

CURRICULUM VITAE – KRISTEN DAVIS
July 2015

Address: Henry Samueli School of Engineering
Civil and Environmental Engineering
University of California, Irvine
Irvine, CA 92697

Phone: (949) 824-4498 (office)

E-mail: davis@uci.edu

Education

University of Florida, Environmental Engineering Sciences, B.S., 2000
Stanford University, Civil and Environmental Engineering, M.S., 2004
Stanford University, Civil and Environmental Engineering, Ph.D., 2009

Professional History

2012-Present Asst. Professor, Civil and Environmental Engineering & Earth System Science,
University of California, Irvine
2010-2012 Research Associate, Applied Physics Laboratory, University of Washington
2009-2010 Postdoctoral Scholar, Departments of Physical Oceanography and Biology, Woods Hole
Oceanographic Institution

Selected Publications

- DeCarlo, Thomas M., Kristopher B. Karnauskas, **Kristen A. Davis**, and George TF Wong. (2015)
Climate modulates internal wave activity in the Northern South China Sea. *Geophysical Research
Letters*.
- Siedlecki, Samantha A., Neil S. Banas, **Kristen A. Davis**, Sarah Giddings, Barbara M. Hickey, Parker
MacCready, Thomas Connolly, Sue Geier. (2015) Seasonal and interannual oxygen variability on the
Washington and Oregon continental shelves. *Journal of Geophysical Research: Oceans*.
- Rippy, Megan, Robert Stein, Brett Sanders, **Kristen Davis**, Karen McLaughlin, John Skinner, John
Kappeler, and Stanley Grant. (2014) Small Drains, Big Problems: The Impact of Dry Weather
Runoff on Shoreline Water Quality at Enclosed Beaches. *Environmental science & technology* 48.24:
14168-14177.
- Davis, Kristen A.**, Neil S. Banas, Sarah Giddings, Samantha A. Siedlecki, Parker MacCready, Evelyn J.
Lessard, Raphael M. Kudela, Barbara M. Hickey. (2014) Estuary-enhanced upwelling of marine
nutrients fuels coastal productivity in the US Pacific Northwest. *Journal of Geophysical Research:
Oceans* 119(12): 8778-8799.
- Giddings, Sarah N., Parker MacCready, Barbara Hickey, Neil Banas, **Kristen A. Davis**, Samantha
Siedlecki, Vera Trainer, Raphael Kudela, Noel Pelland, and Thomas Connolly (2014), Hindcasts of
potential harmful algal bloom transport on the Pacific Northwest coast., *J. Geophys. Res.*,
doi:10.1002/2013JC009622.
- Pineda, Jesús, Victoria Starczak, Ann Tarrant, Jonathan Blythe, **Kristen Davis**, Tom Farrar, Michael
Berumen, and José da Silva. (2013) Two spatial scales in a bleaching event: Corals from the mildest
and most extreme environments escape mortality. *Limnology and Oceanography*, 58(5), 1531-1545.
- Davis, Kristen A.** and Stephen G. Monismith. (2011) The modification of bottom boundary layer
turbulence and mixing by internal waves shoaling on a barrier reef. *Journal of Physical
Oceanography*, 41(11), 2223-2241.
- Davis, Kristen A.**, Steven J. Lentz, Jesús P. Pineda, J. Tom Farrar, Victoria R. Starczak, and James H.
Churchill. (2011) Observations of the thermal environment on Red Sea platform reefs: A heat
budget analysis. *Coral Reefs*, 30, 25-36.
- Magalhaes, JM, IB Araújo, JCB da Silva, RHJ Grimshaw, **KA Davis**, JP Pineda, (2011) Atmospheric
gravity waves in the Red Sea: a new hotspot. *Nonlinear Processes in Geophysics*, 18, 71-79.

- Monismith, Stephen G., **Kristen A. Davis**, Gregory G. Shellenbarger, James L. Hench, Nicholas J. Nidzieko, Alyson E. Santoro, Matthew A. Reidenbach, Johanna H. Rosman, Roi Holtzman, Christopher S. Martens, Niels L. Lindquist, Melissa W. Southwell, and Amatzia Genin, (2010) Flow effects on benthic grazing on phytoplankton by a Caribbean reef. *Limnology and Oceanography*, 55, 1881-1892.
- Davis, Kristen A.**, James J. Leichter, James L. Hench, Stephen G. Monismith. (2008) Effects of western boundary current dynamics on the internal wave field of the Southeast Florida shelf. *Journal of Geophysical Research*, 113, C09010.
- Paytan, Adina, Gregory G. Shellenbarger, Joseph H. Street, Megan E. Gonneea, **Kristen A. Davis**, Megan B. Young, and Willard S. Moore. (2006) Submarine groundwater discharge: An important source of new nutrients to coral reef ecosystems. *Limnology and Oceanography*, 51(1), 343-348.
- Boehm, Alexandria B., Adina Paytan, Gregory G. Shellenbarger, and **Kristen A. Davis**. (2006) Composition and flux of groundwater from a California beach aquifer: Implications for nutrient supply to the surf zone. *Continental Shelf Research*, 26, 269-282.
- Boehm, Alexandria B., Daniel G. Lluch-Cota, **Kristen A. Davis**, Clint D. Winant, and Stephen G. Monismith. (2004) Covariation of coastal water temperature and microbial pollution at interannual to tidal periods. *Geophysical Research Letters*, 31, L06309, doi:10.1029/2003GL019122.

Synergistic Activities

- Technical Reviewer for scientific manuscripts and proposals in Marine Ecological Progress Series, Ocean Dynamics, Journal of Physical Oceanography, Limnology and Oceanography, Progress in Oceanography, Geophysical Research Letters, Estuaries and Coasts, Estuarine, Coastal and Shelf Science, PLoS One, California Sea Grant, National Oceanic and Atmospheric Administration, and the National Science Foundation.
- Acting primary research advisor to three undergraduate students participating in the California Alliance for Minority Participation (CAMP) program at UC, Irvine to support underrepresented students in the science, technology, engineering, and math fields.
- Co-chair of Eastern Pacific Ocean Conference, 2015; Conference Session Organizer for Ocean Sciences Meeting 2012, Eastern Pacific Ocean Conference Meeting, 2011.
- Community Outreach: Organized an interactive science program for elementary and middle school girls through the Sally Ride Program and served as a “Science Superstar” for Project Scientist for a STEM summer camp for girls ages 5-12 years old.

Graduate Advisor

S.G. Monismith, Civil and Environmental Engineering, Stanford Univ., Stanford, CA

Postdoctoral Advisors

S.J. Lentz, Dept. of Physical Oceanography, Woods Hole Oceanographic Institution, Woods Hole, MA

Pineda, J., Dept. of Biology, Woods Hole Oceanographic Institution, Woods Hole, MA

Banas, N., Applied Physics Laboratory, University of Washington, Seattle, WA

Advising

Current students: Aryan Safaie, Emma Reid, Shukai Cai

Total Graduate Students advised: 5