Peter N. Adams

adamsp@ufl.edu http://geomorph.geology.ufl.edu/~adamsp/PNA/Home.html (352) 846-0825 University of Florida Dept. of Geological Sciences 241 Williamson Hall P.O. Box 112120 Gainesville, FL 32611

PERSONAL

Born, 17 Dec. 1971, Philadelphia, Pennsylvania Citizenship - United States of America Married (2005), 2 Children (2008, 2011)

EMPLOYMENT

2015-present	Associate Professor, Dept. of Geological Sciences, Univ. of Florida, Gainesville, FL
2007-2015	Assistant Professor, Dept. of Geological Sciences, Univ. of Florida, Gainesville, FL
2005-2007	Assistant Project Scientist, Scripps Inst. of Oceanography, UCSD, La Jolla, CA
2004-2005	Visiting Assistant Professor, Dept. of Geology, Washington and Lee Univ., Lexington, VA

EDUCATION

2004 Ph.D. Earth Sciences, University of California, Santa Cruz. Thesis Advisor: Robert S. Anderson Thesis title: Assessing Coastal Wave Energy and the Geomorphic Evolution of Rocky Coasts.

1999 M.S. Geosciences, Penn State University. Thesis Advisor: Rudy L. Slingerland Thesis title: *The Origin and Characteristics of Natural Levees.*

1996 B.S. Geosciences, Penn State University. Thesis Advisor: Donald M. Fisher Thesis title: *Fold Kinematics of the Reedsville Shale.*

1996 B.S. Chemical Engineering, Minor in Environmental Engineering, Penn State University.

RESEARCH INTERESTS

General: Surface Processes; Landscape Evolution; Climate Change

Specific: Coastal Evolution in Response to Wave Climate Change; Mechanics of Sea Cliff Retreat;

Influence of Physical Processes on Coastal Ecosystems

Methods: Field Instrumentation; Landscape Analysis; Numerical Modeling

RESEARCH FUNDING

Mathworks, Inc.:

Development of MATLAB Apps to Demonstrate Geomorphic Processes and Landform Evolution

Total UF Budget: **\$26,759** (Direct: \$26,759, IDC Rate=0%), Proposal Submitted: 03/2015, Project Dates: 11/2015-11/2017,

Role: Lead-PI, UF Project #: Gift

U.S. Department of the Interior - U.S. Geological Survey:

Beach Morphologic Change at NASA Kennedy Space Center 2009-2014: Data Collection, Analysis, and Implications

Total UF Budget: \$10,793 (Direct: \$7,195, IDC Rate=49%).

Proposal Submitted: 02/2015, Project Dates: 07/27/2015-07/26/2016,

Role: Lead-PI, UF Project #00124786

U.S. Department of Interior - Bureau of Ocean Engineering Management:

Ecological Function and Recovery of Biological Communities within Dredged Ridge-Swale Habitats in the South-Atlantic Bight,

Total UF (Adams) Budget: **\$68,705** (Direct: \$58,472, IDC Rate=17.5%), Proposal Submitted: 07/2013, Project Dates: 03/21/2014-08/31/2019,

Role: Co-PI, UF Project #00116509

U.S. Department of the Interior - U.S. Geological Survey – National Parks Research:

Development of a Framework for Coastal Vulnerability Forecasting at Fire Island National Seashore,

Total UF Budget: \$48,633 (Direct: \$32,640, IDC Rate=49%),

Proposal Submitted: 09/2012, Project Dates: 03/01/2013-08/31/2014,

Role: Lead-PI, UF Project #00106271

U.S. Department of Commerce - NOAA, subcontract through University of Georgia:

Phase 2 Application of New Geospatial Tools for a Regional Vulnerability Assessment of Estuarine

Shorelines of NC, GA, and FL

Total UF Budget: \$13,794 (Direct: \$11,495, IDC Rate=20%),

Proposal Submitted: 12/2010, Project Dates: 12/01/2012-11/30/2013,

Role: Co-PI, UF Project #00102944

U.S. Department of Commerce - NOAA, subcontract through University of Georgia:

Regional Hazard Vulnerability Assessment Of Oceanfront And Estuarine Shorelines,

Total UF Budget: \$69,653 (Direct: \$58,044, IDC Rate=20%),

Proposal Submitted: 12/2010, Project Dates: 03/01/2012-12/31/2013,

Role: Co-PI, UF Project #00092088

National Aeronautical and Space Administration (Prime) – Innovative Health Applications (Sub):

Providing Geological and Oceanographic Support for the Kennedy Space Center Shoreline Protection

Total UF Budget: \$7,658, (Direct: \$5,227, IDC Rate=46.5%),

Project Dates: 10/10/2011-09/30/2013, Role: **Lead PI**, UF Project #00098450

National Aeronautical and Space Administration (Prime) - Innovative Health Applications (Sub):

Monitoring Shoreline And Beach Morphologic Change At Kennedy Space Center, Cape Canaveral, Fla.,

Total UF Budget: \$155,503 (Direct: \$106,145, IDC Rate=46.5%),

Project Dates: 10/10/2011-09/30/2013, Role: **Lead PI**, UF Project #00098217

National Science Foundation (NSF) – Geomorphology and Landscape Dynamics:

Collaborative Research: Coastal Geomorphic Consequences Of Wave Climate Change.

Total UF Budget: **\$231,632** (Direct: \$166,398, IDC Rate=46.5%), Proposal Submitted: 07/2010, Project Dates: 09/15/2011-08/31/2016,

Role: Lead PI, UF Project #00089142

U.S. Department of the Interior - U.S. Geological Survey:

Cooperative Project To Assist In Dune Vulnerability Assessment At Kennedy Space Center, Cape Canaveral. Florida

Total UF Budget: \$33,329 (Direct: \$22,750, IDC Rate=46.5%).

Project Dates: 09/15/2010-09/14/2011, Role: **Lead PI**, UF Project #00090816

National Aeronautical and Space Administration (Prime) – Innovative Health Applications (Sub):

Seasonal Datum-based Shoreline Change and Beach State Variability at Cape Canaveral, Florida, Phase 2 Total UF Budget: \$98,965 (Direct: \$67.553, IDC Rate=46.5%).

Project Dates: 07/28/2010-09/30/2011,

Role: **Co-PI**, UF Project #00085113b

National Aeronautical and Space Administration (Prime) – Innovative Health Applications (Sub):

Seasonal Datum-based Shoreline Change and Beach State Variability at Cape Canaveral, Florida, Phase 1

Total UF Budget: **\$9,985** (Direct: \$6,816, IDC Rate=46.5%),

Project Dates: 03/09/2010-09/30/2010, Role: **Co-PI**, UF Project #00085113a

National Aeronautical and Space Administration (Prime) - Dynamac Corp. (Sub):

Development of Shoreline Change Proxies from Satellite

Total UF Budget: \$20,345 (Direct: \$13,887, IDC Rate=46.5%),

Project Dates: 04/01/2009-09/30/2009, Role: **Co-PI**, UF Project #00079807

U.S. Department of the Interior - U.S. Geological Survey:

Assessment Of Potential Hotspots Of Coastal Erosion Along The Southern California Coast,

Total UF Budget: \$7,325 (Direct: \$5,000, IDC Rate=46.5%),

Project Dates: 10/01/2008-09/30/2009, Role: **Lead PI**, UF Project #00076458

California Energy Commission PIER Program:

Climate Change and Sea Level Rise: Implications for the California Coast,

Total UF Budget: \$599,625 (Direct: \$479,700, IDC Rate=25%),

Project Dates: 09/01/2006-12/31/2011, Role: **Lead PI**, UF Project #00063531

AWARDS AND HONORS

- 2012 National Aeronautics and Space Administration (NASA), Group Achievement Award (presented 2-Aug-2012 to the Dune Vulnerability Team: "For exceptional teamwork in formulating a storm surge risk model for Kennedy Space Center Launch Complex 39."
- 2005 Mendenhall Post-Doctoral Fellowship, U.S. Geological Survey (offer declined)
- 2003 National Estuarine Research Reserve Graduate 2-year Fellowship, NOAA (\$37,500, http://nerrs.noaa.gov/GRFAbstract.aspx?ID=264)
- 2002 Outstanding TA as voted by Earth Sci. Undergrads, Earth Sciences Dept., UC-Santa Cruz
- 2001 Aaron C. Waters Award Best Ph.D. Thesis Proposal, Earth Sciences, UC-Santa Cruz (\$2,000, http://eps.ucsc.edu/about/honors-awards/waters-award.html)
- 2000 Outstanding Student Paper Award, Hydrology Section, American Geophysical Union Fall Mtg.
- 1999 First Place, Penn State University-wide Graduate Research Exhibition, Phys. Sci. Division (\$1,000)
- 1998 May, P. D. Krynine Research Assistance Award, Dept. of Geosciences, Penn State Univ. (\$1,064)
- 1997 Charles E. Knopf Memorial Fellowship, Department of Geosciences, Penn State Univ. (\$2,800)

INVITED TALKS/SEMINARS

- 2015 Dec. 2, University of Florida, Coasts, Oceans, Ports and Rivers Institute Seminar, Gainesville, FL
- 2015 Oct. 24, Penn State, SlingFest: Sediment from Mountains to Seas Symposium, University Park, PA
- 2013 Apr. 19, Southeastern Geological Society and FAPG Field Meeting, Davenport, FL
- 2013 Apr. 17, University of Florida, Water, Wetlands, and Watersheds Seminar, Gainesville, FL
- 2012 Nov. 1, University of South Florida, College of Marine Sciences Seminar, St. Petersburg, FL
- 2012 Jun. 20, Naval Research Laboratory, John C. Stennis Space Center, MS
- 2010 Jun. 1, University of Connecticut, Center for Integrative Geosciences Seminar, Storrs, CT
- 2010 May 20, Invited Speaker, NASA Climate Change Workshop, Cocoa Beach, FL
- 2010 Jan. 18, Invited Speaker, Florida Institute of Climate Science Symposium, Lake Placid, FL
- 2009 Nov. 9, University of Florida, Department of Civil/Coastal Engineering Seminar, Gainesville, FL
- 2009 May 7, Florida Power and Light, UF-CLAS Alumni Event, Juno Beach, FL
- 2009 Feb. 3, University of Florida, Department of Geography Seminar, Gainesville, FL
- 2008 Nov. 21, University of Pennsylvania, Dept. of Earth & Envt. Sci. Seminar, Philadelphia, PA
- 2008 July 15, University of Auckland, SGGES Special Seminar, Auckland, New Zealand
- 2007 Nov. 7, University of Florida, Department of Civil/Coastal Engineering Seminar, Gainesville, FL
- 2007 Sept. 10, 4th Ann. Climate Change Research Conference, Calif. Energy Comm., Sacramento, CA
- 2007 Aug. 1, Oral Presentation, 8th ARGUS Research Workshop, CIL, Oregon St. Univ., Corvallis, OR
- 2007 Apr. 9, University of Virginia, Dept. of Environmental Sciences Seminar, Charlottesville, VA
- 2007 Mar. 8, San Francisco State University, Dept. of Geosciences Seminar, San Francisco, CA
- 2006 Sept. 14, 3rd Ann. Climate Change Research Conference, Calif. Energy Comm., Sacramento, CA

- 2006 May 23, USGS Center for Coastal and Watershed Studies, St. Petersburg, FL
- 2006 Apr. 13, University of Florida, Department of Geological Sciences Seminar, Gainesville, FL
- 2005 Sept. 15, 2nd Ann. Climate Change Research Conference, Calif. Energy Comm., Sacramento, CA
- 2005 Mar. 9, Scripps Institution of Oceanography, UCSD, Geosc. Research Div. Seminar, La Jolla, CA
- 2005 Feb. 23, University of Delaware, Department of Geology Seminar, Newark, DE
- 2005 Jan. 7, University of Florida, Department of Geological Sciences Seminar, Gainesville, FL
- 2004 Sept. 17, Duke University, Division of Earth and Ocean Sciences Seminar, Durham, NC
- 2004 Apr. 27, Washington and Lee University, Department of Geology Special Seminar, Lexington, VA
- 2004 Mar. 17, Coastal Dynamics of the Western Kenai Peninsula Workshop, Homer, AK
- 2004 Feb. 25, Yale Univ. Dept. of Geosciences Departmental Colloquium, New Haven, CT
- 2002 Apr. 3, UC-Santa Cruz, Topics in Coastal Processes Seminar, Santa Cruz, CA

PROFESSIONAL WORKSHOPS

- 2015 Oct. 18-20, Panelist Teaching MATLAB in the Geosciences, NAGT-SERC Workshop, Carleton College, Northfield, MN
- 2014 Apr. 9-11, Participant Modelling of sediment transport and bed dynamics in Delft3D (Block 2), Deltares Academy, Delft, NL
- 2014 Apr. 7-8, Participant Hydrodynamic modelling in Delft3D (Block 1), Deltares Academy, Delft, NL
- 2012 Mar. 30, Governers' South Atlantic Alliance Regional Coastal Hazard Vulnerability Assessment Implementation Meeting, Skidaway Institute of Oceanography, Savannah, GA
- 2012 Jan. 10, NASA, DVT Group Meeting, Kennedy Space Center, Cape Canaveral, FL
- 2011 10th ARGUS Research Workshop participant, CIL, Oregon St. Univ., Corvallis, OR
- 2011 Host, International Workshop on Progress in Rocky Coast Geomorphology, Feb. 21, 2011 (Univ. of Florida). Attendees from Durham University (UK) and University of Auckland (New Zealand)
- 2010 Jun. 4, Invited Panelist, Seawall Assessment Committee Meeting, City of Homer, Alaska, Kachemak Bay College, Homer, AK
- 2009 Dec. 7, NASA, DVT Group Meeting, Kennedy Space Center, Cape Canaveral, FL
- 2009 Oct. 26-28, Joint Workshop, Community Surface Dynamics Modeling System (CSDMS) Coastal and Terrestrial Working Groups, Boulder, CO
- 2009 9th ARGUS Research Workshop participant, Marine Inst., Univ. of Plymouth, Plymouth, UK
- 2009 Mar. 24, NASA, DVT Group Meeting, Kennedy Space Center, Cape Canaveral, FL
- 2009 Feb. 25-26, Joint Workshop, Community Surface Dynamics Modeling System (CSDMS) Coastal and Marine Working Groups, Charlottesville, VA
- 2009 Jan. 20-21, Community Surface Dynamics Modeling System (CSDMS) Hydrology Focus Research Group Meeting, INSTAAR, University of Colorado, Boulder, CO
- 2008 NAGT Workshop: Teaching Geomorphology in the 21st Century, Ft. Collins, CO
- 2007 8th ARGUS Research Workshop participant, CIL, Oregon St. Univ., Corvallis, OR
- 2006 SWAN wave modeling short course participant, WHOI-USGS, Woods Hole, MA
- 2003 ARGUS Runtime Environment short course participant, NWRA, Bellvue, WA
- 2003 GSA Penrose Conference participant, Taroko Gorge, Taiwan

FIELD EXPERIENCE

- 2013-2014 Led/Supervised Beach Morphology RTK-GPS Surveys, Kennedy Space Cntr., FL (Research)
- 2012 Coordinated deployment of 3 ADCP instruments off coast of Cape Canaveral, Florida (Research)
- 2010 Supervised deployment of 3 ADCP instruments off coast of Cape Canaveral, Florida (Research)
- 2009 Coordinated deployment of 2 ADCP instruments off coast of Matanzas Inlet, Florida (Research)
- 2009-2012 Assisted with Beach Morphology GPS Surveys, Kennedy Space Center, Florida (Research)
- 2005 Beach Profiling and LIDAR Mapping of Sea Cliffs, Kachemak Bay, Alaska (Research)
- 2004 GPS Beach Profiling and Sediment Surveys of Kachemak Bay, Alaska (Research)
- 2003 Coastal Geomorphology and ARGUS Monitoring of Kachemak Bay, Alaska (NERR Fellowship)
- 2003-2000 Microseismic Deployments Along the Central California Coast (PhD Thesis research)
- 2002-2001 Quaternary History of Mono Basin, Eastern California (Teaching Asst. Field Geology)
- 2000 Evaluation of Glacial Sliding Speed and Sediment Output, Chugach Mountains, Alaska (Field Asst.)
- 1999 Tectonic Geomorphology of Owens Valley, Eastern California (Field Course)
- 1998 Modern Alluvial Depo-Environments, Southeastern British Columbia (MS Thesis Research)

- 1997 Stratigraphy of Permian Basin Carbonates, West Texas and New Mexico (Field Course)
- 1996 Structural Study of the Reedsville Shale, Central Pennsylvania (BS Thesis Research)
- 1995 Penn State Geosciences Field School, Montana, Wyoming, Utah. (Field Course)

PROFESSIONAL SERVICE

Journal reviewer of 29 manuscripts for 15 different scientific journals:

- (1) Journal of Geophysical Research Earth Surface (Aug. 2005, Mar. 2015)
- (2) Earth Surface Processes and Landforms (May 2007)
- (3) Marine Geology (Nov. 2007, Jul. 2009, Jun. 2010)
- (4) Continental Shelf Research (Nov. 2007, Apr. 2011)
- (5) International Journal of Climatology (Sept. 2008)
- (6) Shore & Beach (Nov. 2008, Apr. 2009)
- (7) Coastal Engineering (Aug. 2009, Feb. 2010, Dec. 2011)
- (8) Geology (Aug. 2010)
- (9) Computers and Geosciences (Apr. 2011)
- (10) Geosphere (May 2011, Aug. 2015)
- (11) Quaternary Research (Feb. 2012)
- (12) Geophysical Research Letters (Apr. 2012, Jul. 2012, Dec. 2012, Nov. 2013, Jul. 2016, Dec. 2016)
- (13) Journal of Coastal Research (Jun. 2013, Oct. 2014,)
- (14) Geomorphology (Mar. 2014)
- (15) Geological Society of America Bulletin (Aug. 2015)
- Session Co-Convener for American Geophysical Union Fall Meeting, Dec. 2007, San Francisco, CA, Session Numbers: H33L, H34B, and H41B (Coastal Geomorphology and Morphodynamics)
- Session Co-Convener for American Geophysical Union Ocean Sciences Mtg., Feb. 2010, Portland, OR, Session Numbers: GO45A, GO51A: (Geological Oceanography General Contributions)
- Session Co-Convener for American Geophysical Union Fall Meeting, Dec. 2012, San Francisco, CA, Session Numbers: EP53F, EP54A (Coastal Geomorphology and Morphodynamics)

Proposal Reviewer and Panelist for National Science Foundation (Nov. 2008, Oct. 2012, Dec. 2015)

Reviewer for Cambridge University Press (Oct. 2005, Nov. 2007)

Reviewer of Textbook Accuracy for Pearson/Prentice Hall (Oct. 2009)

Core Member, Coastal Working Group, Community Surface Dynamics Modeling System since 2008 Member of Coastal Education and Research Foundation since 2008

Member of American Shore and Beach Preservation Association since 2006

Member Intl. Assoc. of Geomorphologists' Working Group on Rock Coast Geomorphology since 2004 Member of the American Geophysical Union since 1998

Member of the Geological Society of America since 1996

UNIVERSITY SERVICE

- 2014, Feb. 11, Moderator, 2014 University of Florida Water Institute Symposium Session: "Impact of Changing Drivers 2", Reitz Union Ballroom D, University of Florida, Gainesville, FL
- 2013 2014: Member of the Planning Committee, 2014 University of Florida Water Institute Symposium: "Sustainable Water Resources Complex Challenges, Integrated Solutions" (05/23/2013–02/12/2014)
- 2011 present: Faculty Advisor for University of Florida Chapter of the Surfrider Foundation
- 2010 present: Affiliate Faculty, FCI (Florida Climate Institute), Univ. of Florida and Florida State Univ.
- 2009 2011: Senator, University of Florida Faculty Senate, Representative from Natural, Physical & Mathematical Sciences, Seat G: Term 2009-2011
- 2008 2013: Marshal, Commencement Ceremonies, Univ. of Florida (Spr. 2008, Spr.2010, Spr.2013)
- 2008 present: Affiliate Faculty, SNRE (School of Natural Resources and Environment), Univ. of Florida
- 2007 present: Affiliate Faculty, Water Institute, Univ. of Florida
- 2007 present: Affiliate Faculty, LUECI (Land Use and Environmental Change Institute), Univ. of Florida

DEPARTMENTAL SERVICE

- 2017 present: Merit Committee, Department Geological Sciences, Univ. of Florida
- 2014 2015: Informatics Institute Hire Search Committee, Dept. of Geological Sciences, Univ. of Florida
- 2011 present: Contributor to Department Geological Sciences Outreach Program: "Geosciences Day" (11/16/2011)
- 2009 present: Awards Committee, Department Geological Sciences, Univ. of Florida
- 2008 present: Contributor to Department Geological Sciences Outreach Program: "Can You Dig It?" Geology Day/Night at the Florida Natural History Museum (3/27/2008, 3/19/2009, 3/20/2010, 4/16/2011, 3/17/2012, 3/16/2013, 3/15/2014, 3/14/2015, 3/12/2016), Coordinator for "The Work of Water" Display
- 2008 2009: Web Page Committee, Dept. of Geological Sciences, Univ. of Florida
- 2007 2008: Geodynamics Hire Search Committee, Dept. of Geological Sciences, Univ. of Florida
- 2007 present: Faculty Liason to the Science Library, Dept. of Geological Sciences, Univ. of Florida
- 2007 2008: Faculty Advisor for Student Geology Club, Dept. of Geological Sciences, Univ. of Florida

OTHER SYNERGISTIC ACTIVITIES

- 2017 Invited Presenter for "Down To Earth" Youth Summer Camp, Florida Museum of Natural History, Gainesville, FL, Jun. 21, 2017
- 2016 Invited Presenter on Topics of "Land and Water" Mrs. Tracie Blackford's 1st Grade Class, J.J. Finley Elementary School, Gainesville, FL, Jan. 29, 2016
- 2011 Faculty Host for sabbatical visit for International Colleague Visiting Professor, Mark Dickson (University of Auckland, New Zealand), Feb. 12- Mar. 31, 2011
- 2010 Invited Panelist, Illustration in the Earth Sciences Discussion, Univ. of Florida School of Art and Art History Drawing Seminar, Feb. 18, 2010
- 2008 Contributed to the Florida Center for Instructional Technology (FCIT) web site, providing middle and high school teachers with resources for science instruction.

PUBLICATIONS

h-index = 14

i10-index = 15

Citations = 570

Citations since 2012 = 458

(Updated 07-14-2017 by Google Scholar: https://scholar.google.com/citations?user=YGgbWZUAAAAJ&hl=en)

Journal Articles (Peer Reviewed)

- 1. **Adams, P. N.**, R. S. Anderson and J. Revenaugh, **2002**, Microseismic Measurement of Wave Energy Delivery to a Rocky Coast, *Geology*, v. 30, no. 10, p. 895-898.
- 2. **Adams, P. N.**, R. L. Slingerland, and N. D. Smith, **2004**, Variations in Natural Levee Morphology in Anastomosed Channel Floodplain Complexes, *Geomorphology*, v. 61, no.1-2, p. 127-142.
- 3. **Adams, P. N.**, C. D. Storlazzi and R. S. Anderson, **2005**, Nearshore Wave-Induced Cyclical Strain of Sea Cliffs: A Possible Fatigue Mechanism, *Journal of Geophysical Research Earth Surface*, v.110, No. F2.
- 4. **Adams, P. N.**, P. Ruggiero, G. C. Schoch, and G. Gelfenbaum, **2007**, Intertidal Sand Body Migration Along a Megatidal Coast, Kachemak Bay, Alaska, *Journal of Geophysical Research Earth Surface*, v.112, No. F2.
- 5. **Adams, P. N.**, D. L. Inman, and N. Graham, **2008**, Southern California Deep-Water Wave Climate: Characterization and Application to Coastal Processes, *Journal of Coastal Research*, v. 24, no. 4, p. 1022-1035.

- 6. **Adams**, **P. N.**, N. D. Opdyke, and J. M. Jaeger, **2010**, Isostatic Uplift Driven By Karstification and Sea Level Oscillation: Modeling Landscape Evolution In North Florida, *Geology*, v. 38, no. 6, p. 531-534. doi: 10.1130/G30592.1
- 7. Young, A. P., **P. N. Adams**, W. C. O'Reilly, R. E. Flick, and R. T. Guza, **2011**, Coastal cliff ground motions from local ocean swell and infragravity waves in southern California, *Journal of Geophysical Research Oceans*, v.116, C09007. doi:10.1029/2011JC007175
- 8. **Adams**, **P. N.**, D. L. Inman, and J. L. Lovering, **2011**, Effects of Climate Change and Wave Direction on Hotspots of Coastal Erosion in Southern California, *Climatic Change*, v. 109, Suppl. 1, pp. S211-S228. doi:10.1007/s10584-011-0317-0
- 9. Pendleton, L., P. King, C. Mohn, D.G. Webster, R.K. Vaughn, and **P.N. Adams**, **2011**, Estimating The Potential Economic Impacts Of Climate Change On Southern California Beaches, *Climatic Change*, v. 109, Suppl. 1, pp. S277–S298. doi:10.1007/s10584-011-0309-0
- 10. Silliman, B. R., J. van de Koppel, M. W. McCoy, J. Diller, G. Kasozi, K. Earl, **P. N. Adams**, and Andrew R. Zimmerman, **2012**, Degradation and resilience in Louisiana salt marshes after the BP—Deepwater Horizon oil spill, *Proceedings of the National Academy of Sciences*, v. 109, no. 28, p. 11234–11239, doi: 10.1073/pnas.1204922109
- 11. Young, A. P., R. T. Guza, **P. N. Adams**, W. C. O'Reilly, and R. E. Flick, **2012**, Cross-shore decay of cliff top ground motions driven by local ocean swell and infragravity waves, *Journal of Geophysical Research Oceans*, Vol. 117, C06029, doi: 10.1029/2012JC007908
- 12. Limber, P. W., A. B. Murray, **P. N. Adams**, and E. B. Goldstein, **2014**, Unraveling The Dynamics That Scale Cross-Shore Headland Relief On Rocky Coastlines, Part 1: Model development, *Journal of Geophysical Research Earth Surface*, DOI: 10.1002/2013JF002950
- 13. Kline, S. W. ⁹, **P. N. Adams**, and P. W. Limber, **2014**, The Unsteady Nature of Sea Cliff Retreat Due to Mechanical Abrasion, Failure, and Comminution Feedbacks, *Geomorphology*, DOI: 10.1016/j.geomorph.2014.03.037
- 14. Barnard, P. L., M. van Ormondt, L. Erikson, J. Eshleman, C. Hapke, P. Ruggiero, **P. N. Adams**, and A. Foxgrover, **2014**, Development of the Coastal Storm Modeling System (CoSMoS) for predicting the impact of storms on high-energy, active-margin coasts, *Natural Hazards*, DOI: 10.1007/s11069-014-1236-y
- 15. Johnson, J. M., L. J. Moore, K. Ells, A. B. Murray, **P. N. Adams**, R. A. MacKenzie III ^g, and J. M. Jaeger, **2014**, Recent Shifts in Coastline Change and Shoreline Stabilization Linked to Storm Climate Change, *Earth Surface Processes and Landforms*, v. 40, pp. 569-585, DOI: 10.1002/esp.3650
- 16. Wilson, K. E. ⁹, <u>P. N. Adams</u>, C. J. Hapke, E. E. Lentz, and O. Brenner, **2015**, Application of a Bayesian Network to Forecast Barrier Island Morphodynamics, *Coastal Engineering*, v. 102, pp. 30-43, DOI: 10.1016/j.coastaleng.2015.04.006
- 17. **Adams, P. N.**, K. Malone Keough ⁹, and M. Olabarrieta, **2016**, Beach Morphodynamics Influenced by an Ebb-Tidal Delta on the North Florida Atlantic Coast, *Earth Surface Processes and Landforms*, v. 41, pp. 936-950, DOI: 10.1002/esp.3877
- 18. Limber, P., **P. N. Adams**, and A. B. Murray, **2017**, Modeling large-scale shoreline change caused by complex bathymetry in low-angle wave climates, *Marine Geology*, v. 383, pp. 55-64, DOI: 10.1016/j.margeo.2016.11.006

Journal Articles (Peer Reviewed) - in press

Woo, H. B. ⁹, M. Panning, **P. N. Adams**, and A. Dutton, Karst-Driven Flexural Isostasy in North Central Florida, *Geochemistry, Geophysics, Geosystems*, in press as of **6-10-2017**, manuscript #: 2017 GC006934.

Journal Articles (Peer Reviewed) - in review

Adams, P. N., submitted **06-23-2016**, Geomorphic Origin of Merritt Island-Cape Canaveral: A Paleodelta of the Reversed St. Johns River?, *Geology*, manuscript number: G39455

Journal Articles (Peer Reviewed) - in prep

Paniagua Arroyave ⁹, J. F., **P. N. Adams**, A. Valle-Levinson, and Parra, S. M. ⁹, Infragravity waves over cape-related shoals: generation and loss by the shoaling and dissipation of short-wave groups, (update 03/15/2017: Draft complete and being reviewed by co-authors in prep for submission to *Journal of Geophysical Research - Oceans*)

Parra, Sabrina Marie, Arnoldo Valle-Levinson, **Peter N. Adams**, and Juan Felipe Paniagua, Relating Subtidal Hydrodynamics to Large Scale Circulation Patterns at Cape-Associated Shoals, **Continental Shelf Research**

Lovering, J. L., and **P. N. Adams**, **submitted 08-23-2013**, How does vertical marsh accretion control hydrodynamic and morphologic responses of a tidal inlet to sea level rise? *Journal of Coastal Research*, submission #: JCOASTRES-D-13-00169

Kline, S. W., **P. N. Adams**, and N. G. Plant, Influence of complex inner-shelf bathymetry on the geomorphic evolution of a prominant cuspate foreland and adjacent shoreline, *Journal of Geophysical Research – Earth Surface*

Kline, S. W., **P. N. Adams**, N. G. Plant, R. A. MacKenzie, and J. M. Jaeger, Wave transformation and beach and bar behavior along a microtidal coast with complex inner shelf bathymetry and a shoreface-attached oblique sand ridge, Kennedy Space Center, Cape Canaveral, Florida, *Journal of Geophysical Research – Oceans*

Lovering, J. L., **P. N. Adams**, and S. W. Kline, **submitted 04-22-2013**, The roles of marsh configuration and marsh margin retreat on tidal inlet morphology, *Estuarine, Coastal, and Shelf Science*, submission #: ECSS-D-13-00252

Lovering, J. L., and **P. N. Adams**, Ecogeomorphic feedbacks between sea level rise, estuary hydrodynamics, and vertical marsh accretion, *Earth Surface Processes and Landforms*

Parnell, E., **P. N. Adams**, E. Miller, C. Lennert-Cody, and P. Dayton Giant Kelp (Macrocystis pyrifera) Canopy in southern California – a tale of two regimes and multiple drivers, *Marine Ecology Progress Series*.

Schoch, G. C., **P. N. Adams**, and M. N. Dethier, **submitted 04-18-2013**, A Meta-Analysis of Wave Climate and Benthic Invertebrate Abundance on the Olympic Coast of Washington, USA, *Journal of Coastal Research*, submission #: JCOASTRES-D-13-00093 (Update 05-24-2013: rejected with Editor's encouragement to revise and resubmit)

Book Chapters

1. Acknowledged contributor to Syvitski, J.P.M., R.L. Slingerland, P. Burgess, E. Meiburg, A. B. Murray, P. Wiberg, G. Tucker, A.A. Voinov, **2010**, Morphodynamic Models: An Overview. In: Vionnet et al. (eds) River, Coastal and Estuarine Morphodynamics: RCEM 2009, Taylor & Francis Group, London, ISBN 978-0-415-55426-8 CRC Press, p. 3-20.

- 2. Hapke, Cheryl J., **P. N. Adams**, Jonathan Allan, Andrew Ashton, Gary Griggs, Monty Hampton, Joseph Kelly, Adam Young, **2014**, Sea Cliffs of the Continental USA, In: Kennedy, D. and W. Stephenson eds., Rocky Coast Geomorphology: A Global Synthesis. Geological Society of London Memoirs, v.40; p137-154. doi: 10.1144/M40.9
- 3. Karanci, A., L. Velasquez-Montoya, J.F. Paniagua-Arroyave ⁹, **P. N. Adams**, and M.F. Overton, Beach Management Practices and Occupation Dynamics: An Agent-Based Modeling Study for the Coastal Town of Nags Head, NC, USA, in <u>Beach Management Tools (BMT): Concepts, Methodologies, and Case Studies</u>, **in press 03-02-2017**, published by Coastal Education & Research Foundation, Inc.

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- 2. Ruggiero, P., **P. N. Adams**, and J. Warrick, **2007**, Mixed sediment beach processes: Kachemak Bay, AK, *Proceedings of the Coastal Sediments '07 Conference*, New Orleans, May 2007.

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- 4. Pendleton, L., P. King, C. Mohn, D. G. Webster, R. K. Vaughn, and **Adams, P. N.**, **2009**, *Estimating the Potential Economic Impacts of Climate Change on Southern California Beaches*, Report to the California Energy Commission, Publication Number CEC-500-2009-033-D.
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- 10. **Adams, P. N.**, J. M. Jaeger, R. A. MacKenzie, and S. W. Kline, **2012**, *Monitoring Shoreline And Beach Morphologic Change At Kennedy Space Center, Cape Canaveral, Florida Annual Report Phase 3, Oct. 2011-Sept. 2012*, Annual Project Report Prepared for: IHA-NASA Environmental Program at KSC, 19 pp.
- 11. **Adams, P. N.**, J. M. Jaeger, R. A. MacKenzie, and S. W. Kline, **2013**, *Monitoring Shoreline And Beach Morphologic Change At Kennedy Space Center, Cape Canaveral, Florida Final Report, May.* 2009 Oct. 2013, Final Project Report Prepared for: IHA-NASA Environmental Program at KSC, 26 pp.

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- 2. **Adams, P. N.** and Slingerland, R. L., **1998**, Processes Creating Avulsion Channels in Flood Basins: An Example From the Upper Columbia River, EOS, Trans., American Geophysical Union, 1998 Fall Meeting, v. 79, no. 45. (oral)
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- 45. Parra, S. M., A. Valle-Levinson, **P. N. Adams** and J. F. Paniagua-Arroyave, **2016**, Subtidal Dynamics at Cape Associated Shoals. EOS, Trans., American Geophysical Union, PO54C-3270, 2016 Ocean Sciences Mtg., New Orleans, LA. (poster)
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- 08/20/2003, **Homer Tribune**, "Student Scientists Get Taste of the Real Thing at Reserve", by McKibben Jackinsky
- 06/01/2010, **University of Florida News Bureau**, "Geologist: Fla. ridges' mystery marine fossils tied to rising land, not seas", by Aaron Hoover (article): http://news.ufl.edu/2010/06/01/florida-rise/
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- 04/06/2015, NPR All Things Considered, "NASA Battles Rising Sea Levels To Protect Kennedy Space Center", by Amy Green (Reporter and Producer, 90.7 WMFE-Orlando) (National Broadcast): http://www.npr.org/2015/04/06/397891198/nasa-battles-rising-sea-levels-to-protect-kennedy-space-center
- 08/26/2015, **NASA Earth Observatory**, "Sea Level Rise Hits Home at NASA; Watching Waters Rise Right Outside the Front Door", by Michael Carlowicz (Chief Technical Writer, NASA Sciences and Exploration Directorate Goddard Space Flight Center): http://earthobservatory.nasa.gov/Features/NASASeaLevel/

POST DOC AND GRADUATE STUDENT SUPERVISION

Post Doc Supervisor (1 Total):

2012 - 2014: Patrick Limber, (Ph.D. 2012, Duke University), Post Doctoral Research Description: "Numerical Modeling of Sandy Coast Geomorphic Behavior Resulting From Wave Climate Change" Current Position: Mendenhall Post-doctoral Scholar with U.S. Geological Survey, Pacific Science Center, Santa Cruz, CA.

Graduate Student Committee Chair (7 Total - 4 Ph.D., 3 M.S.):

- 2008 2011: Katherine K. Malone (M.S. Student, Geological Sci., Univ. of Florida), Thesis defense Mar. 1, 2011, M.S. conferred May 2011, Thesis Title: "Seasonal and Spatial Variability of Beach Morphodynamics at an Autonomous Tidal Inlet: Matanzas Inlet, Florida Atlantic Coast", Current Position: Geologist with ARCADIS Environmental Services, Washington, D.C.
- 2009 2013: Jessica L. Lovering (Ph.D. Student, Geological Sci., Univ. of Florida), Advanced to candidacy Jan. 14, 2011, Thesis defense Mar. 15, 2013, Ph.D. conferred Apr. 2013, Dissertation Title: "The Role of Marsh Platform Morphology in the Geomorphic Response of Tidal Inlet Systems to Sea Level Rise". Current Position: Physical Scientist, Oceanographic Department (NP3), Ocean Prediction Division (NP31), Coastal Forecasting Branch (NP313), Naval Oceanographic Office (NAVOCEANO), Stennis Space Center, Mississippi.

- 2009 2013: Shaun W. Kline (Ph.D. Student, Geological Sci., Univ. of Florida), Advanced to candidacy Mar. 25, 2011, Thesis defense May 24, 2013, Ph.D. conferred Aug. 2013, Dissertation Title: "Influence of Wave Energy Dissipation on the Geomorphic Behavior of Rocky and Sandy Coasts". Current Position: Coastal Engineer, Environmental Services Group (ESG), Enercon Services, Inc. (ENERCON), Murrysville, Pennsylvania.
- 2013 2014: Kathleen E. Wilson (M.S. Student, Geological Sci., Univ. of Florida), Thesis defense Jun. 20, 2014, M.S. conferred Aug. 2014, Thesis Title: "Probabilistic Forecasting of Coastal Morphodynamic Storm Response at Fire Island, New York". Current Position: Research Geologist, U. S. Geological Survey, St. Petersburg, Florida
- 2013 2014: Matthew Willis (Ph.D. Student, Geological Sci., Univ. of Florida), Withdrew May 2014
- 2013 present: Juan Felipe Paniagua (Ph.D. Student, Geological Sci., Univ. of Florida), Advanced to candidacy Apr. 25, 2016, Title of Research Project: "Analyisis of Infragravity Wave Behavior Over Cape-Associated Shoals"
- 2014 2016: Christian J. Provancha (M.S. Student, Geological Sci., Univ. of Florida), Thesis defense Jun. 17, 2016, M.S. conferred Aug. 2016, Thesis Title: "Linking Latitudinal Variability Of Western Atlantic Wave Climate To The North Atlantic Oscillation". Current Position: U.S. Army Corps of Engineers, New York, NY.
- 2016 present: Hailey A. Johnson (Ph.D. Student, Geological Sci., Univ. of Florida), Title of Research Project: *TBD*.
- 2017 present: Matthew P. Conlin (Ph.D. Student, Geological Sci., Univ. of Florida), Title of Research Project: *TBD*.
- 2017 present: Han Byul (Aiden) Woo (Ph.D. Student, Geological Sci., Univ. of Florida), Title of Research Project: *TBD*.

Graduate Student Committee Co-Chair (1 Total - 1 Ph.D.):

2007 – 2012: Richard A. Mackenzie (Ph.D. Student, Geological Sci., Univ. of Florida, Co-advised by Dr. John Jaeger), Advanced to candidacy Sept. 29, 2009, Thesis defense Jul. 18, 2012, Ph.D. conferred Aug. 2012, Dissertation Title: "Establishing Uncertainties Associated With Visual Based And Datum Based Shoreline Proxies On A Wave Dominated Sandy Coast: Cape Canaveral, Florida", Current Position: Senior Petroleum Geologist with Operations Geology Core Group, Exxon Mobil Corporation, Houston, Texas.

Graduate Student Committee Membership

(40 Total)

(16 Regular Member - 5 Ph.D., 11 M.S.), (21 External Member - 21 Ph.D., 0 M.S.) (1 Minor Member - 0 Ph.D., 1 M.S.), (2 Other University Member - 2 Ph.D., 0 M.S.)

Regular Member - (16 - 5 Ph.D., 11 M.S.)

- 2008 2010: Alison T. Fundis (M.S. Student, Geological Sci., Univ. of Florida, Advised by Dr. Michael Perfit), Thesis defense Jan. 20, 2010, **M.S. conferred May 2010**, Thesis Title: "Paving the Seafloor: Volcanic Emplacement Processes During the 2005-06 Eruption at the Fast-Spreading East Pacific Rise, 9°50′N"
- 2008 2013: Marie J. Kurz (Ph.D. Student, Geological Sci., Univ. of Florida, Advised by Dr. Jon Martin), Advanced to candidacy Apr. 9, 2010, Thesis defense May 2, 2013, Ph.D. conferred Aug. 2013, Dissertation Title: "Biogeochemical And Hydrologic Controls On Solute Sources And Cycling In A Biologically Productive Karst River"

- 2010 2012: Patricia Spellman (M.S. Student, Geological Sci., Univ. of Florida, Advised by Dr. Elizabeth Screaton), Thesis defense Feb. 28, 2012, **M.S. conferred May 2012**, Thesis Title: "River Losses At A Karst Escarpment During Normal Flow And Flood Conditions And Implications For Carbonate Weathering"
- 2012 2013: James Sutton (M.S. Student, Geological Sci., Univ. of Florida, Advised by Dr. Elizabeth Screaton), Thesis defense May 20, 2013, **M.S. conferred August 2013**, Thesis Title: "Largescale Surface Water- Groundwater Exchange Processes in a Karst Aquifer: Examples from the Suwannee River Basin"
- 2012 2013: Timothy L. Kirchner (M.S. Student, Geomatics Program, SFRC, Univ. of Florida Advised by Dr. Bon Dewitt), Final Exam: Nov. 20, 2013, **M.S. conferred December 2013**, (Non-Thesis)
- 2013 2014: Jin Li (M.S. Student, Geological Sci., Univ. of Florida, Advised by Dr. Andrea Dutton), Thesis defense Feb. 21, 2014, **M.S. conferred May 2014**, Thesis Title: "Constraining the Last Interglacial relative sea level signal in the Bahamas"
- 2013 present: Karen L. Vyverberg (Ph.D. Student, Geological Sci., Univ. of Florida, Advised by Dr. Andrea Dutton), Advanced to candidacy Oct. 14, 2015, Dissertation Title: ""
- 2013 present: Michelle L. Penkrot (Ph.D. Student, Geological Sci., Univ. of Florida, Advised by Dr. John Jaeger), Advanced to candidacy Apr. 21, 2016, Dissertation Title: ""
- 2013 2016: Han Byul Woo (M.S. Student, Geological Sci., Univ. of Florida, Advised by Dr. Mark Panning), Thesis defense Jun. 16, 2016, Thesis Title: "Isostasy, Elastic Flexure, and Uplift of mid to North Florida"
- 2014 present: Peter M. Chutcharavan (Ph.D. Student, Geological Sci., Univ. of Florida, Advised by Dr. Andrea Dutton), Advanced to candidacy Sept. 14, 2016, Dissertation Title: ""
- 2014 2016: Matthew E. Farrell (M.S. Student, Geological Sci., Univ. of Florida, Advised by Dr. Mark Panning), Thesis defense Jun. 17, 2016, Thesis Title: "Atmosphere-Ground Coupling in the Eastern United States through the Transportable Array"
- 2014 2016: Michael D. Kedenburg (M.S. Student, Geological Sci., Univ. of Florida, Advised by Dr. David Foster), Thesis defense Jun. 22, 2016, Thesis Title: "Thermochronological Constraints on Cenozoic Uplift and Exhumation of the Azuero Peninsula, Panama: Implications for South Central American Stratigraphy and Tectonics"
- 2015 present: Meng Jia (Ph.D. Student, Geological Sci., Univ. of Florida, Advised by Dr. Mark Panning), Thesis defense: TBD, Thesis Title: *TBD*
- 2015 present: James J. Richardson (M.S. Student, Geography, Univ. of Florida, Advised by Dr. Joann Mossa), Thesis defense: TBD, Thesis Title: *TBD*
- 2015 present: Emily E. Rodriguez (M.S. Student, Geological Sci., Univ. of Florida, Advised by Dr. Ray Russo), Thesis defense Feb. 24, 2017, **M.S. conferred May 2017**, Thesis Title: "Southern Chile Crustal Structure: Responses to Ridge Subduction and Terrane Assembly of the Patagonian Microplate"
- 2016 present: Scott R. Miller (M.S. Student, Geological Sci., Univ. of Florida, Advised by Dr. Joe Meert), Thesis defense TBD, Thesis Title: "TBD"

Minor Committee Member (1 Total - 1 M.S.T.):

2013 – 2015: Brittany E. Eichler (M.S. T Student, Mathematics, Univ. of Florida, Advised by Dr. Jean

External Committee Member (21 Total - 21 Ph.D., 0 M.S.):

- 2007 2009: David J. Robillard (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Ashish Mehta), Advanced to candidacy Dec. 10, 2007, Thesis defense Jun. 29, 2009, Ph.D. conferred Aug. 2009, Dissertation Title: "A Laboratory Investigation Of Mud Seabed Thickness Contributing To Wave Attenuation", Current Position: Assistant Professor, Ocean Engineering Department, United States Naval Academy, Annapolis, MD.
- 2007 2010: Ilgar Safak (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Alex Sheremet), Advanced to candidacy Jan. 23, 2008, Thesis defense Jun. 21, 2010, Ph.D. conferred Aug.
 2010, Dissertation Title: "Interaction of waves, bottom turbulence and cohesive sediment on the muddy Atchafalaya Shelf, Louisiana, USA", Positions: 2010-2012: Post-Doctoral Researcher, Environmental Sciences, University of Virginia, Charlottesville, VA; 2012- present: Research Oceanographer, U.S. Geological Survey, Woods Hole, MA.
- 2007 2010: Ty Hesser (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Donald Slinn), Advanced to candidacy Jan. 23, 2008, Thesis defense Dec. 3, 2010, Ph.D. conferred Dec. 2010, Dissertation Title: "Advancement and Validation of Numerical Storm Surge Modeling on Coral Reefs Using Laboratory Comparisons", Current Position: Research Hydraulic Engineer with the USACE Engineer Research and Development Center in the Coastal and Hydraulics Laboratory, Coastal Processes Branch, (USACE ERDC CHL CPG), Vicksburg, MS.
- 2007 2010: Jungwoo Lee (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Arnoldo Valle-Levinson), Advanced to candidacy Feb. 6, 2008, Thesis defense Jun. 18, 2010, **Ph.D. conferred Aug. 2010**, Dissertation Title: "Modeling of Wind-Driven Interaction at the Estuary/Ocean Transition"
- 2009 2011: Carlos Lopez (Ph.D. Student, Civil Engineering, Univ. of Florida, Advised by Dr. Forrest Masters), Advanced to candidacy Jul. 15, 2010, Thesis defense Nov. 14, 2011, **Ph.D. conferred Dec. 2011**, Dissertation Title: "Measurement, Analysis, and Simulation of Wind Driven Rain". Current Position: Associate Engineer, Haag Engineering, Irving, TX.
- 2011 present: Tianyi Liu (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Peter Sheng),
 Advanced to candidacy Nov. 19, 2012, Thesis defense Oct. 18, 2013, Ph.D. conferred Dec.
 2013, Dissertation Title: "Three Dimensional Simulation Of Wave Induced Circulation".
- 2011 present: Bidhya Yadav (Ph.D. Student, Civil Engr., Univ. of Florida, Advised by Dr. Kirk Hatfield), Advanced to candidacy Oct. 7, 2011, Title of Research Project: "Geomorphological Instantaneous Unit Hydrograph"
- 2011 2012: Luciano Absalonsen (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Robert Dean), Advanced to candidacy Jul. 26, 2011, Thesis defense Jul. 23, 2012, Ph.D. conferred Aug. 2012, Dissertation Title: "Sand Bars Behavior: Observation and Modeling"
- 2012 2013: Sangdon So (Ph.D. Student, Water Resources, Univ. of Florida, Advised by Dr. Arnoldo Valle-Levinson), Advanced to candidacy May 31, 2012, Thesis defense Jul. 12, 2013, Ph.D. conferred Aug. 2013, Dissertation Title: "Cross-Shelf Exchange Flow Over The West Florida Inner Shelf"
- 2010 present: Uriah Gravois (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Alex Sheremet), Advanced to candidacy Jun. 24, 2014, Title of Research Project: *TBD*
- 2012 present: Adam Benjamin (Ph.D. Student, Forest Resources and Conservation, Univ. of Florida, Advised by Dr. Hartwig H. Hochmair), Title of Research Project: *TBD*

- 2012 2016: Stephanie Zick (Ph.D. Student, Geography, Univ. of Florida, Advised by Dr. Corene Matyas), Advanced to candidacy Oct. 3, 2014, Thesis defense Feb. 19, 2016, Ph.D. conferred May 2016, Dissertation Title: "An Assessment of Tropical Cyclone Representation in a Regional Reanalysis and a Shape Metric Methodology for Studying the Evolving Precipitation Structure Prior to and during Landfall". Current Position (as of Spring 2017): Assistant Professor, Dept. of Geography, Virginia Tech University.
- 2012 2016: Christopher D De Vilbiss (Ph.D. Student, Environmental Engineering Sciences, Univ. of Florida, Advised by Dr. Mark Brown), Advanced to candidacy Jun. 18, 2015, Thesis defense Oct. 19, 2016, Ph.D. conferred December 2016, Dissertation Title: "Evaluation of Earth's Geobioshpere Emergy Baseline and the Emergy of Crustal Cycling"
- 2013 2016: Jorge A Laurel-Castillo (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Arnoldo Valle-Levinson), Advanced to candidacy Mar. 25, 2015, Thesis defense Jul. 19, 2016, Ph.D. conferred August 2016, Dissertation Title: "Water Level Variability and Salinity Distribution Response to Ocean and River Forcing Interactions in a Subtropical Estuary"
- 2013 present: Mohammad S Alkhaldi (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Arnoldo Valle-Levinson), Advanced to candidacy May 16, 2017, Dissertation Title: "Nearshore Turbulence Influenced by Shoal Bathymetry and Seasonality"
- 2014 present: Fernanda Nascimento De Paula E Silva (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Arnoldo Valle-Levinson), Advanced to candidacy Dec. 6, 2016, Dissertation Title: "Overtides in Archachon Lagoon, France"
- 2015 present: Ahmad Yousif (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Arnoldo Valle-Levinson), Advanced to candidacy Mar. 28, 2017, Dissertation Title: "Evaluation of Nearshore Currents and Momentum Balance over Shoal Bathymetry, Cape Canaveral, Florida"
- 2015 present: Zhendong Cao (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Maitane Olabarrieta), Advanced to candidacy Jan. 25, 2017, Dissertation Title: "Modeling the Baroclinic Effects of Flow Variability in Tidally-Influenced Estuaries"
- 2016 present: Gisselle Guerra (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Arnoldo Valle-Levinson), Advanced to candidacy TBD, Dissertation Title: *"TBD"*
- 2015 present: Christian A. Rojas Vasquez (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Maitane Olabarrieta), Advanced to candidacy TBD, Dissertation Title: "TBD"
- 2017 present: Braulio Juarez (Ph.D. Student, Coastal Engr., Univ. of Florida, Advised by Dr. Arnoldo Valle-Levinson), Advanced to candidacy TBD, Dissertation Title: *"TBD"*

Member - Other Universities (2 Total - 2 Ph.D., 0 M.S.):

- 2009 2012: Patrick Limber (Ph.D. Student, Nicholas School of the Environment, Duke University, Advised by Dr. A. Brad Murray), Advanced to candidacy Dec. 9, 2009, Thesis defense Aug. 28, 2012, Dissertation Title: "Beach and Sea Cliff Dynamics as a Driver of Rocky Coastline Evolution"
- 2012 present: Nick Cohn (Ph.D. Student, COAS, Oregon State University, Advised by Dr. Peter Ruggiero), Dissertation Topic: "TBD"

UNDERGRADUATE STUDENT RESEARCH SUPERVISION

As primary supervisor (8 Total):

- 2004 2005: Brittany Smith, Supervisor of Undergraduate Independent Study Project, Department of Geology, Washington and Lee University, Project Title: "Tracking Alongshore Sand Wave Migration on Munson Point Beach, Homer, Alaska"
- 2004 2005: Ryan Coppersmith, Supervisor of Undergraduate Independent Study Project, Department of Geology, Washington and Lee University, Project Title: "Examinations of Sea Cliffs near Homer, Alaska"
- 2006 2007: Luke Gommermann, Supervisor of **Undergraduate Student Honors Thesis** and **University Scholars Program***, Department of Geological Sciences, University of Florida, Thesis Title: "Interannual Climatic Oscillations and Wave Climate: Correlations Along the Florida Atlantic Coast"
- 2006 2007: George Juaristic, Undergraduate Independent Study Project, Department of Geological Sciences, University of Florida, Project Title: "Influence of Tides on the Beaches of Homer, Alaska"
- 2010 2011: Susan E. West, Independent Study and **Undergraduate Student Thesis**, Department of Geological Sciences, University of Florida, Thesis Title: "Principal Component Analysis of Beach Profiles at Matanzas Inlet. Florida"
- 2013 2014: Michael Waechter, Independent Study, Department of Geological Sciences, University of Florida, Project Title: "Comparison of Channel Sinuosity in Coastal Marshes"
- 2015, Jan. May: Conner Cash, Independent Study, Department of Geological Sciences, University of Florida, Project Title: "Physical Modeling of Ebb Tidal Delta Development"
- 2015 2016: Schuyler Smith, Independent Study and **Undergraduate Student Honors Thesis**,
 Department of Geological Sciences, University of Florida, Project Title: "Documenting Decadal Scale Shoreline Change Through Vegetation Line Proxies"
- 2016 2017: Collin Brandt, Independent Study and **Undergraduate Student Honors Thesis**,
 Department of Geological Sciences, University of Florida, Project Title: "Presence and Recurrence of Beach Cusps at NASA-Kennedy Space Center, Cape Canaveral, FL"
- 2017 present: Brian Kelly, Independent Study and **Undergraduate Student Honors Thesis**,
 Department of Geological Sciences, University of Florida, Project Title: "Channel Sinuousity of Tidal
 Creeks of the Suwannee River Delta, Florida Gulf Coast"

As co-supervisor (1 Total):

2010 – 2011: Bianca J. Maibauer, co-advised with Dr. John Jaeger, Independent Study and Undergraduate Student Thesis, Department of Geological Sciences, University of Florida, Thesis Title: "Field Investigation of the Relationship between Berm Morphology, Beach Grain Size, and Wave Climate at Cape Canaveral, Florida"

As committee member (1 Total):

2011 – 2012: Samantha Maticka, Committee Member of Undergraduate Honors Thesis and University Scholars Program* (Supervisor: Dr. Arnoldo Valle-Levinson), Thesis title: "The response of density gradient to river discharge in the James River estuary"

TEACHING HISTORY

2003 - University of California at Santa Cruz

Geomorphology (EART 140, Fall 2003) – Quantitative undergraduate course in geomorphology covering large-scale Earth features, neotectonics, fault mechanics, constructional landforms, radiometric dating, geochronology, weathering, glacial/periglacial processes, hillslope geomorphology, fluid mechanics, erosional/depositional fluvial processes, coastal systems, and Quaternary climate.

2004-2005 - Washington and Lee University

Geomorphology (Geology 247, Fall 2004) - Topics same as described above plus weekly field trips.

Earthquakes and Volcanoes (Geology 195, Fall 2004) – Undergraduate seminar/lecture course team-taught with Dr. Linda Lee Davis. Students introduced to principles of seismology and volcanism in context of plate tectonic theory. Students presented case studies of specific tectonic settings.

General Geology with Field Emphasis (Geology 100, Winter 2005) – Field-based undergraduate course in basic principles of geology. Students apply concepts / field techniques to local/regional lithology, stratigraphy, and structure.

Oceanography (Geology 201, Winter 2005) – General education course investigating ocean basin formation, ocean-atmosphere interactions, deep-water and nearshore currents, waves, tides, sedimentary processes, coastal geomorphology, and paleoceanography.

Hydrology (Geology 340, Spring 2005) – Field-based undergraduate course in practical hydrology. Students collected field data (precipitation, infiltration, streamflow, ect.), perform analyses, and interpret observations in the context of a local hydrologic budget.

2007-present, University of Florida

Data Analysis and Modeling in the Geosciences (GLY 6932, Spring 2007) – Graduate level, teamtaught with Dr. John Jaeger. MATLAB computing language used to solve geologic/ hydrologic/ oceanographic problems. Topics include basic statistics, time series analysis, geospatial analysis, dynamic systems modeling, and numerical solutions to differential equations.

Physical Geology (GLY 2010, Fall 2007) – Undergraduate course. Materials, structures, surface features of the earth and the processes that have produced them. Related laboratory demonstrations and experiences.

Coastal Morphology and Processes (GLY 4734, Spring 2008, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017) - Examines the behavior of coastal processes and their influence on the orgin/evolution of coastal landscapes. Undergraduate level course open to graduate students, with permission of instructor. Course includes exams, problem sets, an independent case study project with presentation, and a field trip to Florida Atlantic coast.

Geomorphology (GLY 5705, Fall 2008, Fall 2010, Fall 2012, Fall 2014) – Quantitative graduate level course in geomorphology covering large-scale Earth features, neotectonics, fault mechanics, constructional landforms, radiometric dating, geochronology, weathering, glacial/periglacial processes, hillslope geomorphology, fluid mechanics, erosional/depositional fluvial processes, coastal systems, and Quaternary climate.

Quantitative Methods in Earth Sciences (GLY 6862, Spring 2009, Fall 2013, 2016) – Graduate level course. MATLAB computing language used to solve geologic/ hydrologic/ oceanographic problems. Topics include basic statistics, time series analysis, geospatial analysis, dynamic systems modeling, and numerical solutions to differential equations.

Environmental and Engineering Geology (GLY 2030c, Fall 2009) – Undergraduate course. Earth surface processes and the features they produce, soils, mass wasting, groundwater hydrology, environmental pollution, energy in the environment. Hands on practicum during laboratory section and field trips. Taught with an emphasis on quantitative problems encountered in geological engineering and environmental consulting.

Geostatistics (GLY 6862, Fall 2011) – Statistical methods applied to geological and environmental scientific problems, including univariate, bivariate, and time series analytical methods.

Introduction to Marine Sciences (GLY 3083c, Spring 2013) – Undergraduate, interdisciplinary course, offered by a team of seven (7) tenured (or tenure-track) faculty at UF. My role is to cover "Physical Oceanography" in this course, wherein I present lectures on seasonal to interannual water level fluctuations, as well as tides, and ocean waves. I developed a laboratory exercise which gives the students practice in working with freely available oceanographic data to explore modern rates of sea level rise and storm surge effects on coastal communities.

Geomorphology (GLY 4700, Fall 2015) – Online undergraduate course in surface processes and landform generation/evolution.

TEACHING HISTORY – As Teaching Assistant

Fall 2002: Geomorphology (UCSC)	Fall 1998: Earth History (Penn State)
Summer 2002, 2001: Geology Field Camp (UCSC)	Fall 1997: Earth History (Penn State)
Fall 2001: Hydrology (UCSC)	Spring 1998: Physical Processes (Penn State)
Fall 2000: Mathematics in Earth Sci. (UCSC)	Spring 1997: Planet Earth (Penn State)
Fall 1999: California Geology (UCSC)	Fall 1996: Physical Geology (Penn State)

TEACHING HISTORY – Guest Lectures

- 03/27/2017: GLY 4155c-Geology of Florida, Topic: "Karst-Driven Isostatic Uplift of the Florida Carbonate Platform". Course Instructor: Dr. Liz Screaton (UF Geological Sciences).
- 04/01/2015: GLY 4155c-Geology of Florida, Topic: "Understanding Coastal Evolution at Kennedy Space Center, Cape Canaveral, FL". Course Instructor: Dr. Matthew Smith (UF Geological Sciences).
- 04/14/2014: GLY 4155c-Geology of Florida, Topic: "Understanding Coastal Evolution at Kennedy Space Center, Cape Canaveral, FL". Course Instructor: Dr. Matthew Smith (UF Geological Sciences).
- 01/27/2014: FRC 6934-Natural Resources in a Changing Climate, Topic: "Mechanisms/Components of Sea Level Change". Course Instructor: Dr. Daniel McLaughlin (UF Forest Resources and Conservation).
- 04/13/2013: GLY 4155c-Geology of Florida, Topic: "Beaches of Florida and Longshore Sediment Transport". Course Instructor: Dr. Matthew Smith (UF Geological Sciences).
- 06/13/2012: GLY 4155c-Geology of Florida, Topic: "Coastal Geology of Florida". Course Instructor: Dr. Matthew Smith (UF Geological Sciences).
- 09/15/2009: GLY 4155c-Geology of Florida, Topic: "Using Geomorphology to Understand Florida's Uplift History". Course Instructor: Dr. Joseph Meert (UF Geological Sciences).
- 09/05/2006: GLY 4155c-Geology of Florida, Topic: "Geomorphology of Florida". Course Instructor: Dr. Guerry McClellan (UF Geological Sciences).