ROBIN ELAHI

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EDUCATION

2006-2012 Ph.D. in Biology, University of Washington
2003-2005 M.S. in Biology, California State University, Northridge
1998-2003 B.S. in Biology, Northeastern University

PROFESSIONAL APPOINTMENTS

2018- Lecturer, Hopkins Marine Station, Stanford University
2018 Visiting lecturer, Historical Marine Ecology Research Experience, Friday Harbor Labs, University of Washington
2016-2018 Postdoctoral researcher, Stanford University
2014-2016 National Science Foundation Postdoctoral Fellow, Stanford University and University of British Columbia

PUBLICATIONS

Bowler, D.E., Bjorkman, A.D., Dornelas, M., Myers-Smith, I., O'Connor, M.I., Navarro, L.M., Niamir, A., Supp, S.R., Waldock, C., Vellend, M., Blowes, S.A., Böhning-Gaese, K., Bruelheide, H., **Elahi, R**., Antão, L.H., Hines, J., Isbell, F., Jones, H.P., Magurran, A.E., Cabral, J.S., Winter, M., and A.E. Bates. Mapping human pressures on biodiversity across the planet uncovers anthropogenic threat complexes. *People and Nature*, in press

Chase, J., McGill, B., Thompson, P.L., Antao, L., Bates, A., Blowes, A., Dornelas, M., Gonzalez, A., Magurran, A., Supp, S.R., Winter, M., Bjorkman, A., Bruelheide, H., Byrnes, J.E., Cabral, J., **Elahi, R.**, Gomez, C., Guzman, H., Isbell, F., Myers-Smith, I., Jones, H., Hines, J., Vellend, M., Waldock, C., and M.I. O'Connor. Species richness change across spatial scales. Oikos 128: 1079-1091

Elahi, R., Ferretti, F., Bastari, A., Cerrano, C., Colloca, F., Kowalik, J., Ruckelshaus, M., Struck, A., and F. Micheli. 2018. Leveraging vessel traffic data and a temporary fishing closure to inform marine management. *Frontiers in Ecology and the Environment* 16: 440-446

Guest, J.R., Edmunds, P.J., Gates, R., Kufner, I., Andersson, A., Barnes, B., Chollett, I., **Elahi, R**., Courtney, T., Gross, K., Lenz, B., Mitarai, S., Mumby, P., Nelson, H., Parker, B., Putnam, H., Rogers, C., and L. Toth. 2018. A framework for identifying and characterising coral reef "oases" against a backdrop of degradation. *Journal of Applied Ecology* 55: 2865-2875

Dornelas, M., Antao L.H., Moyes, F., et al. including **R. Elahi**. 2018. BioTime: a database of biodiversity time series for the Anthropocene. *Global Ecology and Biogeography* 27: 760-786

O'Leary, J., Micheli, F., Airoldi L., Boch C., De Leo, G., **Elahi, R.**, Ferretti, F., Graham, N.A.J., Litvin, S.Y., Low, N.H., Lummis, S., Nickols, K.J., and J. Wong. 2017. Resilience of marine ecosystems to climatic disturbances. *BioScience* 67: 208-220

Elahi, R., Sebens, K.P., and G.A. De Leo. 2016. Ocean warming and the demography of declines in coral body size. *Marine Ecology Progress Series* 560: 147-158

Elahi, R., O'Connor, M.I., Byrnes, J.E.K., Dunic, J., Eriksson, B.K., Hensel, M.J.S. and P.J. Kearns. 2015. Recent trends in local-scale marine biodiversity reflect community structure and human impacts. *Current Biology* 25:1938-1943

Elahi, R., Dwyer, T.R. and K.P. Sebens. 2014. Mesoscale variability in oceanographic retention sets the abiotic stage for subtidal benthic diversity. *Marine Ecology Progress Series* 498:117-132

Elahi, R. and K.P. Sebens. 2013. Experimental removal and recovery of subtidal grazers highlights the importance of functional redundancy and temporal context. *PLoS One* 8(11):e78969

Elahi, R., C. Birkeland, K.P. Sebens, K.R. Turner and T.R. Dwyer. 2013. Limited change in the diversity and structure of subtidal communites over four decades. *Marine Biology* 160:3209-3219

Elahi, R. and K.P. Sebens. 2012. Consumers mediate natural variation between prey richness and resource use in a benthic marine community. *Marine Ecology Progress Series* 452:131-143

Elahi, R. 2008. Effects of aggregation and species identity on the growth and behavior of mushroom corals. *Coral Reefs* 27:881-885

Edmunds, P.J. and **R. Elahi.** 2007. The demographics of a 15-year decline in cover of the Caribbean reef coral *Montastraea annularis*. *Ecological Monographs* 77:3-18

Elahi, R. and P.J. Edmunds. 2007. Determinate growth and the scaling of photosynthetic energy intake in the solitary coral, *Fungia concinna* (Verrill). *Journal of Experimental Marine Biology and Ecology* 349:183-193

Elahi, R. and P.J. Edmunds. 2007. Tissue age affects calcification in the scleractinian coral, *Madracis mirabilis*. *Biological Bulletin* 212:20-28

Elahi, R. and P.J. Edmunds. 2007. Consequences of fission in the coral *Siderastrea siderea*: growth rates of small colonies and clonal input to population structure. *Coral Reefs* 26:271-276

GRANTS AND FELLOWSHIPS

2014	NSF Postdoctoral Research Fellowship, Intersections of Math and Biology ($140,000 total)
2011, 2008	NSF GK-12 Fellowship ($60,000 total)
2011	University of Washington (UW) Biology Tunnicliffe Writing Fellowship ($4300)
2010	Lerner-Gray Grant for Marine Research ($1444)
2010, 2007	UW Biology-Friday Harbor Labs Awards ($3150 total)
2009	American Association for Underwater Science ($1500)
2009	Contributed to successful NSF Biological Oceanography proposal "*Effects of Marine Preserves and Non-indigenous Species on Rocky Subtidal Communities*" (awarded to PI Ken Sebens; $718,448)
2007-2008	Achievement Rewards for College Scientists Fellowship: (3×; $9,000 total)
2004, 2003	California State University (CSU) Student Projects ($2,400 total)
2004, 2003	CSU Associated Students ($1,300 total)
2003	CSU Graduate Studies ($400)
2003	Project Aware ($400)

2002 Northeastern University (NU) College of Experience Education ($1,000)

AWARDS

2017 Rafe Sagarin Fund for Innovative Ecology, honorable mention ($250)
2006 CSU Outstanding Graduate Research Award
2005 NSF Graduate Research Fellowship, honorable mention
2003 NU Sears B. Condit Award
2002 NU Dr. Carl Muckenhoupt Memorial Scholarship ($1,600)
2002 NU Amelia Peabody Scholarship ($300)
2002, 2001 NU Joseph Arthur Coolidge Achievement Award ($1,000 total)

TEACHING

Instructor

2018 Carpentry Instructor certification
2013 Ecology, Marine Biology. California State University, Monterey Bay
2006 Introductory Biology for non-majors. Los Angeles City College

NSF GK-12 teaching fellow

2010 Marine Science. Garfield High School, Seattle
2008 Biology. Friday Harbor High School, Friday Harbor

Teaching assistant

2017 Monterey Bay Aquarium Research Institute
Software Carpentry Workshop in Reproducible Science
2007-2011 Friday Harbor Laboratories
Ocean Acidification, Marine Environmental Research, Scientific Diving, Marine Invertebrate Zoology, Marine Subtidal Ecology, Marine Botany
2006-2011 University of Washington
Biology of Algae, Invertebrate Zoology (2×), Evolution and Systematics, Foundations of Ecology
2004-2006 Northeastern University Three Seas Marine Biology Program
Biology of Corals (3×), Tropical Terrestrial Ecology
2003-2005 California State University, Northridge
Physiological Ecology, Introductory Biology (2×), Invertebrate Zoology

MENTORING

2018 Chloe May, Jamie Fields, Cormac Toler-Scott (University of Washington undergraduate students). Presented poster *Undergraduate research in historical ecology: a comparison of invertebrate body size over 45 years* at WSN 2018
2016 Jacopo Beccacece (Marche Polytechnic University postgraduate student). Hopkins Marine Station
2014 Will Sano (Brown University undergraduate student). Hopkins Marine Station
2012 Jackie O'Mara (masters student). Three Seas East West Marine Biology Program. Friday Harbor Labs
2011 Robin Gropp, Julia Trace (high school students). Friday Harbor Labs
2009 Emily Haug, Meghan Rock, Ross Whippo (University of Washington

undergraduate students). Marine Ecology Research Apprenticeship. Friday Harbor Labs

TALKS AND SEMINARS

Invited talks

2018 *Macrocystis*: a foundation for the forest. Hopkins Marine Station, Stanford University, CA

2018 Up close and far away: observations of snails and ship unveil human impacts. Friday Harbor Labs, University of Washington, WA

2017 Benthic ecology in a changing ocean. San Francisco State University, San Francisco, CA

2017 Ecological change in the contemporary ocean: challenges, insights, and opportunities. University of Connecticut, Avery Point, CT

Contributed talks (last 5 years)

2018 Synthesizing snail size shifts: evidence for body size decline over time. Western Society of Naturalists. Tacoma, WA

2017 Proposal for a fisheries restricted area in the Pomo-Jabuka Pit, Adriatic Sea. Food and Agriculture Organization of the United Nations, General Fisheries Commission for the Mediterranean, Rome, Italy

2016 Decadal-scale changes in body size along an intertidal gradient support the temperature-size rule. Western Society of Naturalists. Monterey, CA

2016 Recent trends in coastal biodiversity. American Society of Naturalists. Asilomar, CA

2014 Human-driven gains and losses of local species diversity in modern marine ecosystems. Western Society of Naturalists. Tacoma, WA

SYNTHETIC ACTIVITIES

2019 Open source lessons in graduate and undergraduate statistics
https://elahi.github.io/biohopk-140h/
https://elahi.github.io/xdp/

2017 Bayesian modeling for ecological and social scientists. National Socio-Environmental Synthesis Center.

2016 Local-scale ecosystem resilience amid global-scale ocean change: the coral reef example. Powell Center for Analysis and Synthesis.

2016 Quantifying biodiversity change through time. German Centre for Integrative Biodiversity Research.

2015 Understanding recent biodiversity change across spatial and temporal scales. Canadian Institute of Ecology and Evolution.

2014 Uncovering bright spots in the resilience of marine ecosystems to climatic disturbances. Hopkins Marine Station.

PROFESSIONAL SERVICE

Grant review

2014 National Science Foundation, Biological Oceanography

Peer review

American Naturalist, *BioInvasions, Bulletin of Marine Science*, *Coral Reefs* (2×), *Ecology* (5×), *Ecology & Evolution, Ecology Letters* (3×), *Functional Ecology* (2×), *Galaxea*, *Hydrobiologia*, *Marine Biology*, *Marine Ecology Progress Series* (8×), *Oecologia*, *PLoS ONE*

MEDIA COVERAGE

2015 Human activities, shifts in local species reshaping coastal biodiversity. Science Daily, 9 July 2015. <www.sciencedaily.com/releases/2015/07/150709132447.htm>.

2013 Safeguarding marine species: a dynamic approach to preservation. International innovation, Research Media Ltd., Bristol, UK, February 2013.

2013 Underwater rock walls in the San Juan Islands are healthy and amazingly diverse. San Juan Islander, San Juan Island, WA, September 2013. <http://sanjuanislander.com/opinion/columnists/tide-bites/16823>

SKILLS

Proficient in R: programming, statistical analysis, and data visualization (~8000 hours)
Proficient in generalized linear and additive models, multivariate statistics, demographic modeling, experiment design and analysis
Basic knowledge of Bayesian hierarchical models (JAGS, STAN), bash, Python
PADI SCUBA Divemaster (>1000 dives)
PFI Freediver
American Academy of Underwater Sciences (AAUS) Scientific Diver (since 2002)
Nitrox, CPR, First Aid, Oxygen Administration, Defibrillation, Hazardous Marine Life
Small boat operator (Washington State boat license)

PROFESSIONAL MEMBERSHIPS

Western Society of Naturalists

LANGUAGES

Czech Speaking – native; Reading – conversational; Writing – limited
Spanish Speaking – conversational; Reading – limited; Writing – limited