

MICHAEL M. BENEDETTI

Associate Professor, Department of Geography & Geology
University of North Carolina Wilmington
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EXPERTISE

Physical geography and Quaternary geology; geomorphology, pedology, and geoarchaeology.

EDUCATION

Ph. D., Geography, University of Wisconsin-Madison, 2000.
M. S., Geography, University of Wisconsin-Madison, 1993.
A. B., Geography (Honors), University of Chicago, 1991.

APPOINTMENTS

2006-Pres.: Associate Professor, Geography & Geology, Univ. North Carolina Wilmington.
2000-2006: Assistant Professor, Earth Sciences, Univ. North Carolina Wilmington.
1997-2000: Lecturer, Physical Geography, Univ. Wisconsin-Madison.
1998-1999: Acting Climatologist, Wisconsin Geological and Natural History Survey.
1995-1997: Graduate Research Assistant, Geomorphology Lab, Univ. Wisconsin-Madison.
1991-1995: Graduate Teaching Assistant, Physical Geography, Univ. Wisconsin-Madison.

PROFESSIONAL AFFILIATIONS

Association of American Geographers (Geomorphology, Paleoenvironmental Change Group)
Geological Society of America (Quaternary Geology & Geomorphology Division)
American and International Quaternary Associations (AMQUA, INQUA)

PUBLICATIONS (* student co-author)

Peer-Reviewed Journal Articles

Ghoneim, E., **Benedetti, M.M.**, and El-Baz, F., 2012. An integrated remote sensing and GIS analysis of the Kufrah Paleoriver, Eastern Sahara. *Geomorphology* 139: 242-257.

Benedetti, M.M., Beach, T., and Cordova, C., 2011. Soils, sediments, and geoarchaeology: introduction. *Catena* 85: 83-86.

Haws, J.A., **Benedetti, M.M.**, Funk, C.L., Bicho, N.F., Daniels, J.M., Hesp, P.A., Minckley, T.A., Forman, S.L., Jeraj, M., Gibaja*, J.F., and Hockett, B.S., 2010. Coastal wetlands and Neanderthal settlement of Portuguese Estremadura. *Geoarchaeology* 25: 709-744.

Benedetti, M.M., Haws, J.A., Funk, C.L., Daniels, J.M., Hesp, P.A., Bicho, N.F., Minckley, T.A., Ellwood, B.B., and Forman, S.L., 2009. Late Pleistocene raised beaches of coastal Estremadura, central Portugal. *Quaternary Science Reviews* 28: 3428-3447.

Rauscher, S.A., Pal, J.S., Diffenbaugh, N.S., and **Benedetti, M.M.**, 2008. Future changes in runoff timing over the western United States. *Geophysical Research Letters* 35: L16703.

Jenkins*, S.B., Gamble, D.W., **Benedetti, M.M.**, and Willey, J., 2007. The effects of local weather patterns on nitrate and sulfate rainwater concentrations in Wilmington, NC. *The North Carolina Geographer* 14: 29-38.

Benedetti, M.M., Daniels, J.M., and Ritchie, J.C., 2007. Predicting vertical accretion rates at

an archaeological site on the Mississippi River floodplain: Effigy Mounds National Monument, Iowa. *Catena* 69: 134-149.

Benedetti, M.M., Raber*, M.J., Smith, M.S., and Leonard, L.A., 2006. Mineralogical indicators of alluvial sediment sources in the Cape Fear River basin, North Carolina. *Physical Geography* 27: 258-281.

Benedetti, M.M., 2003. Controls on overbank deposition in the Upper Mississippi River. *Geomorphology* 56: 271-290.

Jacaruso*, J., Gamble, D.W., and **Benedetti, M.M.**, 2001. Hurricanes and snow: a common occurrence in eastern North Carolina. *The North Carolina Geographer* 9: 13-23.

Other Peer-Reviewed Publications and Abstracts

Benedetti, M.M., Beach, T., and Cordova, C. (Eds.), 2011. Soils, Sediments, and Geoarchaeology: a special issue based on theme sessions at the 2009 Annual Meeting of the Association of American Geographers, Las Vegas, NV. *Catena*, vol. 85.

Haws, J.A., Funk, C.L., Daniels, J.M., **Benedetti, M.M.**, and Bicho, N.F., 2011. Paleolithic landscapes and seascapes of Portuguese Estremadura. In: Bicho, N.F., Haws J.A. and Davis, L. (Eds.), *Trekking the Shore: Changing Coastlines and the Antiquity of Coastal Settlement*. Springer Publishing Co.

Benedetti, M.M., Haws, J.A., Funk, C.L., Daniels, J.M., Bicho, N.F., Ellwood, B.B., and Forman, S.L., 2010. Late Quaternary records from the central Portuguese coast: Geomorphic response to environmental change during Oxygen Isotope Stages 3 and 2. *Geological Society of America Abstracts with Programs* 42: 74.

Benedetti, M.M., Haws, J.A., Funk, C.L., Daniels, J.M., Hesp, P.A., Bicho, N.F., Minckley, T.A., Ellwood, B.B., Forman, S.L. 2009. Late Quaternary landscapes and seascapes of Portuguese Estremadura: geomorphic response to environmental change during MIS 3 and 2. Livro de Resúmenes, VII Reunião do Quaternário Ibérico. Universidade do Algarve, Faro, Portugal, pp. 79-82.

Haws, J.A., Funk, C.L., **Benedetti, M.M.**, Bicho, N.F., Daniels, J.M., Hockett, B.S., Jeraj, M. 2009. Late Quaternary landscapes and seascapes of Portuguese Estremadura: Middle and Upper Paleolithic settlement. Proceedings VII Iberian Quaternary Union. Livro de Resúmenes, VII Reunião do Quaternário Ibérico. Universidade do Algarve, Faro, Portugal, pp. 190-192.

Gray*, C.M., and **Benedetti, M.M.**, 2009. Buried soils as stratigraphic marker horizons on the Cape Fear River floodplain, Bladen County, NC. Southeastern GSA meeting, Tampa FL. *Geological Society of America Abstracts with Programs* 41: 46.

Raber*, M.J., Leonard, L.A., **Benedetti, M.M.**, and Smith, M.S., 2004. Characteristics of sediments transported and deposited in the Cape Fear River estuary, southeastern North Carolina. *Geological Society of America Abstracts with Programs* 36: 87.

Benedetti, M.M., 2002. Decreasing suspended sediment concentrations in the Upper Mississippi River. *Geological Society of America Abstracts With Programs* 34: 298.

Other Publications (not peer-reviewed)

Benedetti, M.M., 2011. *Student Workbook for Physical Geography (3/e)*. Dubuque: Kendall/Hunt, 179 p.

Benedetti, M.M., 2005. *Sedimentation Study at Sny Magill Unit of Effigy Mounds National Monument, Iowa: Final Project Report*. Submitted to National Park Service, Southeast

Regional Office, Cooperative Ecosystems Study Unit.

Benedetti, M.M., 1990. Urban municipal development, 1836-1900. In: Conzen, M.P., Daniel, A.R. (eds.), *Lockport Legacy: Themes in the Historical Geography of an Illinois Canal Town*. Chicago: University of Chicago Committee on Geographical Studies, 6-13.

PROFESSIONAL PRESENTATIONS (* student co-author)

Association of American Geographers (AAG)

Benedetti, M.M., Haws, J.A., and Daniels, J.M., 2012. The biogeomorphic response model and Quaternary landscape evolution in central Portugal. Annual Meeting, New York NY.

Klinefelter*, T.J., Jazwinski*, J.H., Patrick*, J.S., Pollard*, D.W., Forman, S.L., Daniels, J.M., Haws, J.A., and **Benedetti, M.M.**, 2012. The Caldas da Rainha geosol and Quaternary landscape evolution in central Portugal. Annual Meeting, New York NY.

Pollard*, D.W., Jazwinski*, J.H., Patrick*, J.S., Klinefelter*, T.J., Ellwood, B.B., Haws, J.A., and **Benedetti, M.M.**, 2012. Quaternary stratigraphy, mineralogy, and geoarchaeology of Lapa do Picareiro, Portugal. Annual Meeting, New York NY.

Benedetti, M.M., Patrick*, J.S., Haws, J.A., Hesp, P.A., Ellwood, B.B., Daniels, J.M., Bicho, N.F., Minckley, T.A., and Forman, S.L., 2011. Coastal sediments of central Portugal: geomorphic response to Late Quaternary neotectonics, sea level, and climate change. Annual Meeting, Seattle, WA.

Patrick*, J.S., **Benedetti, M.M.**, and Daniels, J.M., 2011. Coastal sediments of central Portugal: sedimentology of the Lagoa de Óbidos. Annual Meeting, Seattle, WA.

Benedetti, M.M., Minckley, T.A., Haws, J.A., Daniels, J.M., Funk, C.L., Bicho, N.F., and Forman, S.L., 2010. Praia Rei Cortiço I: Landscape response to climate and sea level change on the central Portuguese coast. Annual Meeting, Washington DC.

Minckley, T.A., **Benedetti, M.M.**, Haws, J.A., Daniels, J.M., Funk, C.L., Bicho, N.F., and Forman, S.L., 2010. Praia Rei Cortiço II: Late Quaternary paleobotany of the central Portuguese coast. Annual Meeting, Washington DC.

Benedetti, M.M., Daniels, J.M., Haws, J.A., Funk, C.L., Hesp, P.A., and Bicho, N.F., 2009. Late Quaternary landscapes of Portuguese Estremadura: Climate-driven geomorphic change during MIS 3. Annual Meeting, Las Vegas, NV.

Haws, J.A., Funk, C.L., Bicho, N.F., **Benedetti, M.M.**, and Daniels, J.M., 2009. Paleolithic landscapes and seascapes, coastal Portugal. Annual Meeting, Las Vegas, NV.

Daniels, J.M., Haws, J.A., Funk, C.L., **Benedetti, M.M.**, Bicho, N.F., 2009. Geomorphology and geoarchaeology of coastal Portugal. Annual Meeting, Las Vegas, NV.

Benedetti, M.M., Daniels, J.M., Haws, J.A., Funk, C.A., and Hesp, P.A., 2008. Geomorphic Adjustments to Quaternary Climate and Sea Level Change, Estremadura Dune Field, Portugal. Annual Meeting, Boston, MA.

Daniels, J.M., **Benedetti, M.M.**, Haws, J.A., and Funk, C.A., 2008. Soil-geomorphic relationships in coastal Estremadura, Portugal: implications for paleoenvironmental reconstruction and archaeological survey. Annual Meeting, Boston, MA.

Neal*, L.T., and **Benedetti, M.M.**, 2007. Streamflow response to tropical and extra-tropical storms on the Carolina coastal plain. Annual Meeting, San Francisco, CA.

Benedetti, M.M., Daniels, J.M., Haws, J.A., and Funk, C.L., 2006. Geomorphic interpretation of late Paleolithic occupation in the Estremadura region of Portugal. Annual Meeting, Chicago, IL.

- Benedetti, M.M.**, Raber*, M.J., Smith, M.S., and Leonard, L.A., 2005. Physical and mineralogical characteristics of floodplain sediments in the Cape Fear River basin, North Carolina. Annual Meeting, Denver, CO.
- Benedetti, M.M.**, and Daniels, J.M., 2004. Estimation, prediction, and monitoring of vertical accretion rates at a cultural resource site: Effigy Mounds National Monument, Iowa. Annual Meeting, Philadelphia, PA.
- Benedetti, M.M.**, 2002. Recent floods and suspended sediment transport in the Upper Mississippi River. Annual Meeting, Los Angeles, CA.
- Benedetti, M.M.**, 2000. Calculation of effective sediment-transporting discharges in the Upper Mississippi Valley. Annual Meeting, Pittsburgh, PA.
- Benedetti, M.M.**, 1997. Historical overbank sedimentation on the Upper Mississippi River, IA-WI. Annual Meeting, Ft. Worth, TX.
- Knox, J.C., and **Benedetti, M.M.**, 1995. Sedimentation associated with large floods on the Upper Mississippi River. Annual Meeting, San Francisco, CA.
- Benedetti, M.M.**, 1993. Sediment budget response to historical land use change: Big Jack watershed, southwestern Wisconsin. Annual Meeting, San Diego, CA.

Other Conferences

- Benedetti, M.M.**, Klinefelter*, T.J., Haws, J.A., Bicho, N.F., Daniels, J.M., and Forman, S.L., 2012. The Caldas da Rainha Geosol: a geoarchaeological marker horizon for the Pleistocene-Holocene transition in central Portugal. Meeting of the Paleoanthropology Society, Memphis, TN.
- Paixão*, E., Pereira, T., Haws, J.A., **Benedetti, M.M.**, Gibaja, J., and Bicho, N.F., 2012. Mira Nascente, a Late Pleistocene site in Southwest Iberia. Meeting of the Paleoanthropology Society, Memphis, TN.
- Haws, J.A., Bicho, N.F., **Benedetti, M.M.**, Ellwood, B.B., and Forman, S.L., 2012. Land, sea and ice: linking local sedimentary records of environmental change from Paleolithic archaeological sites in Portugal to regional and global paleoclimatic records from deep-sea and ice cores. Meeting of the Paleoanthropology Society, Memphis, TN.
- Haws, J.A., **Benedetti, M.M.**, Bicho, N.F., Pereira, T., and Forman, S.L., 2012. From the mountains to the sea: Paleolithic ecodynamics in Portuguese Estremadura. Meeting of the Society for American Archaeology, Memphis, TN.
- Benedetti, M.M.**, Patrick*, J.S., Haws, J.A., Ellwood, B.B., Hesp, P.A., Daniels, J.M., Bicho, N.F., and Forman, S.L., 2011. Late Pleistocene relative sea level high stand deposits of Portuguese Estremadura. XVIII INQUA Congress, International Quaternary Association, Bern, Switzerland.
- Haws, J.A., **Benedetti, M.M.**, Funk, C.L., Bicho, N.F., Daniels, J.M., Hesp, P.A., Minckley, T.A., Forman, S.L., Jeraj, M., Gibaja*, J.F., and Hockett, B.S., 2011. Neanderthal use of coastal wetlands during the last glacial/interglacial cycle in Portuguese Estremadura. XVIII INQUA Congress, International Quaternary Association, Bern, Switzerland.
- Ghoneim, E., El-Baz, F., and **Benedetti, M.M.**, 2011. Mapping of the mighty Kufrah Paleoriver system in the eastern Sahara. Geological Society of America, Southeastern Sectional Meeting, Wilmington, NC.
- Benedetti, M.M.**, Haws, J.A., Funk, C.L., Daniels, J.M., Bicho, N.F., Ellwood, B.B., and Forman, S.L., 2010. Late Quaternary records from the central Portuguese coast: geomorphic response to environmental change during Oxygen Isotope Stages 3 and 2.

- Geological Society of America Annual Meeting, Denver, CO.
- Haws, J.A., Funk, C.L., **Benedetti, M.M.**, Bicho, N.F., Daniels, J.M., Minckley, T.A., and Forman, S.L., 2010. Late Quaternary landscapes and seascapes of Portuguese Estremadura: Middle and Upper Paleolithic settlement (poster). Joint Meeting of the Paleoanthropology Society and the Society for American Archaeology, St. Louis, MO.
- Benedetti, M.M.**, Haws, J.A., Funk, C.L., Daniels, J.M., Hesp, P.A., Bicho, N.F., Minckley, T.A., Ellwood, B.B., and Forman, S.L., 2009. Late Quaternary landscapes and seascapes of Portuguese Estremadura: geomorphic response to environmental change during MIS 3 and 2. VII Iberian Quaternary Union, Faro, Portugal.
- Haws, J.A., Funk, C.L., **Benedetti, M.M.**, Bicho, N.F., Daniels, J.M., Hockett, B.S., and Jeraj, M., 2009. Late Quaternary landscapes and seascapes of Portuguese Estremadura: Middle and Upper Paleolithic settlement. VII Iberian Quaternary Union, Faro, Portugal.
- Benedetti, M.M.**, Haws, J.A., Funk, C.L., Daniels, J.M., Hesp, P.A., and Bicho, N.F., 2009. Late Quaternary landscapes of Portuguese Estremadura: environmental change during Marine Isotope Stages 3 and 2. Geoarchaeology 2009, University of Sheffield, UK.
- Haws, J.A., Funk, C.L., Bicho, N.F., Daniels, J.M., **Benedetti, M.M.**, Hockett, B.S., and Jeraj*, M., 2009. Palaeolithic landscapes and seascapes on the Atlantic coast of Portugal. Geoarchaeology 2009, University of Sheffield, UK.
- Gray*, C.M., and **Benedetti, M.M.**, 2009. Buried soils as stratigraphic marker horizons on the Cape Fear River floodplain, Bladen County, NC. Southeastern Section Meeting, Geological Society of America, Tampa FL.
- Gray*, C.M., and **Benedetti, M.M.**, 2008. Buried soils as stratigraphic marker horizons on the Cape Fear River floodplain, Bladen County, NC. The State of NC Undergraduate Research and Creativity Symposium, Appalachian State University, Boone, NC.
- Haws, J.A., Hockett, B.S., Funk, C.L., Daniels, J.M., **Benedetti, M.M.**, and Bicho, N.F., 2006. Neandertals at the Beach: Late Pleistocene Coastal Settlement, Central Portugal. Meeting of the Paleoanthropology Society and Society of American Archaeology, San Juan, Puerto Rico.
- Raber*, M.J., Leonard, L.A., **Benedetti, M.M.**, and Smith, M.S., 2004. Characteristics of sediments transported and deposited in the Cape Fear River estuary, southeastern North Carolina. Southeastern Section Meeting, Geological Society of America, Washington DC.
- Raber*, M.J., Leonard, L.A., **Benedetti, M.M.**, and Smith, M.S., 2003. Characteristics of sediments entering and retained in the lower Cape Fear River estuary, North Carolina. 17th Biennial Conference of the Estuarine Research Foundation, Seattle, WA.
- Benedetti, M.M.**, 2002. Decreasing suspended sediment concentrations in the Upper Mississippi River. Geological Society of America Annual Meeting, Denver, CO.

AWARDS AND GRANTS

External Sources

- Research Experiences for Undergraduates Supplement (PI), National Science Foundation, Archaeology Program, 2012. Integrated Field, GIS, and Remote Sensing Methods for Studying the Paleolithic Geoarchaeology of Portuguese Estremadura. \$5,083.
- General Research Grant (PI), National Science Foundation, Archaeology Program, 2011-2014. Collaborative Research: Human Responses to Late Pleistocene Coastal Environmental Change in Portuguese Estremadura. BCS-1118183, \$136,014.

Marisco Visiting Scholar, University of Denver, Department of Geography, 2010.
Research Grant (PI), Association of American Geographers, 2008. Geomorphic Response to Climate and Sea Level Change: Estremadura Dune Field, Portugal. \$1,000.
Research Grants (Non-PI Participant), National Science Foundation, Archaeology Program, 2005-2008. Late Pleistocene Coastal Adaptations in Central Portugal. BCS-1455145, BCS-0715279, \$159,600.
Research Grant (PI), National Park Service, Cooperative Ecosystems Study Unit, 2003-2005. Sedimentation study at Sny Magill Unit, Effigy Mounds National Monument. \$19,994.48.
Invited Participant, On the Cutting Edge Workshop: Teaching Climate Change. National Association of Geoscience Teachers, Bozeman MT, August 2006.
Invited Participant, On the Cutting Edge Workshop for Early Career Faculty. National Association of Geoscience Teachers, Williamsburg VA, June 2002.
Outstanding Senior in Geography, Illinois Geographical Society, 1991.

UNCW Sources

Summer Research Initiative, UNCW College of Arts & Sciences, 2009. Landscape Response to Climate Change: New Evidence from Oxygen Isotope Stage 3. \$3,500.
Research Reassignment, UNCW College of Arts & Sciences, Spring Semester 2009. Late Quaternary environmental change and geoarchaeology of central Portugal.
Charles L. Cahill Award, UNCW Graduate School, 2008. Geomorphic response to climate and sea level change, Estremadura dune field, Portugal. \$3,000.
International Travel Award, UNCW International Programs, 2006, 2007, 2009, 2010, 2011.
Charles L. Cahill Award, UNCW Graduate School, 2005. Field and laboratory analysis of Bh horizons in sandy soils of New Hanover County, North Carolina. \$2,500.
Summer Research Initiative, UNCW College of Arts & Sciences, 2005. Geomorphic response to environmental change: depositional history of the Cape Fear River. \$3,500.
Marine Science Pilot Project, UNCW Center for Marine Science, 2003-2004. From source to sea: an analysis of fluvial sediment delivery to the Cape Fear River estuary. M.M. Benedetti, L.A. Leonard, and M.S. Smith, co-investigators. \$18,885.
Summer Pedagogy Development Stipend, UNCW Center for Teaching Excellence, 2002. New teaching strategies for physical geography labs. \$3,000.
Summer Research Initiative, UNCW College of Arts & Sciences, 2001. Measuring floodplain sedimentation rates in response to environmental change. \$3,000.
Charles L. Cahill Award, UNCW Graduate School, 2000. Quaternary environments of the lower Cape Fear River valley. \$2,500.

COURSES TAUGHT

University of Wisconsin-Madison

Geography 120 Global Physical Environments
Geography 127 Physical Systems of the Environment
Geography 333 Geomorphology
Geography 360 Quantitative Methods in Geography
Geography 495 Senior Seminar

University of North Carolina Wilmington

Geography 130 Introduction to Physical Geography
Geography 222 Quantitative Methods in Earth Science
Geography 235 / Geology 226 Principles of Hydrology
Geography / Geology 335 Geomorphology
Geography 336 Rivers and Floods
Geography 435 Environmental Geography
Geography 436 Ice Age Earth
Geography 437 Soils in the Earth Sciences
Geography 495 Senior Seminar
Geology 250 Beaches and Coasts
Geology 390 Field Methods in Geosciences
Honors 292 Introduction to Research and Discovery in the Sciences

ADVISING

Undergraduate Honors Students

Primary advisor, B.A. Honors (Geography). Tanya Klinefelter, current. The Caldas da Rainha geosol and Quaternary landscape evolution in central Portugal.
Primary advisor, B.A. Honors (Geography). Joey Jazwinski, current. Site formation processes and stratigraphy of the Middle Paleolithic Mira Nascente site, Portugal.
Primary advisor, B.A. Honors (Geography). Jessica Patrick, 2011. Sedimentology of the Óbidos lagoon, central Portugal.
Primary advisor, B.A. Honors (Geography). Carla Gray, 2009. Buried soils as stratigraphic marker horizons on the Cape Fear River floodplain, Bladen County, NC.
Primary advisor, B.A. Honors (Geography). Laura Neal, 2007. Streamflow response to tropical and extra-tropical storms on the Carolina Coastal Plain.
Committee member, B.A. Honors (History). Christopher Blakely, 2010. Metaphors embedded within the Earth: the role of narrative in history and geology.
Committee member, B.A. Honors (Geography). David Johnson, 2009. Detailed GPS survey and elevation model for Masonboro Island, Southeastern NC.
Committee member, B.A. Honors (Geography). Trevor Lancaster, 2009. A spatial and temporal analysis of coastal engineering activities in southeastern North Carolina.
Committee member, B.A. Honors (Geography). Sara Beth Jenkins, 2006. Effects of local weather patterns on nitrogen analyte rainwater concentrations in Wilmington, NC.
Committee member, B.S. Honors (Biology). Katie Day, 2003. Geographic variability in mitochondrial DNA of the eastern field mouse (*Peromyscus maniculatus*).
Committee member, B.S. Honors (Geology). Kemp Burdette, 2003. Correlating trade routes and ballast stone provenance: Campbell Island, Cape Fear River.

Graduate Students

Primary advisor, M.S. (Geology). John Hawkins Gagnon, 2011. Age and stratigraphy of the Smith Island complex, southeastern NC.
Primary advisor, M.S. (Geology). Carolyn Gomes, 2008. Spatial distribution of subsurface horizons in a pine flatwood landscape, New Hanover County, NC.

Primary advisor, M.S. (Geology). Maverick Raber, 2004. Characteristics of sediments transported to and deposited in the Cape Fear River estuary, southeastern North Carolina.

Committee member, M.S. (Geology). Josh April, current. Comparisons of sea level rise on the northern and southern North Carolina coast.

Committee member, M.S. (Geology). Will Weiland, current. The Caribbean mid-summer drought (MSD) and ocean-atmosphere interactions: San Salvador Island rainfall patterns.

Committee member, M.S. (Marine Science). Dinoflagellate cyst analysis in Mangrove Lagoon, Salt River Bay, St. Croix, U.S. Virgin Islands.

Committee member, M.S. (Geology). Launna Carvalho Sampai, 2011. Comparison of inlet-induced geomorphic changes related to unmodified inlets along a sand rich coastal system.

Committee member, M.S. (Geology). John Robert Mitchell, 2011. Development of rainfall-flood threshold values for evacuation routes in Brunswick County, NC.

Committee member, M.S. (Geology). Devon Olivola, 2008. Short-term sediment deposition rates in riparian marshes and swamps along the lower Cape Fear River, NC.

Committee member, M.S. (Marine Science). Sara Althof, 2007. Effects of *Spartina alterniflora* on turbulence in a tidal marsh: a field experiment of biophysical interactions.

Committee member, M.S. (Geology). Luke Davis, 2006. Sediment dynamics of a fluvially-influenced inner shelf environment, Long Bay, NC.

Committee member, M.S. (Geology). Lauren Saal, 2005. The impact of rainfall on suspended sediment concentrations in an urbanized tidal creek, Bradley Creek, NC.

Committee member, M.S. (Marine Science). Alisha Renfro, 2004. Sedimentation processes in riparian wetland systems of the Cape Fear River, NC.

SERVICE

Professional Service

Editorial Board, *North Carolina Undergraduate Research Journal – Explorations* (2009).

Moderator, State of North Carolina Undergraduate Research and Creativity Symposium (2009).

Joint Editor for physical geography submissions, *The North Carolina Geographer* (2004-08).

Grant Proposal Technical Committees: Water Resources Research Institute of North Carolina (2002); Environmental Protection Agency (2006); National Science Foundation (2012).

Grant Proposal Reviews, National Science Foundation program areas: Earth Sciences, Geography and Spatial Science, Hydrologic Sciences, Instrumentation and Facilities, Research Experiences for Undergraduates.

Journal Manuscript Reviews: *Catena*, *Geomorphology*, *Geoarchaeology*, *Physical Geography*, *Journal of Geoscience Education*, *Journal of the American Water Resources Association*, *Applied Geography*, *Journal of Latin American Geography*, *Southeastern Geographer*, *The North Carolina Geographer*, *North Carolina Undergraduate Research Journal – Explorations*.

UNCW Service

Advisory board, UNCW Center for Support of Undergraduate Research and Fellowships (CSURF) (2008-12).

Member, Provost's Task Force for Performance Funding Measures (2012).

Departmental ambassador, UNCW Quality Enhancement Plan (2010-12).

Departmental representative, UNCW Faculty Senate (2008-12).
Member, UNCW Admissions Committee (2003-05, 2009-10), Chair (2011).
Chair, Sedimentary Geology Search Committee (2010-11).
Supervisor, Soil & Sedimentology Laboratories, UNCW Geography & Geology (2000-08).
Chair, Scholarships and Awards Committee, UNCW Geography & Geology (2004-07).
Faculty Advisor, Geography Club, UNCW Geography & Geology (2001-02, 2005-06).

Community Service

Volunteer Official, Regional Science Fair (2003).
Event Leader (*Dynamic Planet*), Regional Science Olympiad (2002-07).
Volunteer admissions interviews, University of Chicago Committee (2001-12).