

# CURRICULUM VITAE

## HOLLIE E EMERY

### EDUCATION

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Ph.D. September 2018	Boston University	Earth Sciences
Dissertation title: “ <i>The effects of tidal restriction, Phragmites australis invasion, and precipitation change on salt marsh greenhouse gas emissions</i> ”		
B.S. May 2009, summa cum laude	University of Massachusetts, Boston	Biology

### ACADEMIC APPOINTMENTS

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2018 – present	Postdoctoral Fellow, Harvard University
2018	Course Instructor, Boston University
2011 – 2018	Teaching Fellow, Boston University
2015 – 2016	NSF GK-12 Fellow, Atlantic Middle School, Quincy MA
2010 – 2011	Dean’s Fellow, Boston University
2009 – 2010	Research Assistant, Purdue University

### GRANTS AND FUNDING

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2015 – 2018	National Science Foundation Doctoral Dissertation Improvement Grant
2015 – 2016	NSF GK-12 Fellowship
2013 – 2015	National Park Service George M. Wright Climate Change Fellowship
2013	Joshua A. Nickerson Conservation Fellowship
2013	Boston University Biogeosciences Fellowship
2010 – 2011	Boston University Dean’s Fellowship

### HONORS

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2018	Outstanding Teaching Fellow, Dept of Earth & Environment, Boston University
2011	Honorable Mention, National Science Foundation Graduate Research Fellowship
2009	Biology Award for Excellence in Research, University of Massachusetts Boston
2008	Louise Bronner Scholarship, University of Massachusetts Boston

### PUBLICATIONS

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#### Journal articles

- 2021 **Emery, H.E.**, Angell, J.H., Tawade, A., Fulweiler R.W. Tidal rewetting in salt marshes triggers pulses of nitrous oxide emissions but slows carbon dioxide emission. *Soil Biology and Biochemistry* 156:108197. DOI: 10.1016/j.soilbio.2021.108197
- 2019 **Emery, H.E.**, Angell, J.H., Fulweiler R.W., Salt marsh greenhouse gas fluxes and microbial communities are not sensitive to the first year of precipitation change. *Journal of Geophysical Research: Biogeosciences* 124: 1071–1087. DOI: 10.1029/2018JG004788
- 2017 **Emery, H.E.**, Fulweiler, R.W. Incomplete tidal restoration may lead to persistent high CH<sub>4</sub> emission. *Ecosphere* 8 (12): e01968. DOI: 10.1002/ecs2.1968
- 2016 Fulweiler, R.W., **Emery, H.E.**, Maguire T.J. Reproducibly Quantifying Benthic Processes in an Estuary Under Change. *Earth and Space Science* 3 (8): 318-325. DOI: 10.1002/2015EA000158
- 2014 **Emery, H.E.**, Fulweiler, R.W. *Spartina alterniflora* and invasive *Phragmites australis* stands have similar greenhouse gas emissions in a New England marsh. *Aquatic Botany* 116: 83-92. DOI: 10.1016/j.aquabot.2014.01.010
- 2011 Fulweiler, R.W., **Emery, H.E.**, Heiss, E.M., Berounsky, V.M. Assessing the role of pH in determining water column nitrification rates in a coastal system. *Estuaries and Coasts* 34: 1095-1102. DOI: 10.1007/s12237-011-9432-4

## CONFERENCE PRESENTATIONS

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- 2022 **Emery, H.E.**, Daniel Hoer, Leo-Paul Pelletier, Christopher McRaven, Peter Girguis. “Measuring ephemeral methane seepage with the ABISS: Autonomous Biogeochemical In situ Sensing System” (Talk). ASLO/AGU Ocean Sciences Meeting.
- 2017 **Emery, H.E.**, Fulweiler, R.W. “Salt Marsh Microbial Community Change and Trace Greenhouse Gas Fluxes Under Precipitation Intensification” (Talk). Coastal and Estuarine Research Federation conference.
- 2016 **Emery, H.E.**, Fulweiler, R.W. “The Effects of Precipitation Change on Salt Marsh Greenhouse Gas Fluxes” (Talk). Mass Audubon Staff Natural History Conference.
- 2015 **Emery, H.E.**, Fulweiler, R.W. “Salt Marshes in a Changing Climate: Greenhouse Gas Emissions, Carbon Cycling, and Precipitation Change” (Talk). Coastal and Estuarine Research Federation conference.
- 2015 **Emery, H.E.**, Fulweiler, R.W. “Salt Marsh Biogeochemistry in a Changing Climate: The Effects of Extreme Precipitation.” (Talk) George Wright Society Conference on Parks, Protected Areas, and Cultural Sites.
- 2014 **Emery, H.E.**, Fulweiler, R.W. “Salt Marsh Biogeochemistry in a Changing Climate: The Effects of Extreme Precipitation.” (Talk) Cape Cod National Seashore Science at the Seashore Symposium.
- 2014 Dietze, Michael, **Emery, H.E.**, Gergel, D, Gianotti, D, Mantooth, JA, Rigden, A. “Predicting Phenology: A case-study in real-time ecological forecasting” (Talk) Ecological Society of America Conference.
- 2013 **Emery, H.E.**, Fulweiler R.W. “Anthropogenic Impacts on Salt Marsh Greenhouse Gas Emissions” (Talk) ASLO Aquatic Sciences Meeting.
- 2012 **Emery, H.E.**, Fulweiler R.W. “Does *Phragmites australis* invasion change the greenhouse gas fluxes in a salt marsh?” (Talk) New England Estuarine Research Society.
- 2011 **Emery, H.E.**, Fulweiler R.W. “Restoration and *Phragmites* in Salt Marshes: Effects on greenhouse gas emission” (Poster) Coastal and Estuarine Research Federation conference.
- 2009 Dukes, J.S. Goranson, C.E. **Emery, H.E.** “The Boston-Area Climate Experiment: Design and initial system performance” (Poster) Ecological Society of America Conference
- 2009 **Emery, H.E.**, Dukes J.S. “Characterizing soil moisture responses to warming and precipitation change in the first year of the Boston Area Climate Experiment” (Talk) Boston Area Climate Experiment Conference.
- 2009 **Emery, H.E.**, Dukes J.S. “Characterizing soil moisture trends at the Boston Area Climate Experiment”. (Poster) Boston Undergraduate Research Symposium.

## TEACHING AND MENTORING

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### Instructor of record

Environmental Change and Sustainability

### Teaching Fellow

Marine Urban Ecology

Environmental Earth Science

Climate and Earth Systems Science

Coastal Biogeochemistry

Atmospheric Environment

Introduction to Environmental Modelling

### Mentoring

- 2019 Liliana Abramson, H.S. student, CRLS/Harvard internship
- 2018-2019 Tinsley Galyean, postgraduate technician

2017 Jenn Soukup, B.U. directed study  
2016 Akaash Tawade, H.S. student, BURise summer program  
2015 Emma Schectman, B.U. Marine Program directed study  
2012 Ariel Bobbett, H.S. student, BURise summer program

**K-12 Education**

2012, 2016 BU RISE Research mentor to rising high school seniors  
2015 – 2016 NSF GK-12 Fellow, Atlantic Middle School, Quincy MA

**SERVICE**

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**Course Development**

2017 GE 375 Intro to Environmental Science

**Outreach**

2012 – 2017 Hosted annual summer outreach day for Upward Bound students  
2015 Chaperone, Tech Savvy, Boston Area Girls STEM Collaborative

**Peer Referee**

Journals: Ecological Engineering, Frontiers in Environmental Science, Journal of Geophysical  
Research: Biogeosciences, PeerJ, Scientific Reports, Wetlands, Estuaries and Coasts