

## Graduate Program

The Department of Geography & Spatial Sciences at the University of Delaware College of Earth, Ocean and Environment offers a variety of master's and doctoral degree programs that will prepare you for an exciting and impactful career in academia, government or private industry. Our faculty includes dedicated researchers and instructors who are experts in climatology, environmental monitoring, geospatial data science, remote sensing, geopolitics, political ecology and more.

### PROGRAMS

Geography (MA, MS, PhD) Climatology (PhD) Water Science & Policy (MS, PhD)

Geographic Information Science Cert. Minerals, Materials & Society Cert. Wind Power Science & Policy Cert.

#### For more information

Department of Geography & Spatial Sciences COLLEGE OF EARTH, OCEAN & ENVIRONMENT 216 Pearson Hall • Newark, DE 19716 Phone: (302) 831–2294 • Email:ceoe-info@udel.edu The Geography graduate degrees feature individualized areas of study including physical geography, human geography, or coupled human-environment systems. Within the Climatology program, students learn the physics of climatology (thermodynamics, radiation, and cloud processes), atmospheric dynamics (forces and flows), measurement (microclimatological methods and instrumentation, remote sensing) and computational methods for data analysis and synthesis. Both certificates are designed for working professionals aspiring to leadership positions in their fields.

#### **RESEARCH UNDERWAY IN**

Coupled Human-Environment Systems Environmental Peacebuilding Food Justice and Security GIScience and Environmental Data Analytics Sustainable Resource Use Climate Studies Ecohydrology Meteorology

#### FACILITIES AND RESOURCES

GIS Lab Meteorology Visualization Lab Satellite Receiving Station for Remote Sensing Center for Environmental Monitoring & Analysis

Application information and process is online at grad.udel.edu/apply, but applicants are encouraged to contact potential advisors directly prior to application.

Faculty information and research interests on reverse.



#### www.udel.edu/gss

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# GEOGRAPHY & SPATIAL SCIENCES: FACULTY & RESEARCH INTERESTS

#### **SALEEM ALI**

(Massachusetts Institute of Technology, 2000) Causes and consequences of environmental conflicts; how ecological factors can promote peace; environmental conflicts in extractive industries, especially minerals. saleem@udel.edu

#### **CRISTINA L. ARCHER**

(Stanford University, 2004) Renewable energy; wind power; meteorology; climate change; air quality; numerical modeling of atmospheric processes. carcher@udel.edu

#### **KYLE F. DAVIS**

(University of Virginia, 2016) Food systems; sustainability; global environmental change; geospatial data science; nutrition; foreign land investments; human migration. kfdavis@udel.edu

#### **TRACY DELIBERTY**

(University of Oklahoma, 1993) Geographical information systems; climatology; remote sensing. tracyd@udel.edu JING GAO (University of Wisconsin–Madison, 2013) Geospatial data science; machine learning; human dimensions of climate change; urban land change; spatial population; uncertainty analysis and modeling. jinggao@udel.edu

#### **CATHLEEN A. GEIGER**

(Dartmouth College, 1996) Complex systems/ large data analysis; human sustainability and geophysical interactions; communication and data visualization. cgeiger@udel.edu

BRIAN HANSON (University of Minnesota, 1985) Climate dynamics; glaciology. hanson@udel.edu

YAO HU (University of Illinois Urbana-Champaign 2016) Socio-hydrology, modeling, data science, cyberinfrastructure. yaohu@udel.edu

PAUL JACKSON (University of Toronto, 2011) Interaction between humans and the urban environment; health and environmental geography; urban planning and public health; environmental politics. pjack@udel.edu

#### **DANIEL J. LEATHERS**

(The Pennsylvania State University, 1988) The role of snow cover in the global climate system; the influence of land-surface changes on regional climates; environmental monitoring. leathers@udel.edu

#### **DAVID R. LEGATES**

(University of Delaware, 1988) Hydroclimatology; precipitation and climate change; spatial statistics. legates@udel.edu

#### **DELPHIS F. LEVIA**

(Clark University, 2000) Ecohydrology; biosphereatmosphere interactions; biogeochemistry; field methods and instrumentation; microscopy; bioimaging. **dlevia@udel.edu** 

#### **PINKI MONDAL**

(University of Florida, 2011) Remote sensing; Geographic Information System; developing geospatial methods for landscape-level monitoring and assessments; climate change impacts on agriculture in the developing countries. mondalp@udel.edu

#### LINDSAY NAYLOR

(University of Oregon, 2014) International economic development and human geography; geopolitics of food systems; impact of agricultural production on power relations; improving equity and sustainability of food systems. Inaylor@udel.edu

#### SARA A. RAUSCHER

(University of Wisconsin– Madison, 2004) Regional processes affecting climate variability and change; modeling strategies for highresolution regional climate information; climate change impact on tropical Americas; climate extremes. rauscher@udel.edu

#### DANA E. VERON

(Scripps Institution of Oceanography, University of California, San Diego, 2000) Climate change impacts; cloud-radiation interactions: surface radiative properties; Arctic energy balance; Antarctic boundary layer meteorology; sea breeze circulation; land/ocean surface-atmospheric interactions: offshore wind resource assessment. dveron@udel.edu