

## Lisa C. McManus

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### EDUCATION

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

### PROFESSIONAL EXPERIENCE

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- 2017-present Postdoctoral Associate  
Department of Ecology, Evolution, and Natural Resources, Rutgers University  
Supervisor: Malin L. Pinsky

### HONORS AND AWARDS

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- 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

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- McManus LC**, Watson JR, Vasconcelos VV and Levin SA. 2018. The stability and recovery of coral-algae systems: the importance of recruitment seasonality and grazing influence. *Theoretical Ecology* 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 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.
- McManus LC**, Vasconcelos VV, Levin SA, Thompson DM, Kleypas JA, Castruccio FS, Curchitser EN, Watson JR. Ecological implications of thermal stress and larval connectivity in the Coral Triangle. Submitted to *Global Change Biology*.

### MANUSCRIPTS IN PREPARATION

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- McManus LC**, Schindler DE, Tekwa E, Walsworth TE, Forrest DL, Colton MA, Webster MS, Essington TE, Palumbi SR, Mumby PJ and Pinsky ML. Trait dispersal network structure drives eco-evolutionary dynamics under environmental change. In preparation for *Science*.

**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.

Tekwa EW, **McManus LC**, Schindler DE, Forrest DL, Colton MA, Webster MS, Essington TE, Palumbi SR, Mumby PJ and Pinsky ML. Mechanisms of bistability in coral reef systems. In preparation for Journal of Theoretical Biology.

DeFilippo LB, **McManus LC**, Pinsky ML, Colton MA, Webster MS, Essington TE, Palumbi SR, Mumby PJ and Schindler DE. Eco-evolutionary considerations for coral restoration.

## **PRESENTATIONS**

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- 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.
- 2015 **National Marine Fisheries Service – Sea Grant Fellows Symposium**, Miami, FL. Poster presentation. Linking dispersal scales, genetic differentiation and persistence in corals.
- 2013 **Student Conference on Conservation Science**, New York, NY. Poster presentation. Modeling fine-scale coral connectivity on the Bermuda platform.
- 2013 **Princeton University-Marine Biology (EEB 312)**, Bermuda Institute of Ocean Sciences, St. George's, Bermuda. Guest lecture. Connectivity of Marine Ecosystems.

## **TEACHING EXPERIENCE**

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| <b>New Brunswick High School STEM Club</b><br><i>Volunteer Instructor for Agent-based Modeling Class</i><br>Created and presented NetLogo programming lessons to members of the Science, Technology, Engineering and Math Club | New Brunswick High School<br>New Brunswick, NJ<br>Feb – April 2018<br>Contact: Rebecca Donatelli   |
| <b>Department of Ecology and Evolutionary Biology</b><br><i>Assistant in Instruction for EEB 312 Marine Biology</i><br>Conducted precepts and facilitated marine science field and laboratory experiments.                     | Princeton University and Bermuda<br>Institute of Ocean Sciences<br>St. George's, Bermuda<br>May – June 2013<br>Supervisors: James Gould and Samantha de Putron |
| <b>Department of Ecology and Evolutionary Biology</b><br><i>Assistant in Instruction for EEB 211 Life on Earth</i><br>Presented lectures and facilitated biology laboratory experiments  | Princeton University<br>Princeton, NJ<br>Sept. 2012 – Jan. 2013<br>Supervisors: Daniel Rubenstein and Stephen Pacala   |

## **ADVISING EXPERIENCE**

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**Princeton University** Princeton, NJ

Beth McKenna, undergraduate senior thesis (2012-2014)

Clare Gallagher, undergraduate senior thesis (2012-2014)

## **ADDITIONAL TRAINING**

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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**

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

## **SKILLS**

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

## **SERVICE**

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*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, Theoretical Ecology

## **REFERENCES**

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### **Malin L. Pinsky**

Associate Professor  
Ecology, Evolution, and Natural Resources  
Rutgers University  
848-932-8242  
[malin.pinsky@rutgers.edu](mailto:malin.pinsky@rutgers.edu)

### **Simon A. Levin**

Professor  
Ecology and Evolutionary Biology  
Princeton University  
609-258-6880  
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### **Madhavi A. Colton**

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Coral Reef Alliance  
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### **Rusty E. Brainard**

Supervisory Oceanographer  
Coral Reef Ecosystem Program  
Pacific Islands Fisheries Science Center, NOAA  
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