apoptosis, and autophagy in Daudi cells. Poster presentation. 20th Anniversary NIH Research Festival; Bethesda, MD.

Fey, SB, Pfitsch W. 2006. Ecological interactions limiting molybdenum uptake in *Lupinus perennis* and symbiotic bradyrhizobia. Poster presentation. Annual Adirondack Natural History Conference; Albany, NY.

Invited Panel Discussions and Presentations at Public Science Events

Fey SB. 2021. On being an ecologist at a small liberal arts college. G. Evelyn Hutchinson Environmental Postdoctoral Fellowship Career Development Workshop. Yale University. New Haven, CT.

Fey SB. 2020. Changing mean and variance in ecosystems under global change. Expert Panellist. AQUACOSM webinar series on Consequences of Global Change on Aquatic Ecosystems. Oldenburg, Germany.

Fey SB. 2017. Forecasting ecology amidst global change. Oral Presentation. 4 Lakes SCUBA Club. Madison, WI.

Fey SB, Chaves-Ulloa R, Trout-Haney JV, Culler LE, Cottingham KL. 2014. The future of aquatic science: an education session for undergraduates. Joint Aquatic Sciences Meeting. Portland, OR.

TEACHING EXPERIENCE

Course Director

Bio 101: Topics in Biology, Reed College, Department of Biology	2018-22
Bio 211: Scientific Literature and Discourse, Reed College, Department of Biology	2020
Bio 301: Ecology, Reed College, Department of Biology	2018-20, 22-23
Bio 431: Global Change Ecology, Reed College, Department of Biology	2017-19, 2021-22
Bio 481: Independent study, Reed College, Department of Biology	2019-20
Bio 22: Methods in Ecology, Dartmouth College, Department of Biological Sciences	2013

Senior Theses Advised at Reed College

2022-2023

Ena Hashimoto: Cloudy with a Chance of Plastics: Synthetic Fibers in Portland Rainwater

Danny Gibson: Trophic interactions and heatwave response in a freshwater community

Stockten Blanco: Predicting temperature-mediated mortality amidst anthropogenic climate change
Stephen Crafton-Temple: The implications of salinization & predation for inducible defenses

2021-2022

Kit Gurin: Effects of urbanization on coyote foraging patterns (Spring Fall)
Victoria Miller: Macroinvertebrate diversity in the Reed Canyon Stream
Sosie Nixon: Assessing pollinator post fire recovery dynamics (Spring Fall w/ A. Ramirez)
Monlam Tehshar: An abundance analysis of the new *Lepomis* sp. fish in Reed Lake.

2020-2021

Hannah Meier: Transgenerational plasticity and *C. reinhardtii* movement strategies (co-adv. w/ A.R. Ritz)
Isaac Schuman: Ecological consequences of the timing of spatial variation for *C. reinhardtii*
Meredith Theus: The environmental context of BPA bioremediation (co-adv. w/ J. Michaels).
Maggie Slein: Metanalysis of constant vs. fluctuation environments (w/ M.I. O'Connor & J. Bernhardt)

2019-2020

Emily Crook: Ecological drought: Drought ecology and policy from the ground up (Spring Fall)
Mahalia Dryak: Measuring microplastics and ecosystem health along the Clackamas River
Asher Smith: Size and temperature: An ecology of phytoplankton sizes in a changing world (Spring Fall)
Sasha Vukasovich: Caribbean *Sargassum* Inundation Events in the Context of Ocean Climate Change

2018-2019

Maeve Kolk: Rapid warming and nutrient availability impact cyanobacteria demographic performance.
Amy-Rose Lazarte: Modeling the body temperature in freshwater phytoplankton (co-adv. w/ A. Ritz).
Alec Lobnitz: Detecting behavioral thermoregulation in *Daphnia magna*
Nancy McWilliams: The effects of light-temperature interactions on freshwater phytoplankton

2017-2018

Hulali Alford, The effects of rising temperatures on the survivability of *C. reinhardtii*
Aaron Till, Modeling mass mortality events under climate change
Keita Yagi, Interdisciplinary investigations on fertility (co-adv. w/ K. Clausing)

Graduate Thesis Advising

Simon Tye. University of Arkansas, Dept. of Biology, Ph.D. Committee member 2019-2023
Guest Lecturer 2009-Present

Topics in Biology (Reed College 2018), Research Methods (University of Vermont 2016), Aquatic Ecology (College of William and Mary 2016), Ecology (Hamilton College, 2015), Ecology (Dartmouth 2015), Physiological Ecology (Dartmouth 2013), Animal Behavior (Dartmouth 2012), Ecology (Dartmouth 2012 Spring & Fall), Ecological Research in the Tropics (Dartmouth 2012), Introduction to Polar Systems (Dartmouth 2011), Invasive Species, Society and the Environment (Dartmouth 2011), Methods in Ecology (Dartmouth 2009, 2010, 2016).

Teaching Assistantships, Dartmouth College Department of Biological Sciences

Biology Foreign Studies Program: Ecological Research in the Tropics (2012), Physiological Ecology (2011), Methods in Ecology (2009), Evolution and Genomic Diversity (2009), Animal Behavior (2008)

PROFESSIONAL ACTIVITIES AND AFFILIATIONS

Reviewer for: *The American Naturalist*, *Animal Conservation*, Austrian Academy of Sciences, *Current Opinion in Insect Science*, *Ecology*, *Ecology Letters*, *Ecological Applications*, *Environmental Pollution*, *Freshwater Science (Journal of the North American Benthological Society)*, *Functional Ecology*, *Geosciences*, *Genomics*, *Global Change Biology*, *Hydrobiologia*, *Integrative and Comparative Biology*,

Journal of Plankton Research, Journal of Animal Ecology, Knowledge & Management of Aquatic Ecosystems, Natural Sciences and Engineering Research Council of Canada (NSERC) Strategic Project Grants, , Nature Climate Change, Nature Ecology and Evolution, Limnology and Oceanography, Limnology and Oceanography Letters, Oikos, Oecologia, PeerJ, PLoS ONE, Polar Biology, Proceedings of the Royal Society B, Science (co-review with KLC), Sustainability, Water Research, Yale Institute for Biospheric Studies (YIBS) Small Grant Program.

National Science Foundation Reviewer Panelist	2021, 2022, 2023
National Science Foundation Ad Hoc Reviewer	2018, 2022
Canadian Institute for Ecology and Evolution (CIEE) Working Group Title: Thermal variability and life amidst uncertainty in fluctuating environments	2020-2021
Ecological Society of America (ESA) Aquatic Ecology Section Secretary	2017-2019
Long Term Ecological Research (LTER) Network Working Group Title: Synthesizing population and community synchrony to understand drivers of ecological stability across LTER sites	2017-2020
NCEAS (National Center for Ecological Analysis and Synthesis) Working Group Title: A toolbox for analysis of long-term ecological dynamics	2014-2017
GLEON Limnology Theory Working Group Participant. Title: Examining patterns of controls on phytoplankton community assembly	2010-2014
Women in Science Project (WISP) research internship sponsor. Dartmouth College	2009-2011
Global Change Ecology Hands-on Research for High School Students. Woodstock, VT	2009-2011
Society Memberships: Association for the Science of Limnology & Oceanography, Ecological Society of America, Global Lake Ecological Observatory Network	