

MATTHEW A. REIDENBACH

Department of Environmental Sciences
 University of Virginia
 291 McCormick Rd, Clark Hall
 P.O. Box 400123
 Charlottesville, VA 22904

Phone: (434) 243-4937
 Fax: (434) 982-2137
 E-mail: reidenbach@virginia.edu
 www.faculty.virginia.edu/reidenbach/

(a) Professional Preparation

| | | |
|----------------------------|-------------------------------------|------------|
| Cornell University | Civil and Environmental Engineering | B.S. 1997 |
| Stanford University | Civil and Environmental Engineering | M.S. 1998 |
| Stanford University | Civil and Environmental Engineering | Ph.D. 2004 |
| Univ. California, Berkeley | Integrative Biology (post-doc) | 2004-2007 |

(b) Appointments

2013-present Associate Professor, Department of Environmental Sciences, University of Virginia, Charlottesville, VA

2007-2013 Assistant Professor, Department of Environmental Sciences, University of Virginia, Charlottesville, VA

2004-2007 Post-Doctoral Research Fellow, Miller Institute for Basic Research in Science, University of California, Berkeley, CA

2000-2004 Research Assistant, Department of Civil and Environmental Engineering, Stanford University, Stanford, CA

1998-2000 Teaching Assistant, Department of Civil and Environmental Engineering, Stanford University, Stanford, CA

1996 Teaching Assistant, Department of Civil and Environmental Engineering, Cornell University, Ithaca, NY

(c) Publications (10 most relevant)

1. **Reidenbach M.A.**, Berg P., Hume A., Hansen J.C.R., and Whitman E.R., 2013, "Hydrodynamics of intertidal oyster reefs: the influence of boundary layer flow processes on sediment and oxygen uptake", *Limnology and Oceanography: Fluids and Environments*, 3, 225-239.
2. **Reidenbach, M. A.**, Limm M., Hondzo M., and Stacey M.T., 2010, "The effects of bed roughness on boundary layer mixing and mass flux across the sediment-water interface", *Water Resources Research*, 46, W07530, doi:10.1029/2009WR008248.
3. **Reidenbach M.A.**, Koseff J.R., and Monismith S.G., 2007, "Laboratory experiments of fine-scale mixing and mass transport within a coral canopy", *Physics of Fluids*, 19(7), 075107.
4. **Reidenbach M.A.**, Koseff J.R., Monismith S.G., Steinbuck J.V., and Genin A., 2006, "The effects of waves and morphology on mass transfer within branched reef corals", *Limnology and Oceanography*, 51(2): 1134-1141.
5. **Reidenbach M.A.**, Monismith S.G., Koseff J.R., Yahel G., and Genin A., 2006, "Boundary layer turbulence and flow structure over a fringing coral reef", *Limnology and Oceanography*, 51(5), 1956-1968.

6. **Reidenbach M.A.**, Koseff J.R., and Koehl M.A.R., 2009, "Hydrodynamic forces on larvae affect their settlement on coral reefs in turbulent, wave driven flow", *Limnology and Oceanography*, 54(1), 318-330.
7. Genin A., Monismith S.G., **Reidenbach M.A.**, Yahel G., and Koseff J.R., 2009, "Intense benthic grazing of phytoplankton in a coral reef", *Limnology and Oceanography*, 54(3), 938-951.
8. **Reidenbach M.A.**, George N., and Koehl M.A.R., 2008, "Fluid flow through lobster olfactory organs: the effects of morphology and kinematics on odor sampling by the spiny lobster, *Panulirus argus*", *Journal of Experimental Biology*, 211, 2849-2858.
9. Koehl M.A.R. and **Reidenbach M.A.**, 2007, "Swimming by microscopic organisms in ambient water flow", *Experiments in Fluids*, 43, 755-768.
10. Monismith S.G., Genin A., **Reidenbach M.A.**, Yahel G., and Koseff J.R., 2006, "Thermally driven exchanges between a coral reef and the adjoining ocean", *Journal of Physical Oceanography*, 36(7), 1332-1347.

(d) Awards and Honors

- 2012 CAREER Award, National Science Foundation (Division of Ocean Sciences)
- 2011 All-University Teaching Award, University of Virginia
- 2011 Mead Honored Faculty (for faculty-student interaction), University of Virginia
- 2010-2011 Distinguished Young Investigator (FEST grant), University of Virginia
- 2009-2010 University Teaching Fellowship, University of Virginia
- 2009-2010 Professors as Writers Fellowship, University of Virginia
- 2010 Seven Society Teaching Recognition, University of Virginia
- 2004-2007 Miller Institute Post-Doctoral Fellowship, University of California Berkeley
- 2003 Best Speaker Award, NSF/ONR Physical Oceanography Dissertation Symposium
- 1997-2000 Stanford Graduate Fellowship, Stanford University

(e) Collaborators and Other affiliations

(a) Collaborators and Co-editors:

Charles Derby (Georgia State University), Amatzia Genin (Hebrew University, Israel), Michael Hadfield (University of Hawaii), James Hench (Duke University), Miki Hondzo (University of Minnesota), Mimi Koehl (U.C. Berkeley), Jeffrey Koseff (Stanford University), DeForest Mellon (University of Virginia), Stephen Monismith (Stanford University), Johanna Rosman (U. of North Carolina, Chapel Hill), Mark Stacey (U.C. Berkeley), Gitai Yahel (Ruppin School of Marine Sciences, Israel)

*(b) Graduate Advisors and Post-Doctoral Sponsors-*Stephen Monismith and Jeffrey Koseff, Stanford University (PhD thesis co-advisors), Mimi A.R. Koehl and Mark Stacey, U.C. Berkeley (Post-doctoral co-sponsors)

(c) Thesis Advisor and Postgraduate-Scholar Sponsor: all at the University of Virginia: Amy Grady (Ph.D. candidate, 2009-), Swapnil Pravin (Ph.D. candidate, 2009-), Jonathan Stocking (Ph.D. candidate, 2010-), Emily Thomas (M.S. candidate, 2011-), Ross Timmerman (M.S. candidate, 2012-), Elizabeth Murphy (Ph.D. candidate, 2012-), Elizabeth Whitman (M.S.), Jennifer Hansen (Ph.D.), total graduate students advised: 8, post-docs: 0.