Environmental and Conservation Sciences

Department Information

- **Program Director:**
  Craig Stockwell, Ph.D.
- **Department Location:**
  Biological Sciences, Stevens 119
- **Department Phone:**
  (701) 231-7717
- **Department Web Site:**
  www.ndsu.edu/ecs/ (http://www.ndsu.edu/ecs/)
- **Application Deadline:**
  International applications are due May 1 for fall semester and August 1 for spring semester. Domestic applicants should apply at least one month prior to the start of classes.
- **Credential Offered:**
  Ph.D., M.S.
- **English Proficiency Requirements:**
  TOEFL ibt 79; IELTS 6.5; Duolingo 105

**Bakr Aly Ahmed, Ph.D.**  
Virginia Tech, 2001  
Research Interests: Built Environment; Sustainable Architecture; Construction Technology; Urban Sustainability

**Laura Aldrich-Wolfe, Ph.D.**  
Cornell University, 2006  
Research Interests: Restoration Ecology; Conservation Biology; Fungal Community Ecology

**F. Adnan Akyuz, Ph.D.**  
University of Missouri-Columbia, 1994  
Research Interests: Applied Climatology and Microclimatology/Climate Based Agriculture

**Allan C. Ashworth, Ph.D.**  
University of Birmingham, 1969  
Research Interests: Quaternary Paleoecology, Paleoclimatology

**Achintya Bezbaruah, Ph.D.**  
University of Nebraska-Lincoln, 2002  
Research Interests: Nanomaterials for Pollution Control, Recalcitrant and Micro Pollutants, Contaminant Fate and Transport, Small Community Water and Wastewater Treatment, Environmental Sensors, Environmental Management

**Julia Bowsher, Ph.D.**  
Duke University, 2007  
Research Interests: Evolutionary and Developmental Biology

**Igathinathane Cannayen, Ph.D.**  
Indian Institute of Technology, 1997  
Research Interests: Biomass Harvest, Storage, Collection and Pre-Processing

**Frank X.M. Casey, Ph.D.**  
Iowa State University, 2000  
Research Interests: Field and Laboratory Studies of Water Flow and Chemical Transport Processes

**Amitava Chatterjee, Ph.D.**  
University of Wyoming, 2007  
Research Area/Activity: Soil Fertility Management, Greenhouse Gas Emissions

**Xuefeng (Michael) Chu, Ph. D.**  
University of California, Davis, 2002  
Larry Cihacek, Ph.D.
Iowa State University, 1979
Research Interests: Carbon Sequestration in Soils, Soil Physical Properties, Soil Management for Waste Disposal

Dennis Cooley, Ph.D.
University of Rochester, 1995
Research Interests: Ethics of Science

Aaron Daigh, Ph.D.
Iowa State University, 2013
Research Interests: Soil Physics, Transport in Soils, Soil Residue and Water Management, Crop Rotations, and Nutrient/Agrochemical/Industrial Byproduct Soil Amendment Impacts on Soil Physical Properties

Stephanie Day, Ph.D.
University of Minnesota, 2012
Research Interests: Fluvial Geomorphology, Slope Stability, Geospatial Sciences

Edward (Shawn) DeKeyser, Ph.D.
North Dakota State University, 2000
Research Interests: Wetland Ecology, Wetland Assessment and Monitoring, Invasive Species Ecology and Management, Native Prairie Restoration

Anne Denton, Ph.D.
University of Mainz, 1996
Research Interests: Data Mining, Bioinformatics, Scientific Informatics, Educational Technology, Model Building, Databases

Thomas M. DeSutter, Ph.D.
Kansas State University, 2004
Research Interest: Trace Gas Fluxes, Inorganic Soil Chemistry, Soil Environmental Conditions

Ned Dochtermann, Ph.D.
University of Nevada, Reno, 2009
Research Interests: Ecological and Evolutionary Causes and Consequences of Phenotypic Variation

Paulo Flores, Ph.D.
Federal University of Rio Grande do Sul, 2008
Research Interests: Precision Agriculture, Unmanned Aerial Systems; Imagery analyses

Caley Gasch, Ph.D.
University of Wyoming, 2013
Research Interests: Soil ecology; Restoration; Conservation

Erin Gillam, Ph.D.
University of Tennessee, 2007
Research Interests: Behavioral ecology of bats, ecological and evolutionary basis of behavior in all animal groups, behavioral, ecological, and evolutionary factors influence the structure of animal communication signals and wildlife ecology and conservation.

Kendra Greenlee, Ph.D.
Arizona State University-Tempe, 2004
Research interests: Environmental and respiratory physiology of insects; insect immunology.

Timothy Greives, Ph.D.
Indiana University, 2009
Research Interests: Physiology and Behavior of Animals in Response to Environmental Signals

Ademola (Demmy) Hammed, Ph.D.
International Islamic University, 2014
Research Interests: Biotechnology Engineering; Agricultural Bioproducts

Jason Harmon, Ph.D.
University of Minnesota, 2003
Research Interests: Environmental change; ecosystem services; population and community ecology

Mark Harvey, Ph.D.
University of Wyoming, 1986
Research Interests: American West, Environmental History, Public History
Harlene Hatterman-Valenti, Ph.D.
Iowa State University, 1993
Research Interests: High-Value Crop Production

Robert R. Hearne, Ph.D.
University of Minnesota, 1995
Research Interests: Economic Analysis of Emerging Environmental and Resource Issues in the Northern Great Plains

Britt Heidinger, Ph.D.
Indiana University, 2007
Research Interests: Physiological Ecology, Senescence, Stress Physiology

David Hopkins, Ph.D.
North Dakota State University, 1997
Research Interests: Soil Formation and Chemistry

Tom Isern, Ph.D.
Oklahoma State University, 1977
Research Interests: History of Agriculture, History of Great Plains

Sivaguru Jayaraman, Ph.D.
Tulane University, 2003
Research Interests: Photocatalysis, Photochemistry, Green Chemistry

Xinhua Jia, Ph.D.
University of Arizona, 2004
Research Interests: Evapotranspiration, Subsurface Drainage and Water Quality

Dinesh Katti, Ph.D.
University of Arizona, 1991
Research Interests: Geotechnical Engineering, Constitutive Modeling of Geologic Materials, Expansive Soils, Multiscale Modeling, Steered Molecular Dynamics, Computational Mechanics, Nanocomposite, and Bio-nanocomposites. Computational Biophysics

Page Klug, Ph.D.
Kansas State University, 2009
Research Interests: Human-wildlife Interactions; Ecology; Birds; Snakes

Ben Laabs, Ph.D.
University of Wisconsin, 1999
Research Interests: Quaternary Geology; Glacial Geology; Cosmogenic Nuclides; Paleoclimate; Surface Processes

Trung Le, Ph.D.
University of Minnesota, 2011
Research Interests: Hydraulics; Fluid Mechanics; Numerical Methods for Fluid-Structure Interaction

Kenneth E. Lepper, Ph.D.
Oklahoma State University, 2001
Research Interests: Quaternary Geology and Age Dating

Wei Lin, Ph.D.
State University of New York at Buffalo, 1992
Research Interests: Water and Wastewater Treatment, Hazardous Waste Management

Zhulu Lin, Ph.D.
University of Georgia, 2003
Research Interests: Surface and Subsurface Hydrology and Modeling, Soil and Water Resources Management, Environmental Systems Analysis, Risk Identifications and Assessment, Geostatistics and Spatial Statistics

Guodong Liu, Ph.D.
Hunan University, 2001
Research Interests: Synthesis of Novel Nanomaterials, Biosensors, Bioassays

John McEvoy, Ph.D.
University of Ulster Northern Ireland, 2002
Research Interests: Cryptosporidium Virulence Factors and Mechanisms of Pathogenesis
Jennifer Momsen, Ph.D.
Rutgers University, 2007
Research Interests: Biology Education, Systems Thinking in Introductory Biology, Visualization, Assessing the Cognitive Level of STEM Courses

Bakr Mourad Aly Ahmed, Ph.D.
Virginia Tech., 2001
Research Interests: Sustainability Indicators and Implementation, Carrying Capacity Measurements, Coastal Development, Built Environment and Natural Resources Conservation

Jack Norland, Ph.D.
North Dakota State University, 2008

Nurun Nahar, Ph.D.
North Dakota State University, 2017
Research Interests: Biomass Conversion; Bioprocess Engineering; Biofuels

Peter Oduor, Ph.D.
University of Missouri - Rolla, 2004
Research Interests: Geographic Information Systems, Groundwater Flow Modeling, Groundwater Contamination

Marinus Otte, Ph.D.
Vrije Universiteit, 1991
Research Interests: Wetland ecology, Biogeochemistry, Ecophysiology and Ecotoxicology

Birgit Pruess, Ph.D.
Ruhr-Universitat Bochum, 1991
Research Interest: Microbial Physiology and Gene Regulation

Scott Pryor, Ph.D.
Cornell University, 2005
Research Interests: Biofuel Production from Cellulosic Feedstocks, Biobased Chemicals and Materials, Bioprocess Engineering, Process Optimization, Solid State and Liquid Fermentation Systems

Shafiqur Rahman, Ph.D.
University of Manitoba, 2004
Research Interests: Animal Waste Management, Biosolids Management, Air Quality, Water Quality, Composting

David A. Rider, Ph.D.
Louisiana State University, 1988
Research Interests: Insect Systematics, Biodiversity

David Ripplinger, Ph.D.
North Dakota State University, 2012
Research Interests: Energy Transport; Agricultural Economics

David C. Roberts, Ph.D.
Oklahoma State University, 2009
Research Interests: Evaluation and Design of Economically Efficient Tools and Policies for Pollution Control, Economic Valuation of Environmental and Ecological Attributes Through Revealed and Stated Preference Methods, Valuation of Environmental Risk, and Low-Impact and Precision Agriculture

Bernhardt Saini-Eidukat, Ph.D.
University of Minnesota, 1991
Research Interests: Environmental Geochemistry, Igneous Petrology, Economic Geology

Kalidas Shetty, Ph.D.
University of Idaho, 1989
Research Interests: Plant Science; Agriculture; Food Science; Human Nutrition; Public Health

Halis Simsek, Ph.D.
North Dakota State University, 2012
Research Interests: Bioenvironmental Engineering

Senay Simsek, Ph.D.
North Dakota State University, 2012
Research Interests: Bioenvironmental Engineering; Carbohydrate Chemistry; Cereal Science; Food Science And Technology

**Todd Sirotiak, Ph.D.**
Iowa State University
Research Interests: Construction Process Improvement; Sustainability

**Matt Smith, Ph.D.**
University Of Arkansas, 2012
Research Interests: Morphology; Physiological Ecology

**Dean D. Steele, Ph.D.**
University of Minnesota, 1991
Research Interests: Irrigation and Environmental Engineering

**Craig A. Stockwell, Ph.D.**
University of Nevada, 1995
Research Interests: Conservation Biology, Evolutionary Ecology of Native Fishes, Human-Wildlife Interactions

**Linda Tackett, Ph.D.**
University of Southern California, 2014
Research Interests: Norian (and Mesozoic, generally) Paleoecological, Taxonomic, and Environmental Dynamics

**Steve E. Travers, Ph.D.**
University of California, 1998
Research Interests: Plant Evolutionary Ecology

**Cheryl Wachenheim, Ph.D.**
Michigan State University, 1994
Research Interests: Eliciting Perceptions and Valuations from Consumers, Firms, Students and Other Stakeholders and Decision Makers

**Alexander Wagner, Ph.D.**
Oxford University, 1997
Research Interests: Lattice Boltzmann, Spinodal Decomposition, Viscoelasticity, Drop Deformation and Break-up in a Shear Flow, Wetting, Non-equilibrium Thermodynamics, Complex systems

**Scott Wood, Ph.D.**
Princeton University, 1985
Research Interests: Environmental Geochemistry, Radioactive Waste Disposal

**Brian D. Wisenden, Ph.D.**
University of Western Ontario, 1993
Research interests: Behavioral Ecology of Fishes, Chemical Ecology of Predator-Prey Interactions, Parental Care and Mating Systems