### ALICIA M. WILSON

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#### **EDUCATION**

Johns Hopkins University, Ph.D. 1999	Earth and Planetary Sciences (Hydrogeology)
Stanford University, M.S. 1993	Applied Earth Science (Hydrogeology)
Dartmouth College, B.A. 1991	Earth Science

#### APPOINTMENTS

3/1/2017-present	Associate Director, School of the Earth, Ocean, and Environment, UofSC
2017 to present	Professor, School of the Earth, Ocean, and Environment, UofSC
2014 to present	Adjunct Associate Professor, Marine Science Program, UofSC
2011 to present	Senior Associate Faculty, Environment & Sustainability Program, UofSC
2010-2011	Blaustein Visiting Professor, Stanford University
2008-2009	Undergraduate Director, School of the Environment, University of South Carolina
2008-2010	Adjunct Associate Professor, Marine Science Program, University of South Carolina
2007 to 2016	Associate Professor, Earth & Ocean Sciences, University of South Carolina
2001 to 2007	Assistant Professor, Geological Sciences, University of South Carolina
2000	Post-doc, Bren School of Environmental Science & Management
1999	National Research Council Post-doctoral Research Associate,
	USGS WRD, Reston VA

#### HONORS AND AWARDS

2017 Fellow, Geological Society of America

2017 Finalist, University of South Carolina Mungo Undergraduate Teaching Award

PUBLICATIONS (\* indicates Wilson student; \*\* indicates Wilson undergraduate student)

- 1. \*Evans, Tyler and Alicia M. Wilson (2017) Submarine groundwater discharge and solute transport under a transgressive barrier island. Journal of Hydrology, 547:97-110.
- 2. Michael, H.A., V.E.A. Post, A.M. Wilson, and Adrian D. Werner (2017) Science, society, and the coastal groundwater squeeze. Water Resources Research. 10.1002/2017WR020851
- Savidge, W.B., A.M. Wilson, and G. Woodward\*\* (2016) Using a thermal proxy to examine sediment-water exchange in mid-continental shelf sandy sediment. Aquatic Geochemistry 22:419-441. doi:10.1007/s10498-016-9295-1.
- 4. Wilson, A.M., W.B. Savidge, and G. Woodward\*\* (2016) Using heat as a tracer to estimate the depth of rapid porewater advection below the sediment-water interface. Journal of Hydrology.
- 5. \*Evans, Tyler and Alicia M. Wilson (2016) Groundwater transport and the freshwater-saltwater interface below beaches. Journal of Hydrology.
- 6. Schutte, C.A., S.M. Joye, A.M. Wilson, W.S. Moore, and T.B. Evans\* (2016) Methanotrophy controls groundwater methane export from a barrier island. Geochimica et Cosmochimica Acta 17:242-256.
- Schutte, Charles A., S.B. Joye, A.M. Wilson, T.B. Evans\*, W.S. Moore and K. Casciotti (2015). Intense nitrogen cycling in permeable intertidal sediment revealed by a nitrous oxide hotspot. Global Biogeochemical Cycles, 29, doi:10.1002/2014GB005052.

- \*Hughes, Wilson, and Moore (2015) Groundwater transport and radium variability in coastal porewaters. Estuarine, Coastal and Shelf Science, 164, p 94-104. <u>http://dx.doi.org/10.1016/j.ecss.2015.06.005</u>.
- Wilson, Alicia M., Tyler Evans\*, Willard Moore, Charles Schutte, and Samanatha Joye (2015) What time scales are important for monitoring tidally-influenced submarine groundwater discharge? Insights from a salt marsh. Water Resources Research 51, 4198-4207, doi:10.1002/2014WR015984.
- \*Gupta, Ipsita, Alicia M. Wilson, and Benjamin J. Rostron (2015) Groundwater age, brine migration, and large-scale solute transport in the Alberta Basin, Canada. Geofluids 15, 608–620. <u>doi:</u> <u>10.1111/gfl.12131</u>.
- 11. Wilson, Alicia M., T.B. Evans\*, A.H. Hughes\*, W.S. Moore, C.A. Schutte, S.B. Joye (2015) Groundwater controls ecological zonation of macrophytes in salt marshes. Ecology 96, 840-849. <u>http://dx.doi.org/10.1890/13-2183.1</u>.
- 12. Das, Reshmi, Michael Bizimis, and Alicia M. Wilson (2013) Tracing mercury seawater vs. atmospheric inputs in a pristine SE USA salt marsh system: Mercury isotope evidence. Chemical Geology 336, p. 50-61.
- 13. \*Hughes, Andrea L.H., Alicia M. Wilson, and James T. Morris (2012) Hydrologic variability in a salt marsh: Assessing the links between drought and acute marsh dieback. Estuarine, Coastal and Shelf Science 111(95-106).
- 14. Wilson, Alicia M. and James T. Morris (2012) The influence of tidal forcing on groundwater flow and nutrient exchange in a salt marsh-dominated estuary. Biogeochemistry v. 108, no. 1, p. 27-38.
- 15. \*Gupta, Ipsita, Alicia M. Wilson, and Benjamin J. Rostron (2012) Cl/Br ratios as indicators of the origin of brines: Hydrogeologic simulations of the Alberta Basin, Canada. GSA Bulletin, v. 124 no. 1-2, p. 200-212.
- Wilson, Alicia M., Willard, S. Moore, Samantha B. Joye, Joseph L. Anderson\*, and Charles A. Schutte (2011) Storm-driven groundwater flow in a salt marsh. Water Resources Research, v. 47, W02535, doi:10.1029/2010WR009496, 11 pp.
- 17. Wilson, Alicia M., Marcus Huettel, and Steven Klein (2008) Grain size and depositional environment as predictors of permeability in coastal marine sands, Estuarine, Coastal and Shelf Sediments 80(1) 193-199.
- 18. Carter, E.S., S.M. White, and A.M. Wilson (2008) Variation in groundwater salinity in a tidal salt marsh basin, North Inlet Estuary, South Carolina. Estuarine, Coastal and Shelf Science 76, 543-552.
- 19. Wilson, Alicia M., and Carolyn Ruppel (2007) Salt tectonics and shallow subseafloor fluid convection: models of coupled fluid-heat-salt transport. Geofluids 7 (4), 377-386.
- 20. \*Thornton, M. M. and Alicia M. Wilson (2007) Topography-driven flow versus buoyancy-driven flow in the U.S. mid-continent: implications for the residence time of brines, Geofluids, 7, 69-78.
- 21. Gardner, Leonard R., and Alicia M Wilson (2006) Comparison of four numerical models for simulating seepage from salt marsh sediments. Estuarine, Coastal and Shelf Science, 69, 427-437.
- 22. Wilson, A. M., and L. R. Gardner (2006), Tidally driven groundwater flow and solute exchange in a marsh: Numerical simulations, Water Resour. Res., 42, W01405, doi:10.1029/2005WR004302
- 23. Wilson A. M., and L. R. Gardner (2005), Comment on "Subsurface flow and vegetation patterns in tidal environments" by Nadia Ursino, Sonia Silvestri, and Marco Marani, Water Resour. Res., 41, W07021, doi:10.1029/2004WR003554.
- 24. Moore, Willard S., and Alicia M. Wilson (2005) Advective flow through the upper continental shelf driven by storms, buoyancy, and submarine groundwater discharge. Earth and Planetary Science Letters, Volume 235, Issues 3-4, 15 July 2005, Pages 564-576.
- 25. Wilson, Alicia M. (2005), Fresh and saline groundwater discharge to the ocean: A regional perspective. Water Resources Research, v. 41, W02016, doi:10.1029/2004WR003399.
- 26. Hoffman, J, S.A. Leake, D.L. Galloway, and A.M. Wilson (2003) MODFLOW-2000 ground-water model

 User guide to the Subsidence and Aquifer-System Compaction (SUB) Package. U.S. Geological Survey Open-File Report 03-233, 44 p.

- 27. Wilson, Alicia M. (2003), The occurrence and chemical implications of geothermal convection in continental shelves: Geophysical Research Letters, v. 30, no. 21, 2127, doi:10.1029/2003GL018499
- 28. Wilson, Alicia M., Thomas Fenstemaker, and John M. Sharp, Jr. (2003) Abnormally-pressured beds as barriers to diffusive mass transport in sedimentary basins. Geofluids 3(3), p. 203-212.
- 29. Whitaker, Fiona F., Gareth Jones, Ward Sanford, Peter Smart, and Alicia M. Wilson (2002), Hydrology, geochemistry and diagenetic potential of saline groundwater: field results from the Bahamas and model studies: Special Publication of the Karst Waters Institute no. 7, p. 124-128.
- Keller, Arturo A., Patricia Holden, and Alicia M. Wilson (2002) Modelling the seasonal variation in bioavailability of residual NAPL in the vadose zone, in Groundwater quality; natural and enhanced restoration of groundwater. S. F. Thornton and S. E. Oswald, eds., IAHS-AISH Publication vol. 275, p. 133-139.
- Wilson, Alicia M., Ward Sanford, Fiona Whitaker, and Peter Smart (2001), Spatial patterns of diagenesis during geothermal convection in carbonate platforms: American Journal of Science, v. 301, p. 727-752.
- 32. Wilson, Alicia M., James R. Boles, and Grant Garven (2000), Calcium mass transport and diagenesis during compaction-driven flow in the San Joaquin Basin, California: GSA Bulletin, v. 112, no. 6, p. 845-856.
- Wilson, Alicia M., Ward Sanford, Fiona Whitaker, and Peter Smart (2000), Geothermal convection: a mechanism for dolomitization at Enewetak Atoll?: Journal of Geochemical Exploration, v. 69-70, no. 1-3, p. 41-45.
- 34. Wilson, Alicia M., Grant Garven, and James R. Boles (1999), Paleohydrogeology of the San Joaquin Basin, California: GSA Bulletin, v. 111, No. 3, pp. 432-449.
- 35. Wilson, Alicia M., and Steven Gorelick (1996), The effects of pulsed pumping on land subsidence in the Santa Clara Valley, California: Journal of Hydrology, Vol. 184, No. 3-4, p. 375-396.

### Grants

- NSF (Biological Oceanography) \$993K. Groundwater sources of "new" N for benthic microalgal production in the South Atlantic Bight. 1/1/2018-12/31/2020. Lead PI Jay Pinckney, co-PIs Alicia Wilson and Susan Lang.
- NSF (Hydrology) \$575K. Fluid and chemical fluxes across the seafloor of a passive margin. 7/1/2013 – 6/30/2018. Lead PI Wilson, co-PIs Billy Moore and Scott White.
- 3. National Center for Women & IT, \$2000 5/15/2017-9/15/2017. 2015 Girls Go for IT Summer Camp. Lead PI Wilson. Co-PI Dr. Toni Williams, UofSC School of Education.
- 4. National Center for Women & IT, \$2000 5/15/2016-9/15/2016. 2015 Girls Go for IT Summer Camp. Lead PI Wilson. Co-PI Dr. Toni Williams, UofSC School of Education.
- 5. South Carolina Sea Grant, \$149k. How does coastal development impact groundwater inputs to estuarine tidal creeks? 2/1/2016-1/30/2018. Lead PI Wilson, co-PI Erik Smith.
- 6. National Center for Women & IT, \$2000. 10/15/2015 5/15/2016. Girls Go for IT Computer Club. Sole PI.
- 7. National Center for Women & IT, \$2000 5/15/2015-8/15/2015. 2015 Girls Go for IT Summer Camp. Lead PI Wilson. Co-PI Dr. Toni Williams, UofSC School of Education.

- 8. USC Provost's Office Research Engagement Collaborative Seed Grant, \$25k. Coastal Health, Sustainability and Adaptation. Lead PI Dr. Kirstin Dow. Wilson is (unfunded) co-PI.
- 9. National Center for Women & IT, \$1500 4/21/2014-8/15/2014. Girls Go for IT Summer Camp. Sole PI.
- 10. USC Internal funding (VPR) \$14,855 Measurement of oxygen consumption in beach face pore waters. 4/16/2012-4/15/2013. Lead PI Tim Shaw. Wilson is co-PI (unfunded).
- NSF (Hydrology) \$574,094 (USC portion \$374,094); 9/1/2007 8/31/2010. Collaborative Research: Groundwater dynamics of a barrier island. Lead PI Wilson. USC co-PI Billy Moore; UGA co-PI Mandy Joye.
- 12. South Carolina Sea Grant, \$42,720, 2/1/2008 8/31/2009. An integrated hydrologic and ecological study of salt marsh dynamics. Lead PI Wilson. Co-PI Jim Morris (USC Biology).
- DOE (Basic Energy Science), \$158,000; 3/1/2004 5/15/2008. Understanding long-term solute transport in sedimentary basins: Simulating brine migration in the Alberta Basin, Canada. Sole PI.
- 14. South Carolina Sea Grant, \$147,543, 3/1/2006 7/31/2008. An integrated hydrologic and ecological study of salt marsh dynamics. Lead PI Wilson. Co-PI Jim Morris (Biology).
- USC Magellan Scholar Program \$1200 6/1/2006 5/15/2007. 3-D Maps of Salinity and Groundwater Composition beneath South Carolina's Coastal Plain. With Elizabeth (Ashley) Shull, USC Geology Undergraduate Major.

### Abstracts (since 2007)

- 1. \*George, C.P., A.M. Wilson, W.S. Moore, S.M. White and E Smoak (2016) Submarine groundwater discharge to the continental shelf in the South Atlantic Bight. Abstract EP21B-0885 presented at the 2016 Fall Meeting, AGU, San Francisco, CA, 12-16 Dec.
- \*Evans, T, and A.M. Wilson (2016) Groundwater transport and the freshwater-saltwater interface below sandy beaches. 2016 GSA Southeastern Section Meeting. Geological Society of America *Abstracts with Programs*. Vol. 48, No. 3. doi: 10.1130/abs/2016SE-273623
- \*George, C.P., E. Smoak, A.M. Wilson, S.M. White and W.S. Moore (2016) Submarine groundwater discharge to the continental shelf in the South Atlantic Bight. 2016 GSA Southeastern Section Meeting. Geological Society of America *Abstracts with Programs*. Vol. 48, No. 3. doi: 10.1130/abs/2016SE-273724
- \*Hughes, A.L.H., A.M. Wilson, and W.S. Moore (2016) Groundwater transport and radium variability in coastal porewaters. 2016 GSA Southeastern Section Meeting. Geological Society of America *Abstracts with Programs*. Vol. 48, No. 3. doi: 10.1130/abs/2016SE-273951
- 5. Wilson, A.M. (2016) How does sea level rise affect salt marsh hydrogeology and submarine groundwater discharge (SGD)? 2016 GSA Southeastern Section Meeting. Geological Society of America *Abstracts with Programs.* Vol. 48, No. 3. doi: 10.1130/abs/2016SE-273728
- Wilson A.M. and W.B. Savidge (2016) A new heat tracer method to complement Ra-Rn methods for porewater transport. 6<sup>th</sup> International Ra-Rn workshop. https://sites.google.com/site/rarngirona/abstracts

- 7. \*George, C.P., A.M. Wilson, W.S. Moore, S.M. White and E Smoak (2016) Submarine groundwater discharge to the continental shelf in the South Atlantic Bight. Abstract EC53B-04 presented at the 2016 Ocean Sciences Meeting, New Orleans LA, 21-26 Feb.
- 8. Angel, A., Bodnar, R.J., and Wilson, A.M. (2016) The Role of the Cryosphere in Earth's Geohydrologic Cycle in Deep Time, *Goldschmidt Conference*, Yokohama, Japan.
- 9. Smoak, E., S.M. White and A.M. Wilson (2015) Depositional environments during sea-level rise based on paleochannel fill offshore Charleston, SC. Geological Society of America *Abstracts with Programs*. Vol. 47, No. 7, p. 266.
- 10. Wilson, A.M. (2015a) How far can we stretch the concept of a watershed? Groundwater-seawater exchange far from shore. Geological Society of America *Abstracts with Programs.* Vol. 47, No. 7, p. 411. **Invited.**
- 11. Wilson, A.M. (2015b) How does sea level rise affect salt marsh hydrogeology? Implications for ecological zonation and nutrients. Abstracts, 25th Biennial Conference of the Coastal and Estuarine Research Federation.
- 12. \*Evans, T.B., S.M. White and A.M. Wilson (2014) Position of the freshwater-saltwater interface in a coastal confined aquifer. Abstract H23D-0912 (#22555) presented at the 2014 Fall Meeting, AGU, San Francisco, CA, 15-19 Dec.
- S.M. White, W.S. Moore, E. Smoak, \*C. George and A.M. Wilson (2014) Fluid Exchange Across the Seafloor of the Continental Shelf in the South Atlantic Bight. Abstract H23D-0907 (#16023) presented at the 2014 Fall Meeting, AGU, San Francisco, CA, 15-19 Dec.
- M.C. Marvin-DiPascuale, L.M. Windham-Myers, A.M. Wilson, T. Buck, and E. Smith (2014) The influence of coastal wetland zonation on surface sediment and porewater mercury speciation. Abstract OS53E-1092 (#6839) presented at the 2014 Fall Meeting, AGU, San Francisco, CA, 15-19 Dec.
- M.C. Marvin-DiPascuale, L.M. Windham-Myers, A. Wilson, T. Buck, and E. Smith (2014) The Influence of Coastal Wetland Zonation on Surface Sediment and Porewater Mercury Speciation. 2014 NERRS/NERRA Annual Meeting, November 17 – 21, 2014, Shepherdstown, WV.
- 16. \*Hughes, A.H. and A.M Wilson (2014) Groundwater transport and radium variability in coastal porewaters. Geological Society of America Abstracts with Programs, Vol. 46, No. 6, p. 481.
- 17. Wilson, A.M. and W.S. Savidge (2014) USING HEAT AS A TRACER TO QUANTIFY TRANSIENT FLUSHING BELOW THE SEDIMENT-WATER INTERFACE IN A SANDY CONTINENTAL SHELF. Geological Society of America Abstracts with Programs, Vol. 46, No. 6, p. 479.
- 18. Wilson, A.M. (2014) **Invited**. Regional groundwater flow and energy resources: New challenges in continental shelves. Geological Society of America Abstracts with Programs, Vol. 46, No. 6, p. 230.
- 19. Wilson, A.M., A.H. Hughes, and W.S. Moore (2013) Radium isotopes as tracers for groundwatersurfacewater interactions in tidally-influenced creeks. Geological Society of America *Abstracts with Programs.* Vol. 45, No. 7, p.196.
- 20. \*Evans, Tyler, A.M. Wilson, W.S. Moore (2013) Salinity and groundwater flow below beaches, Abstract 1802427 presented at 2013 Fall Meeting, AGU, San Francisco, CA, 9-13 Dec.
- 21. \*Hughes, A.L., A.M. Wilson (2013) Improving radium-based tracer techniques: Hydrologic controls on porewater radium activity, Abstract 1817479 presented at 2013 Fall Meeting, AGU, San Francisco, CA, 9-13 Dec.

- 22. \*Peurifoy, J. Brad, A.M. Wilson (2013) Quantifying relative changes in SGD in response to fluctuations in tidal amplitude and MSL from a fringing marsh system, North Inlet, SC, Abstract presented at 2013 Fall Meeting, AGU, San Francisco, CA, 9-13 Dec.
- 23. Wilson, A.M., W.S. Moore, T.B. Evans, S.B. Joye, C.S. Schutte (2013) Groundwater controls on ecological zonation in the U.S. Southeast. H33I-02. Abstract presented at the 2013 Fall Meeting, AGU, San Francisco, CA, 9-13 Dec.
- \*Peurifoy, J. Brad, A.M. Wilson, and S.M. White (2012) Salinity and groundwater flow beneath a fringing salt marsh: Electrical resistivity tomography. GSA Abstracts with Programs, Vol 44, No. 7, p. 433.
- 25. \*Evans, Tyler, A.M. Wilson, C. Schutte, W. Moore, and S.B. Joye (2012), GSA Abstracts with Programs, Vol 44, No. 7, p. 616.
- 26. \*Hughes, A.L., A.M. Wilson, and J.T. Morris (2012), Natural hydrologic variability in an intertidal salt marsh and its impact on groundwater transport of select geochemical tracers and proxies. GSA Abstracts with Programs, v 44, no. 7, p. 615
- 27. Wilson, A.M., \*T. Evans, W.S. Moore, C. Schutte, and S.B. Joye (2012) Temporal variability in submarine groundwater discharge: What time scales are important? GSA Abstracts with Programs, Vol 44, No. 7, p. 615. Schutte, C., A.M. Wilson, J. Anderson, W. Moore, and S. Joye (2012) Tidally-driven hotspots of nitrogen cycling in shallow coastal aquifers. NASA Astrobiology Science Conference, Atlanta GA, April 16-20, 2012.
- 28. Das, Reshmi, Michael Bizimis, and Alicia M Wilson (2011), Mass independent isotope fractionation of mercury in the sediments of a salt marsh: Cabretta Island, GA. 10th International Conference on Mercury as a Global Pollutant Abstract Volume p. 72-73. (Available at www.mercury2011.org)
- 29. Wilson, A.M., U. Wortmann, M. Huuse, J.C. McIntosh (2011) Reflux circulation and groundwater age below the Great Australian Bight, GSA Abstracts with Programs, Vol 43, No. 5, p. 393.
- 30. \*Hughes, A.L., A.M. Wilson, and J.T. Morris (2011), Hydrologic variability in a salt marsh: Assessing the links between drought and acute marsh dieback. Abstracts, 21st Biennial Conference of the Coastal and Estuarine Research Federation, p. 100.
- 31. Wilson, A.M., J.T. Morris, W.S. Moore, S.B. Joye, J. Anderson, C. Schutte (2011) The effectis of variability in tidal forcing on groundwater exchange in coastal wetlands. 21st Biennial Conference of the Coastal and Estuarine Research Federation, p. 231.
- 32. \*Hughes, A.L. and A.M. Wilson (2010), Groundwater modeling and radium isotopes as tools for estimating coastal groundwater discharge: A field and modeling study, North Inlet Salt Marsh, Georgetown, South Carolina, Eos Trans. AGU, 91(26), Ocean Sci. Meet. Suppl., Abstract IT25D-03.
- 33. Schutte, C.A., W.S. Moore, A.M. Wilson, and S.B. Joye (2010), Nitrogen cycling and trace gas dynamics in coastal aquifers, Goldschmidt Conference Abstracts.
- \*Gupta, Ipsita and A.M. Wilson (2010) Using geochemical evidence to constrain hydrogeologic models of brine formation and residence time. Geological Society of America Abstracts with Programs, Vol. 42, No. 5, p. 486
- 35. Wilson, A.M. and J.T. Morris (2010), Groundwater-mediated feedbacks between sea level rise and marsh productivity, Abstract EP31B-0746 presented at 2010 Fall Meeting, AGU, San Francisco, CA, 13-17 Dec.

 Wilson, A.M., \*J. Anderson, W.S. Moore, C. Schutte, S.B. Joye (2009) Storm-driven groundwater flow and nutrient transport in a barrier Island. *Eos Trans. AGU, 90(52)*, Fall Meet. Suppl., Abstract H13H-05.

### Seminars (Since 2010)

- 1. January 29, 2016: Florida International University
- 2. March 4, 2013: University of Georgia, Dept. Marine Sciences
- 3. March 29, 2013: Virginia Tech, Dept Geology
- 4. April 19, 2013: Clemson University, Dept. Environmental Engineering and Earth Science
- 5. Oct 11, 2013: University of Missouri, Dept. Geological Sciences
- 6. Nov 9, 2012: University of South Carolina, Dept. Mechanical Engineering, "The residence time of porefluids in deep sedimentary basins: Can you conduct a tracer test over millions of years?"
- March 3, 2011: USGS Water Resources Discipline Research Seminar (Western Regional Headquarters, Menlo Park; "Hydrologic variability and the hydrogeology of salt marshes: Some insights from field and modeling studies." Video streamed nationally and archived at <u>http://wwwrcamnl.wr.usgs.gov/wrdseminar/pastseminarsonvideo.htm</u>
- 8. March 23, 2011: University of the Pacific, Earth and Environmental Science Dept. Seminar, "Hydrogeology of salt marshes: Some insights from field and modeling studies"
- 9. April 7, 2011: UC Santa Barbara, Earth Science Dept Seminar. "Hydrologic variability and salt marsh ecosystems"
- 10. April 27, 2011, UC Santa Cruz, Dept Earth and Planetary Sciences (brown bag) "Groundwater flow and hydrologic variability in salt marshes."
- 11. March 1, 2010: Skidaway Institute of Oceanography.
- 12. October 21, 2010: Rice University, Dept. Earth Science
- 13. November 17, 2010: Stanford University, Dept. Environmental Earth System Science

### **ADVISERS**

M.S.: Prof. Steve Gorelick, Environmental Earth System Sciences, Stanford University Ph.D.: Prof. Grant Garven, now at Tufts University Post-doc: Dr. Ward Sanford, National Research Program, USGS Reston, Virginia Post-doc: Profs. Patricia Holden and Arturo Keller, Bren School, UC Santa Barbara

### **STUDENTS ADVISED**

<u>MS students:</u> Carolyn Ryan (current) Meghan Shanahan (current) Brad Peurifoy (2013) Joseph Anderson (2010) Alan Mehrzad (2009) Melissa Thornton (2005) Justin Scheidt (2005) <u>Ph.D. Students:</u> Camaron George (current) Tyler Evans (2016) Andrea Hughes (2016) Ipsita Gupta (2010)

### **PROFESSIONAL MEMBERSHIPS**

AGU, GSA, AWG (Association for Women Geoscientists)

## USC Service (emphasizing last 5 years)

- Associate Director, School of the Earth, Ocean and Environment, (2017-2019)
- Member of many dept- and School-level committees (Geological Sciences Undergrad Committee,

Environmental Science Undergrad Committee etc.)

• Organizer for the Earth and Ocean Sciences Seminar Series (2010-2013)

• Hiring committees for the Director of the School of the Earth, Ocean and Environment (2012-2013) and Director of the (UofSC) Baruch Institute (2016)

- Chair of the 2011-2012 and 2012-2013 Aqueous Geochemistry searches.
- College of Arts and Sciences Curriculum Committee (3 years)
- Chair of the E&SP Future Hires Committee 2013-2014

• Undergraduate director, School of the Environment (now the Environment & Sustainability Program in the School of the Earth, Ocean and Environment), 2008-2009

# **Professional Service**

- Chair, Geological Society of America Hydrogeology Division, 2016 Meeting.
- Geological Society of America Hydrogeology Division Management Board, 2013-present
- Associate Editor, Water Resources Research 3/3014-12/2017.
- NSF Panels: Hydrology Panel 2011, 2012, 2015; MG&G (pre-2010), Coastal SEES (2016)
- Geological Society of America Joint Technical Program Committee, Hydrogeology Division rep, 2010-2012 (Responsible for the Hydrogeology Div. technical program for the 2012 Annual meeting)
- Associate Editor, Hydrogeology Journal, 2005 2009
- Integrated Ocean Drilling Program Scientific Steering and Evaluation Panel (SSEP), 2005-2008
- Reviewer for NSF and other funding agencies
- Reviewer for many journals. For the period 2009-2013, this included 34 reviews for:

Water Resources Research	J Hydrology
Hydrologic Processes	GRL (Geophysical Research Letters)
Geology	JGR (Journal of Geophysical Research)
Limnology and Oceanography	G <sup>3</sup>
Geochimica et Cosmochimica Acta	Marine Chemistry
Journal of Geology	Hydrogeology Journal
Estuaries and Coasts	Soil Science Society of America Journal
J Am. Mining and Reclamation	J. South American Earth Science
Wetlands Ecology and Management)	

### **Outreach and Outside Activities**

- Director, Girls Go for I.T. Summer Camps (2014-present) and Clubs (2015-2016 school year). These coding camps and clubs are designed to attract middle-school girls to careers in IT and STEM fields. In 2016 we had grown to 60 campers in the summer camp, with 20-30% minority participation.
- Director, Dent Gets I.T. Club (2015-2016 school year). This coding club was designed to attract middle-level students from a school with a large population of underserved and underrepresented groups to careers in IT and STEM fields.
- Coach for children's rec soccer teams, 11 seasons (Galaxy Girls 2012-2016; Rockets 2017-present)