

Jacqueline McSweeney

Scripps Institute of Oceanography

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EDUCATION:

Ph.D. candidate, Graduate School of Oceanography, Rutgers University, 2011- 2016

BS, Chemistry, Loyola Marymount University, 2007 – 2011

BA, Spanish, Loyola Marymount University, 2007 – 2011

ACADEMIC DISTINCTIONS:

- National Science Foundation Graduate Research Fellowship Program Recipient, 2012
- National Science Foundation Graduate Research Fellowship Program Honorable Mention, 2011
- *Presidential Scholar* (2007 – 2011), *Kilp Alumni Scholar* (2007 – 2011), *Rose Hill Foundation Scholar* (2008 – 2010), *Jesuit Summer Institute Fellow* (2009), *Dean's Scholar* (2010 – 2011), *Cahn Honors Scholar* (2010 – 2011), and *McIntyre Fellow* (2009) at Loyola Marymount University

RELEVANT RESEARCH EXPERIENCE:

- **Post Doctoral Researcher in Physical Oceanography**
 - Scripps Institute of Oceanography, 2017 – present
 - Estuarine-Nearshore Connectivity: modeling and observations
 - Advisers: Falk Feddersen and Sarah Giddings
- **Research Assistant in Physical Oceanography**
 - Rutgers University Institute of Marine and Coastal Sciences, 2011 - 2016
 - Sediment Transport Dynamics of Delaware Estuary: modeling and observations
 - Advisers: Bob Chant and John Wilkin
- **Friday Harbor Laboratory Estuarine & Coastal Fluid Dynamics summer course**
 - University of Washington, 2012
 - Analysis of the Thermal Budget in Fisherman Bay (located on Lopez Island, WA)
 - Advisers: Rocky Geyer and Parker MacCready
- **Research in Ocean Sciences (RIOS) REU internship**
 - Rutgers University, 2010; funded by NSF
 - Profiling and Modeling Optics, Sediment and Phytoplankton in the Delaware Bay
 - Adviser: John Wilkin
 - Award recipient for poster presentation
- **Organic Chemistry Research Position**
 - Loyola Marymount University, 2008 - 2011
 - Synthesis of Indole Derivatives; Synthesis and molecular modeling of G-Quadruplexes
 - Adviser: Jeremy McCallum
 - Seaver Research Grant recipient, 2009

PROFESSIONAL ACTIVITIES:

- Chair, *Gordon Research Seminar on Coastal Ocean Modeling*, June 2015

Last updated: January 2017

- Discussion Leader, *Gordon Research Conference on Coastal Ocean Modeling*, June 2015
- Cofounder, *Gathering of Rutgers Earth, Environmental and Natural Sciences (GREENS)*, 2013-2015
- Seminar Coordinator, *Department of Marine and Coastal Sciences*, Rutgers, 2014-2015

PUBLICATIONS:

McSweeney, J. M., Chant, R. J., Wilkin, J. L., Sommerfield, C. K., and Tabatabai, A. (2016), Modeling Spatiotemporal Variability of Residual Sediment Fluxes in Delaware Estuary. *Submitted to J. Geophys. Res. Oceans*.

McSweeney, J. M., Chant, R. J., Wilkin, J. L., and Sommerfield, C. K. (2016), Suspended-sediment Impacts on Light-Limited Productivity in the Delaware Estuary, *Estuaries and Coasts* (2016), doi:10.1007/s12237-016-0200-3

McSweeney, J. M., Chant, R. J. and Sommerfield, C. K. (2016), Lateral variability of sediment transport in the Delaware Estuary. *J. Geophys. Res. Oceans*. 121, 725–744, doi:10.1002/2015JC010974

McCallum, J. E. B., Huston, G., **McSweeney, J. M.**, Rucker, B., 2010. Synthesis of Lipophilic N9-Benzylguanidine Derivatives. *Synlett*, 19, 2871–2874.

RELEVANT TEACHING EXPERIENCE:

- Teaching Assistant for
 - Dynamics of Marine Ecosystems at Rutgers, 9/12 – 12/12
 - General Physics I and Electricity & Magnetism at LMU, 8/10 – 5/11
 - Organic Chemistry and General Physics I at LMU, 8/09 – 5/10

INVITED SEMINARS:

- 2016: National Oceanography Center in Liverpool, Scripps Institute of Oceanography, Stockton University, Woods Hole Oceanographic Institute
- 2015: Oregon State University, Kean University

SERVICE:

- Peer reviewer for: *Journal of Geophysical Research (JGR) – Oceans*, *Journal of Physical Oceanography (JPO)*, *Continental Shelf Research (CSR)*, *Ocean Dynamics*
- Science Fair/Research Symposium judge: various, 2011-2016

CONFERENCE PRESENTATIONS (select):

1. **Spatiotemporal Variability of Residual Sediment Transport in Delaware Estuary**
October 2016, *Physics of Estuaries and Coastal Seas Conference* in the Netherlands
2. **Modeling 3-Dimensional Sediment Transport Processes in Delaware Estuary**
February 2016, *Ocean Sciences Conference* in New Orleans, LA
3. **Lateral Sediment Dynamics in Delaware Estuary**
October 2014, *Physics of Estuaries and Coastal Seas Conference* in Porto de Galinhas, Brazil
4. **Sediment Dynamics in the Delaware Estuary's Turbidity Maximum**
November 2013, *Coastal and Estuarine Research Federation Conference* in San Diego, CA

FIELD EXPERIENCE:

dye experiments, tidal surveys, mooring deployments, sediment coring