About the Assistantships

Five (5) highly qualified candidates will engage in applied research within their discipline (ecohydrology & watershed science, human dimensions of natural resources/tourism, wildlife populations & habitat management, forest and natural resource markets, and geospatial analytics), receive interdisciplinary research training, and participate as a member of cohort of doctoral students to understand how salinization affects natural resources and the people who live, work, and recreate in the Albemarle-Pamlico Peninsula of North Carolina. Working with stakeholders, decision-makers, and collaborators in the region, the NC State team expects to outline locally adaptable solutions to problems associated with salinization. Specifically, the team will rely on a range of methods to assess and model salinization-related impacts to water resources, wildlife, forest product markets, and tourism in the region. Assessments of adaptive capacity, governance networks and stakeholder information flows will enhance the ability to build community climate readiness during outreach and engagement workshops. The workshops will employ cutting edge geospatial and visualization tools to help researchers and community members work together to understand salinization and its effects, and test adaptation strategies in a virtual space.

The assistantships are 12-month, 20-hour per week positions beginning January, 2015. The position includes a competitive stipend, tuition, fees and health insurance benefits. Funds for professional development purposes are available. This position is funded for 3 years and is renewable each year based on satisfactory progress.

Responsibilities

• Actively engage with the interdisciplinary research team and develop new areas of inquiry with faculty advisors and project collaborators. Research activities entail literature reviews, research design, data collection and analysis, and results dissemination. Travel to research sites and participation in outreach community workshops is required.
• Assist or lead in writing grant proposals, technical and non-technical reports, fact sheets and other public-audience deliverables, and peer-reviewed journal articles.
• Mentor, train and supervisor undergraduate research assistantships affiliated with the project.
• Maintain good graduate standing and make satisfactory progress toward completion of degree.
Specific Positions & Faculty

- **Ecohydrology & Watershed Science** with Dr. Ryan Emanuel (ryan_emanuel@ncsu.edu)
  - DEPARTMENT OF FORESTRY & ENVIRONMENTAL RESOURCES
  - The successful candidate will study landscape salinization and impacts on freshwater-dependent ecosystems in coastal North Carolina as part of a larger, interdisciplinary effort to understand coupled human and natural processes associated with climate-driven salinization of surface waters and adjacent lands. Desired qualifications include a Master’s degree in hydrology or related environmental sciences, experience with hydrological fieldwork, expertise in Matlab or similar analytical software, and familiarity with geospatial computing tools. Exceptionally qualified Bachelor’s degree holders will also be considered.

- **Environmental Social Science & Community Resilience** with Dr. Erin Seekamp (erin_seekamp@ncsu.edu)
  - DEPARTMENT OF PARKS, RECREATION AND TOURISM MANAGEMENT
  - The successful candidate will examine communities’ adaptive capacity to salinization-related impacts and estimate changes in tourism demand from salinization. Background or experience in both qualitative and quantitative research methods is highly desired, including but not limited to interviews, focus group research, and/or survey research. Previous coursework in social psychology and/or environmental sociology desired. Travel is required.

- **Wildlife Population & Habitat Management** with Dr. Chris Moorman (chris_moorman@ncsu.edu)
  - FISHERIES, WILDLIFE & CONSERVATION BIOLOGY PROGRAM, DEPARTMENT OF FORESTRY & ENVIRONMENTAL RESOURCES
  - The successful candidate will lead a study of the effects of salinization, in advance of coastal sea level rise, on plant communities and associated wildlife populations. The project will include a mix of observational and manipulative experiments designed to better understand wildlife response to changes in plant communities induced by sea level rise and salinization. Applicants should have a M.S. in wildlife biology, zoology, conservation biology, or other related field. Preference will be given to applicants with demonstrated interest in field ecology, basic plant identification skills, and proficiency in GIS use, field sampling of wildlife, and quantitative methods to analyze field data.

- **Geospatial Analytics & Computational Social Science** with Dr. Jordan Smith (jwsmit12@ncsu.edu)
  - CENTER FOR GEOSPATIAL ANALYTICS AND DEPARTMENT OF PARKS, RECREATION & TOURISM MANAGEMENT
  - The successful candidate will engage in theory-driven social science utilizing advanced analytical methods and models (agent-based models of land use change; spatial social network analysis; stated preference experiments conducted with the aid of immersive virtual environment technology; and geovisualization-based stakeholder engagement). Applicants should have demonstrated experience in advanced quantitative analytical techniques and emerging geospatial decision support systems.

- **Forest Products & Natural Resource Marketing** with Dr. Sudipta Dashmohapatra (jwsmit12@ncsu.edu)
  - DEPARTMENT OF FOREST BIOMATERIALS
  - The successful candidate will engage in theory-driven social science and market-based analytical methods and models as a part of the project. Applicants should have experience in interviewing and survey research methodologies, as well as strong quantitative analytical skills related to forest and/or recreational markets.

About the College

CNR (http://cnr.ncsu.edu) is a world leader in the sustainable use of natural resources. CNR’s comprehensive approach to teaching, research and service encompasses the many and varied ways in which people’s physical, economic and social needs are met through the wise use of natural resources. CNR is committed to interdisciplinary research, teaching and engagement, as nurturing and enjoying the environment and engineering sustainable products go hand-in-hand with helping communities and enterprises thrive. The faculty, staff, students and alumni of CNR are discovering and sharing real world solutions to real world problems everyday.

To Apply

Email a current CV, 1-page letter of interest, & writing example to the appropriate faculty member. Review of applications will begin immediately and continue until an optimal candidate is identified. Anticipated date of decisions is 21 Nov 2014.

NC State University promotes equal opportunity and prohibits discrimination and harassment based upon one’s age, color, disability, gender identity, genetic information, national origin, race, religion, sex (including pregnancy), sexual orientation and veteran status.

NC State. Think and do.