Lisa C. McManus

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EDUCATION

2012-2017	Ph.D. in Ecology and Evolutionary Biology, Princeton University
2006-2010	B.S. in Marine and Atmospheric Science, University of Miami, *summa cum laude*

PROFESSIONAL EXPERIENCE

2020-present	Assistant Research Professor Hawai'i Institute of Marine Biology, University of Hawai'i at Manoa
2017-2020	Postdoctoral Associate Department of Ecology, Evolution, and Natural Resources, Rutgers University

HONORS AND AWARDS

2018	National Institute for Mathematical and Biological Synthesis Short-term Visit ($2000)
2015	Princeton EEB Women Scientists in Conservation Biology Research Award ($6000)
2015	Best Poster: NMFS-Sea Grant Fellowship Symposium
2014-2017	NMFS-Sea Grant Fellowship in Population and Ecosystem Dynamics ($96,000) *NOAA Supervisor: Rusty Brainard, Coral Reef Ecosystem Program, NMFS*
2014-2017	National Defense Science and Engineering Graduate Fellowship ($250,000)
2014	Princeton Environmental Institute Walbridge Fund Graduate Award ($7500)
2013	Lerner-Gray Fund for Marine Research Award ($1400)
2013	Princeton EEB Seed Grant ($2500)
2013	National Science Foundation Graduate Research Fellowship – Honorable Mention
2012	Princeton University First Year Fellowship in Science and Engineering
2010	Rosenstiel School of Marine and Atmospheric Science Outstanding Student Award
2010	Rosenstiel School of Marine and Atmospheric Science Program Honors
2009	Phi Beta Kappa Honor Society
2008-2010	NOAA Hollings Undergraduate Scholarship *NOAA Supervisor: Rusty Brainard, Coral Reef Ecosystem Program, NMFS*

PUBLICATIONS

Tekwa EW, **McManus LC**, Greiner A, Colton MA, Webster MS, and Pinsky ML. 2020. Geometric Analysis of Regime Shifts in Coral Reef Communities. bioRx 10.1101/2020/01/10/899179

McManus LC, Vasconcelos VV, Levin SA, Thompson DM, Kleypas JA, Castruccio FS, Curchitser EN, Watson JR. 2020. Extreme temperature events will drive coral decline in the Coral Triangle. Global Change Biology 10.1111/gcb.14972

McManus LC, Watson JR, Vasconcelos VV and Levin SA. 2019. The stability and recovery of coral-algae systems: the importance of recruitment seasonality and grazing influence. Theoretical Ecology 12:61-72. 10.1007/s12080-018-0388-x

McManus LC, Yurek S, Teare PB, Dolan TE and Serafy JE. 2014. Killifish habitat suitability as a measure of coastal restoration performance: integrating field data, behavioral trials and simulation. Ecological Indicators 44:173-181.

McManus LC, Tekwa E, Schindler DE, Walsworth TE, Colton MA, Webster MS, Essington TE, Palumbi SR, Mumby PJ, Forrest DL, and Pinsky ML. Evolution reverses the effect of network structure on metapopulation persistence. In revision.

MANUSCRIPTS IN PREPARATION

McManus LC, Vasconcelos VV, Levin SA, Santos, FP, Thompson DM, Kleypas JA, Castruccio FS, Curchitser EN, Watson JR. Larval dispersal facilitates coral adaptive response on a spatially realistic network. In preparation for PLOS Computational Biology.

DeFilippo LB, **McManus LC**, Pinsky ML, Colton MA, Webster MS, Essington TE, Palumbi SR, Mumby PJ and Schindler DE. Evaluating the use of assisted evolution to build climate resilience on coral reefs.

OTHER PUBLICATIONS

McManus JW and **McManus LC**. 2012. Proposed Dredging for an Aircraft Carrier Turning Basin in Apra Harbor, Guam: Options for Assessment and Mitigation. Technical Report. Engineer Research and Development Center, U.S. Army Corps of Engineers. 121 pages.

PRESENTATIONS

2019 **Smithsonian Environmental Research Center**, Edgewater, MD. Invited talk. Coral reef dynamics in a changing world: a multiscale perspective.

2019 **Department of Ecology, Evolution and Natural Resources, Rutgers University**, New Brunswick, NJ. Invited talk. Coral reef dynamics in a changing world: a multiscale perspective.

2019 **Ecological Society of America Annual Meeting**, Louisville, KY. Contributed talk. Dispersal network structure constrains eco-evolutionary response under directed environmental change.

2018 **Ecological Society of America Annual Meeting**, New Orleans, LA. Invited talk. Spatial marine metacommunity connectivity and the response of the Coral Triangle to climate change.

2018 **Ocean Sciences Meeting**, Portland, Oregon. Contributed talk. Ecological implications of thermal stress and larval connectivity in the Coral Triangle.

2016 **International Coral Reef Symposium**, Honolulu, HI. Contributed talk. Larval dispersal as a mechanism for coral persistence on reef communities.

2015 **Ecological Society of America Annual Meeting**, Baltimore, MD. Contributed talk. Larval dispersal as a mechanism for coral persistence on reef metacommunities.

2015 **Pacific Islands Fisheries Science Center**, Honolulu, HI. Invited talk. Linking dispersal scales, genetic differentiation and persistence in corals.

TEACHING EXPERIENCE

New Brunswick High School STEM Club
Volunteer Instructor for Agent-based Modeling Class
Created and presented NetLogo programming lessons to members of the STEM Club

New Brunswick High School
New Brunswick, NJ
Feb – April 2018
Contact: Rebecca Donatelli

Department of Ecology and Evolutionary Biology
Assistant in Instruction for EEB 312 Marine Biology
Conducted precepts and facilitated marine science field and laboratory experiments.

Princeton University and Bermuda Institute of Ocean Sciences
St. George's, Bermuda
May – June 2013
Supervisors: James Gould and Samantha de Putron

Department of Ecology and Evolutionary Biology
Assistant in Instruction for EEB 211 Life on Earth
Presented lectures and facilitated biology laboratory experiments

Princeton University
Princeton, NJ
Sept. 2012 – Jan. 2013
Supervisors: Daniel Rubenstein and Stephen Pacala

ADVISING EXPERIENCE

Princeton University Princeton, NJ
Beth McKenna, undergraduate senior thesis (2012-2014)
Clare Gallagher, undergraduate senior thesis (2012-2014)

ADDITIONAL TRAINING

June 2014 Methods in Ecological Genome Analysis: Whole-genome genotyping with 2bRAD workshop led by Mikhail Matz (University of Texas), Summerland Key FL

PROFESSIONAL ASSOCIATIONS

International Society for Reef Studies, Ecological Society of America, Association for the Sciences of Limnology and Oceanography

SKILLS

Scientific Diver: 300+ logged scientific dives
Programming languages – Python, Mathematica, R, MATLAB, Latex
Foreign languages – Filipino (native)

SERVICE

Mentor, Rutgers Future Scholars Internship, Rutgers University (2018)
Volunteer Instructor, New Brunswick High School STEM Club (2018)
Judge, Build It Better Design Challenge, New Brunswick High School STEM Club (2018, 2019)
Organizer, Theoretical Ecology Lab Tea Seminar Series, Princeton University (2013-2014)
Organizer, Conservation Book Club, Princeton University (2013-2015)
Reviewer, American Naturalist, Global Ecology and Biogeography, Theoretical Ecology, Nature Climate Change