

Kyle F. Edwards
Curriculum Vitae

University of Hawai'i at Mānoa | Department of Oceanography
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EDUCATION

2005-2010. UC Davis, Population Biology, Ph.D. 2010.

Dissertation: "Coexistence mechanisms in a sessile marine community"

Advisor: John J. Stachowicz

1999-2003. University of Chicago,

B.A. Biology with Honors, 2003.

Thesis: "Ecological analysis of nitrogen content in the brown alga *Fucus gardneri*"

Advisor: Catherine Pfister

B.A. Religion and the Humanities, 2003.

PROFESSIONAL HISTORY

2014-present. Assistant Professor. University of Hawai'i at Mānoa, Department of Oceanography.

2010-2013. Postdoctoral Research Associate with Elena Litchman and Chris Klausmeier. Michigan State University.

RESEARCH

Current Awards

"Eating themselves sick? Ecological interactions among a mixotrophic flagellate, its prokaryotic prey, and an ingestible giant virus." NSF, 4/16-4/19, \$774K, co-PI.

Publications (2014-current)

Edwards, K. F. 2016. Community trait structure in phytoplankton: seasonal dynamics from a method for sparse trait data. *Ecology* 97:3441-3451.

Edwards, K. F., M. K. Thomas, C. A. Klausmeier, and E. Litchman. 2016. Phytoplankton growth and the interaction of light and temperature: A synthesis at the species and community level. *Limnology and Oceanography* 61:1232-1244.

- Bonachela, J. A., C. A. Klausmeier, K. F. Edwards, E. Litchman, and S. A. Levin. 2016. The role of phytoplankton diversity in the emergent oceanic stoichiometry. *Journal of Plankton Research* 38:1021-1035.
- Long, E. C., K. F. Edwards, and A. M. Shapiro. 2015. A test of fundamental questions in mimicry theory using long-term datasets. *Biological Journal of the Linnean Society* 116:487–494.
- Litchman, E., K. F. Edwards, and C. A. Klausmeier. 2015. Microbial resource utilization traits and trade-offs: implications for community structure, functioning, and biogeochemical impacts at present and in the future. *Frontiers in microbiology* 6.
- Edwards, K. F., M. K. Thomas, C. A. Klausmeier, and E. Litchman. 2015. Light and growth in marine phytoplankton: allometric, taxonomic, and environmental variation. *Limnology and Oceanography* 60:540–552.
- Litchman, E., P. Tezanos Pinto, K. F. Edwards, C. A. Klausmeier, C. T. Kremer, and M. K. Thomas. 2015. Global biogeochemical impacts of phytoplankton: a trait-based perspective. *Journal of Ecology* 103:1384–1396.
- Edwards, K. F., C. A. Klausmeier, and E. Litchman. 2015. Nutrient utilization traits of phytoplankton. *Ecology* 96:2311.
- Karban, R., L. H. Yang, and K. F. Edwards. 2014. Volatile communication between plants that affects herbivory: a meta-analysis. *Ecology letters* 17:44–52.
- Edwards, K. F. and E. Litchman. 2014. Phytoplankton communities. Pages 365–382 in *Marine Community Ecology and Conservation*, eds M. D. Bertness, J. F. Bruno, B. R. Silliman, J. J. Stachowicz. Sinauer.

TEACHING

Courses Taught

OCN 683: Advanced Statistics in R. Fall 2014-2016. 100% taught by Edwards. >20 students each year. Teaching evaluations from 2016: mean course score 4.8 out of 5, mean instructor score 4.8 out of 5. This course draws students from Oceanography, Marine Biology, Zoology, Botany, NREM. Will continue teaching this every fall.

OCN 621: Biological Oceanography. Spring 2017. 50% taught by Edwards (1.5 credits). Will continue co-teaching this every spring.

OCN 628: Benthic Biological Oceanography. Spring 2016. 25% taught by Edwards (1 credit)

Graduate Student Committees

Masters Thesis committee chair – Anamica Bedi

Ph.D. Thesis committee member – Lydia Baker, Chris Schvarcz, Pavica Srsen, Amanda Ziegler, Elaine Luo, Alice Vislova, Emily Young, Phoebe Woodworth-Jefcoats, Evan Barba

MS. Thesis committee member – Sara Coffey

Comprehensive Exam committee member – Chris Schvarcz, Pavica Srsen, Amanda Ziegler, Elaine Luo, Alice Vislova, Emily Young

Advisory committee member – Mika Siegelman, Stacey Naeemullah

GES student thesis mentor – Alaina Smith

SERVICE

Departmental

Graduate Student Recruitment Committee – BOD representative

Adviser for 6 GES students

GES Oral presentation reviewer (2)

GES Student thesis reviewer (2)

Guest lecturer (8 lectures), OCN 628

Guest lecturer (6 lectures), OCN 621

Guest participant (2 lectures), OCN 490

Departmental Seminar Organizer, Spring 2016

UH

Guest lecturer (1 lecture), BIOL 301

UROF Oral presentation judge, Fall 2016, Spring 2017

National/International

Instructor (1 week sole-taught), “Enhancing Linkages between Mathematics and Ecology”, Kellogg Biological Station, June 2015

External proposal reviewer: NSF (7); DFG (German Research Foundation) (2); Scientific Commission of Lower Saxony; PRESTIGE fellowship (France); ETAG (Estonian Research Council)

External thesis reviewer: James Cook University

Invited participant: Ocean Carbon Biogeochemistry workshop on the Biology of the Biological Pump; sDiv workshop on Global Changes in Marine Diversity and Productivity; Jena workshop on Effects of Trait Variability on Complementarity

Invited speaker: IGB Berlin workshop on Trait-Based Approaches in Aquatic Biodiversity Research (declined)

Journal reviewer: (30 manuscripts total since 2014) Ecology Letters, Limnology and Oceanography, Ecology, Marine Ecology Progress Series, American Naturalist, Frontiers in Microbiology, Journal of Plankton Research, Scientific Reports, Ecography, AIMS Geosciences