

Graduate Students Round Ten (first awarded in 2023):

- Irina Filina, Assistant Professor, UNL Earth and Atmospheric Sciences, for the project: Gravity and seismic measurements over Nebraska aquifers to detect seasonal changes in water level Student: Kaitlin Steinauer, M.S., Geology
- Lilyan Fulginiti, Professor, UNL Agricultural Economics, for the project: Optimal Groundwater Management Policies for the High Plains Aquifer: Taxes, Quotas and Water Markets Student: Bruno Chaves Morone, Ph.D., Agricultural Economics (expected graduation: May 2024)
- Troy Gilmore, Associate Professor, UNL School of Natural Resources, for the project: Advancing environmental sensing through fixed ground-based camera imagery Student: John Stranzl, Ph.D., Natural Resources
- Kristina Kintziger, Professor of Health & Environment, UNMC Environmental, Agricultural & Occupational Health, for the project: *Detection of Poly- and Perfluoroalkyl Substances in Nebraska Drinking Water and Exposure Assessment in Adult Rural and Service Member Populations* Student: Sarah Tucker, Ph.D., UNMC Toxicology, Environmental Health & Occupational Health (expected graduation: December 2026)
- Taro Mieno, Associate Professor, UNL Agricultural Economics, for the project: Drought Impacts on Cattle Stocking Density and Land Use Student: Shara Akat, Ph.D., Agricultural Economics
- Eleanor G. Rogan, Interim Chair, UNMC Dept. of Health Promotion, for the project: Possible correlation between exposure to agrichemicals and pediatric cancer or birth defects Student:
 Jabeen Taiba, Ph.D., Health Practice & Medical Education
- Saleh Taghvaeian, Associate Professor, UNL Biological Systems Engineering, for the project: *Improving water and nutrient management under center pivot irrigation in south-central Nebraska* Student: Thais Murias Jardim, Ph.D., Biological Systems Engineering
- Mehmet Vuran, Professor, UNL School of Computing, for the project: Fast-LoRa: High-Throughput and Long-Range Wide Area Networks for Advanced Connectivity and Automation in Agricultural Fields Student: Sangwon Shin, Ph.D., Computer Science
- Hongfeng Yu, Associate Professor, UNL School of Computing, for the project: *Revealing Dynamic Spatial Patterns of Groundwater Quality Modeling* Student: Xinyan Xie

Hubbard Fellowships:

- Shannon Bartelt-Hunt, Professor and Dept. Chair, UNL Civil and Environmental Engineering, for the project: Connecting AntiMicrobial Resistance, Agricultural Decisions, and Environmental Systems: A tool for mitigating AMR and assessing risk to human health in agro-ecosystems Student: Moriah Brown, for a Ph.D. in Environmental Engineering
- Michael Kaiser, Assistant Professor, UNL Agronomy & Horticulture, for the project: Sustainable soil management strategies to improve water retention and quality in agricultural systems Student: Britt Fossum, Ph.D., Agronomy

Graduate Students Round Nine (first awarded in 2022):

- Trenton Franz, Associate Professor, UNL School of Natural Resources, for the project: *Investigating* proximal gamma-ray sensor for soil moisture monitoring Student: Sophia Becker, Ph.D., Hydrological Sciences
- Mary Harner, Research Professor, UNK Communication and Biology, for the project: Connecting students to natural history and water resource science Student: Jamila Bajelan, M.S., Public Communication

STUDENT SUPPORT AWARDS



- Aaron Mittelstet, Assistant Professor, UNL Biological Systems Engineering, for the project: Vadose Zone Nitrate Accumulation Lower Loup Natural Resources District Area 30, Relation to Manure Application, Fertilizer Management and Groundwater Nitrate Concentrations Student: Muili Lawal, M.S., Biological Systems Engineering (started Jan. 2023)
- Karina Schoengold, Associate Professor, UNL Agricultural Economics, for the project: Assessing Producer Preferences for Conservation Program Participation and Ecosystem Service Provision Student: Kaouter Essakkat, Ph.D., Agricultural Economics
- Harkamal Walia, Professor, UNL Agronomy & Horticulture, for the project: *Physiological and molecular analysis of combined heat and drought-stress traits in wheat* Student: Shohei Oguro, M.S., Agronomy, Plant Breeding and Genetics
- Karrie Weber, Associate Professor, UNL School of Biological Sciences and Department of Earth and Atmospheric Sciences, for the project: *Nitrate-stimulated uranium biogeochemical cycling in soils and sediments* Student: Taylor Rosso, Ph.D., Biological Sciences

Hubbard Fellowships:

 Tsegaye Tadesse, Research Professor, UNL School of Natural Resources and National Drought Mitigation Center, for the project: *Investigating Complex Drought Impacts on Society and Public Health using Machine Learning* Student: Beichen Zhang, Ph.D. Candidate in Natural Resource Sciences/Climate Assessment and Impacts

Research Awards:

- Osler Ortez, Assistant Professor, The Ohio State University Horticulture and Crop Science, for the project: Addressing corn production issues to enhance productivity and close yield gaps
 Postdoctoral Fellow: Izaias Pinheiro Lisboa
- Martha Rhoades, Research Manager, Xenobiotics Laboratory, UNL School of Natural Resources, for the project: DWFI Continued Support of Birth Outcomes and Water (BOW) Study, in collaboration with Kent Eskridge, Professor, UNL Statistics and Troy Gilmore, Associate Professor, UNL School of Natural Resources Student: Augustine Kena Adjei, Ph.D., Statistics (started Jan. 2023)

Graduate Students Round Eight (first awarded in 2021):

- Erin Haacker, Assistant Professor, UNL Earth and Atmospheric Sciences, for the project: Modeling Nitrate Contamination in Northeastern Nebraska Student: tbd
- Javed Iqbal, Assistant Professor, UNL Agronomy & Horticulture, for the project: Optimizing Nitrogen and Water Inputs for Corn Based on Nitrate Leaching
 Student: Archdoon Singh, for a Ph. D. in Agronomy.
 - Student: Arshdeep Singh, for a Ph.D. in Agronomy
- Deepak Keshwani, Associate Professor, UNL Biological Systems Engineering, for the project: An integrated framework to account for temporal, spatial, and climate variability in the Corn-Water-Ethanol-Beef (CWEB) nexus system

Student: Heydi Calderon, for a Ph.D. in Biological Systems Engineering

- Xu Li, Professor, Professor, UNL Civil and Environmental Engineering, for the project: *Mitigating the Risk of Manure-Borne Antibiotic Resistance to Surface Water* Student: Qu Wen, for a Ph.D. in Civil and Environmental Engineering
- Bijesh Maharjan, Assistant Professor & Extension Specialist, UNL Agronomy & Horticulture, for the project: Optimizing Nitrogen Management in Furrow-Irrigated Corn Field to Increase Grain Yield and Ensure Groundwater Quality Student: Deepak Ghimire, for a Ph.D. in Agronomy

STUDENT SUPPORT AWARDS



Daniel Uden, Assistant Professor, UNL School of Natural Resources and Agronomy & Horticulture, Center for Resilience in Agricultural Working Landscapes, for the project: Remotely sensed early warning of toxic algal blooms in Nebraska lakes Student: Mercy Kipenda, M.S., SNR

Hubbard Fellowships:

Tirthankar Roy, Assistant Professor, UNL Civil and Environmental Engineering, for the project: A comprehensive framework to assess flood risk within the context of public health Student: Shivendra Srivastava, Ph.D., Water Resources Engineering

Graduate Students Round Seven (first awarded in 2020):

Jessica Corman, Assistant Professor, UNL Agronomy & Horticulture, for the project: Looking to the past to understand the future of freshwater in the Sandhills Student: Daniel Gschwentner, for a Ph.D. Natural Resource Sciences with specialization in Applied Ecology, SNR

Graduate Students Round Six (first awarded in 2019):

Jesse Korus, Assistant Professor, UNL School of Natural Resources, for the project: Integrating Hydrologic Modeling and Geophysical Characterization to Improve Water Management Tools Student: Nafyad Kawo, for a Ph.D. in Natural Resource Sciences, Specialization: Hydrological Sciences

Undergraduate (annual awards):

- Katherine Frels, Assistant Professor, UNL Agronomy & Horticulture, for the project: The effect of drought-stress conditions on the germination of solid-stem populations of winter wheat, Triticum aestivum. Student: Cole Hammett, B.S. in Plant Biology
- Platte Basin Timelapse Project: Caden Connelly, Production Intern; Emily Nelson, Production Intern; Grace Carey, Production Intern; Marissa Lindemann, Production Intern; Josh Nazarenus, Production Intern; Rachel Holt, Storytelling Intern; Valentina Catalano, Production Intern; Elijah Riley, Production Intern; advised by Michael Forsberg, Research Assistant Professor, UNL School of Natural Resources and Producer & Project Manager, Mariah Lundgren, UNL School of Natural Resources, and Michael Farrell, DWFI Faculty Fellow. While DWFI funds support three interns, the PBT project is leveraging this support in FY24 to support several interns throughout the year.

STUDENT SUPPORT AWARDS

