

Nicole Couto

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Education

2017 Ph.D. in Oceanography, Rutgers University
2008 B.A. in Physics, University of California at Santa Barbara

Professional Experience

2017 – present Postdoctoral Scholar, Scripps Institution of Oceanography, Marine Physical Laboratory
2011 - 2017 Graduate assistant, Rutgers University, Department of Oceanography
2010 – 2011 Lab technician, University of California at Santa Cruz, Department of Ocean Sciences
2008 - 2009 Volunteer lab technician, University of California at Santa Barbara, Department of Geography
2007 Technical Scholar, Lawrence Livermore National Laboratories, Physics and Systems Engineering Program
2005 Volunteer lab technician, Lawrence Livermore National Laboratories

Grants and Awards

2014 Teledyne-Webb Graduate Fellowship
2014 Teledyne RDI Academic Grant
2014 SCAR Open Science Conference Travel Award
2014 Rutgers Graduate School Conference Travel Award
2013 IMCS Student Travel Award
2009 SEA Semester Tuition Award - Oceanography

Peer-reviewed Publications

Kohut, J., P. Windsor, H. Statscewich, M. Oliver, E. Fredj, **N. Couto**, K. Bernard, W. Fraser (in press), Variability in summer surface residence time within a Western Antarctic Peninsula biological hotspot, *Philosophical Transactions of the Royal Society*.

Couto, N., J. Kohut, D. Martinson, O. Schofield (2017), Distribution of Upper Circumpolar Deep Water on the warming continental shelf of the West Antarctic Peninsula, *Journal of Geophysical Research: Oceans*, doi:10.1002/2017JC012840.

Schofield, O., G. Saba, K. Coleman, F. Carvalho, **N. Couto**, H. Ducklow, Z. Finkel, A. Irwin, A. Kahl, T. Miles, M. Montes-Hugo, S. Stammerjohn, N. Waite (2017), Decadal variability in coastal phytoplankton community composition in a changing West Antarctic Peninsula, *Deep Sea Research I*, doi:10.1016/j.dsr.2017.04.014.

Stukel, M. R., E. Asher, **N. Couto**, O. Schofield, S. Strebel, P. Tortell, and H. Ducklow (2015), The imbalance of new and export production in the Western Antarctic Peninsula, a potentially “leaky” ecosystem, *Global Biogeochem. Cycles*, 29(9), 1400–1420, doi:10.1002/2015GB005211.

Marian, J., L. A. Zepeda-Ruiz, **N. Couto**, E. M. Bringa, G. H. Gilmer, P. C. Stangeby, and T. D. Rognlien (2007), Characterization of sputtering products during graphite exposure to deuterium ions by molecular dynamics, *Journal of Applied Physics*, 101(4), 044506, doi:10.1063/1.2496577.

Other Publications

Couto, N., J. Kohut, O. Schofield, M. Dinniman, J. Graham (2017), Pathways and retention times in a biologically productive canyon system on the West Antarctic Peninsula, *OCEANS 2017-MTS/IEEE Anchorage*.

Couto, N., O. Schofield, J. Kohut (2016), Comparison between glider-derived geostrophic velocities and shipboard ADCP measurements, *OCEANS 2016-MTS/IEEE Monterey*, doi:10.1109/OCEANS.2016.7761286

Activities

2015-2017	Co-chair of Gordon Research Seminar on Polar Marine Science, scheduled for March 2017
2015-2017	Contributing author at Oceanbites.org, a blog that explains recent literature in oceanography to non-experts.
2014	Graduate student mentor for Research Internships for Ocean Sciences (RIOS) program
2012 - 2015	Seminar series organizer for the Department of Marine and Coastal Sciences at Rutgers University
2012 - 2014	Volunteer crewmember aboard the schooner <i>Pioneer</i> at South Street Seaport Museum, New York, NY

2009 - 2010 High school math and physics tutor

Presentations

- 2018 Rutgers University, New Brunswick, NJ, "Turbulent controls on properties of water entering the Arctic through Bering Strait," (talk)
- 2018 Gordon Research Conference, Ocean Mixing, Andover, NH, "Turbulent controls on properties of water entering the Arctic through Bering Strait," (poster)
- 2018 Ocean Sciences Meeting, Portland, OR, "Turbulent controls on properties of water entering the Arctic through Bering Strait," (poster)
- 2017 Teledyne Marine Technology Workshop, San Diego, CA, "Tidal and wind-driven controls on heat flux at the head of Palmer Deep Canyon," (poster)
- 2017 Gordon Research Conference, Polar Marine Science, Ventura, CA, "Tidal and wind-driven controls on heat flux near Palmer Station, Antarctica," (poster)
- 2016 Palmer LTER Meeting, New Brunswick, NJ, "Tidal and wind-driven currents near Palmer Station," (talk)
- 2016 Marine Technology Society Oceans Conference, Monterey, CA, "Comparison between glider-derived geostrophic velocities and shipboard ADCP measurements," (talk)
- 2015 Kean University, Biology Department, "Life adjusts to a warming Antarctic," (invited talk)
- 2015 Long Term Ecological Research (LTER) All Scientists Meeting, Estes Park, CO, "Modeling the pathways to Palmer Deep, a biologically productive canyon," (poster)
- 2015 Teledyne Marine, Falmouth, MA, "Warm water intrusions onto the continental shelf of the West Antarctic Peninsula," (talk)
- 2015 Gordon Research Conference, Polar Marine Science, Barga, Italy, "A census of Upper Circumpolar Deep Water on the continental shelf of the West Antarctic Peninsula," (talk and poster)
- 2015 Southern Ocean Dynamics and Biogeochemistry Workshop, Pasadena, CA, "Glider operations along the West Antarctic Peninsula," (poster)
- 2014 Rutgers Joint Graduate Student Association meeting, New Brunswick, NJ "Where does warm water enter on the continental shelf of the West Antarctic Peninsula?" (talk)
- 2014 Palmer LTER Meeting, Williamsburg, VA, "A census of Upper Circumpolar Deep Water along the West Antarctic Peninsula," (talk)
- 2014 Scientific Committee on Antarctic Research (SCAR) Open Science Conference, Auckland, NZ, "A census of Upper Circumpolar Deep Water on the continental shelf of the West Antarctic Peninsula," (talk)
- 2013 Graduate Climate Conference, Woods Hole, MA, "The importance of eddies in

2013	delivering heat to the West Antarctic Peninsula,” (poster) Gordon Research Conference, Coastal Ocean Circulation, Biddeford, ME, “Glider Observations of Subsurface Antarctic Circumpolar Current Water Along the West Antarctic Peninsula,” (poster)
2012	Long Term Ecological Research (LTER) All Scientists Meeting, Estes Park, CO, “Characteristics of eddies shed from the Antarctic Circumpolar Current,” (poster)

Field Experience

2016	R/V <i>Laurence M. Gould</i> , Palmer Station, Antarctica, Long Term Ecological Research Project – Field Team Leader (Jan. 10 – Feb. 17)
2015 -2016	United States Antarctic Program, Palmer Station, Antarctica, Long Term Ecological Research Project – Field Team Leader (Oct. 19 – Jan. 10)
2015	R/V <i>Oceanus</i> , Guaymas Basin, Mexico, Ocean acidification: oxygen-limited CO2 tolerance in squids – Glider technician (May 16-27)
2014	United States Antarctic Program, Palmer Station, Antarctica, Long Term Ecological Research Project – Field Team Leader (Feb. 5 – Mar. 31)
2014	R/V <i>Laurence M. Gould</i> , Palmer Station, Antarctica, Long Term Ecological Research Project (Dec. 31 – Feb. 5)
2013	R/V <i>Point Sur</i> , Palmer Station, Antarctica, Long Term Ecological Research Project (Jan. 27-29)
2012–2013	United States Antarctic Program, Palmer Station, Antarctica, Long Term Ecological Research project – Field Team Leader (Oct. 9 – Feb. 3)
2012	SSV <i>Corwith Cramer</i> , Woods Hole, MA, Sea Education Association - deckhand (Aug. 10-23)
2012	United States Antarctic Program, Palmer Station, Antarctica, Long Term Ecological Research Project (Dec. 27 – Feb. 1)
2011	SSV <i>Corwith Cramer</i> , Woods Hole, MA, Sea Education Association - deckhand (May 9 – Aug. 23)
2011	R/V <i>Knorr</i> , Halifax, NS, Growth, Formation, and Separation of the Northwest Corner Eddy (Feb. 26 – Apr. 1)
2009-2010	SSV <i>Robert C Seamans</i> , Honolulu, HI, Sea Education Association - student (Nov. 27 – Jan. 4)
2008	R/V <i>Shearwater</i> , Santa Barbara, CA (May 5-6)