STUDENT SUPPORT



Graduate Students Round Eight (first awarded in 2021):

- Patricio Grassini, Associate Professor, UNL Agronomy & Horticulture, for the project: Has irrigated corn in Nebraska reached a yield plateau?
 - Student: Gonzalo Rizzo Ayphassorho, for a Ph.D. in Agronomy, Minor in Statistics
- Erin Haacker, Assistant Professor, UNL Earth and Atmospheric Sciences, for the project: Modeling Nitrate Contamination in Northeastern Nebraska
 - Student: Jordan Shields, for a Ph.D. in Earth and Atmospheric Sciences
- Javed Iqbal, Assistant Professor, UNL Agronomy & Horticulture, for the project: Optimizing Nitrogen and Water Inputs for Corn Based on Nitrate Leaching
 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-WaterEthanol-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. 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 Shimire, for a Ph.D. in Agronomy
- Taro Mieno, Assistant Professor, UNL Agricultural Economics, for the project: *Incorporating machine learning methods in economic analysis of water use in agriculture* Student: Sanat Bhandari, Ph.D. Computer Science and Engineering
- Larkin Powell, Professor, UNL School of Natural Resources, for the project: Assessing risk and risk perception of tick-borne disease along a climate-induced transition zone in Nebraska Student: Dominic Cristiano, M.S., SNR
- Amy Schmidt, Associate Professor, UNL Biological Systems Engineering, for the project: Integrated
 Crop Nutrient Management (ICNM) to Support Crop-Human-Environment Well-Being
 Student: Matthew Chaffee (being recruited) M.S., SNR
- 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
- Jessica Fargen Walsh, Assistant Professor, UNL College of Journalism and Mass Communications, for the project: A Thematic Analysis of Local News Coverage of Water Issues in Nebraska Student: to be recruited from Fall 2021 Journalism graduate students

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: to be
 recruited from Fall 2021 Civil Engineering graduate students
- Steven Thomas, Associate Professor, UNL School of Natural Resources, for the project: Comparing human and veterinary antibiotics in Nebraska streams Student: Justin Caniglia, Ph.D., SNR

STUDENT SUPPORT



<u>Graduate Students Round Seven</u> (first awarded in 2020):

- Katie Anania, Assistant Professor, UNL Art, Art History & Design, for the project: Visualizing Food and Water Supplies in the U.S. and Latin America through Artists' Projects
 Student: Tharius LeBeau, for a M.A. in Art, Art History & Design
- Shannon Bartelt-Hunt, Professor and Dept. Chair, UNL Civil and Environmental Engineering, for the project: The fate of microplastics in terrestrial systems: understudied sources and citizen science Student: Nasrin Naderi Beni, for a Ph.D. in Civil Engineering, specialization in Env. Engineering
- Andrea Basche, Assistant Professor, and Daren Redfearn, Associate Professor, UNL Agronomy &
 Horticulture, for the project: Assessing site-specific impacts of cover crops on water cycling using
 high-resolution imagery and ground based data Student: Fernanda Souza Krupek, for a Ph.D. in
 Agronomy
- 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
- Bruce Dvorak, Professor, UNL Civil Engineering & Biological Systems Engineering, for the project:
 Environmental sustainability assessment of small Nebraska water resource recovery facilities: water reuse opportunities Student: Matt Thompson, for a Ph.D. in Civil Engineering (Year 2) with specialization in Environmental Engineering
- Yi Qi, Assistant Professor, UNL School of Natural Resources, for the project: Develop scalable methods for identifying Water Use Gap of Farmlands in Midwestern States
 Student: Wenqi Ou, for a Ph.D. Natural Resource Sciences, SNR (Year 2)
- Zhenghong Tang, Professor, UNL College of Architecture, for the project: Using small Unmanned
 Aircraft System (UAS) to promote precision conservation and sustainable agricultural practices in the
 Rainwater Basin, Nebraska Student: Qiao Hu, for a Ph.D. Natural Resource Sciences, SNR
- Elizabeth Van Wormer, Assistant Professor, UNL School of Natural Resources, for the project:
 Linking child stunting, microbiome, livestock health and water quality: a One Health study in Rwanda
 Student: Ben Ndayambaje, for a Ph.D. Natural Resource Sciences, SNR
- Haishun Yang, Associate Professor, UNL Agronomy & Horticulture, for the project: WaterSmart: A
 cyberinfrastructure-based integrated agro-geoinformatic decision-support web service system to
 facilitate informed irrigation decision-making Student: Anthony Amori, for a Ph.D. in Agronomy

<u>Graduate Students Round Six</u> (first awarded in 2019):

- Jesse Bell, Professor, UNMC College of Public Health, for the project: Improving the Knowledge of Drought and Health in the United States
 - Student: Jagadeesh Puvvula, for a Ph.D. in Environmental Health
- Carrick Detweiler, Assistant Professor, UNL Computer Science and Engineering, and Francisco
 Munoz-Arriola, Associate Professor, UNL Biological Systems Engineering, for the project: Expansion

STUDENT SUPPORT



- of Long-term Persistent Monitoring Applications of Tethered UASs Student: **Daniel Anthony Rico**, for a Ph.D. in Computer Science and Engineering with a specialization in Computer Engineering
- Troy Gilmore, Assistant Professor of Groundwater Hydrology, UNL School of Natural Resources, for the project: Influence of recharge patterns on the sustenance of groundwater-fed streams
 Student: Caner Zeyrek, for a Ph.D. in Natural Resource Sciences, SNR
- 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
- Tiffany Messer, Adjunct Assistant Professor, UNL School of Natural Resources, and Daniel Snow,
 Research Professor, Nebraska Water Center, for the project: Treating Non-Point Source Cocktails:
 Pesticide Removal Utilizing In-stream Best Management Practices Student: Josephus Borsuah, for a Ph.D. in Natural Resource Sciences, SNR
- Francisco Munoz-Arriola, Associate Professor, UNL Biological Systems Engineering, for the project:
 Precision Water Resources Management in Omaha Nation, Nebraska Student: Armando Zarco,
 M.S. in Biological Systems Engineering
- Eleanor Rogan, Professor, UNMC College of Public Health Department of Environmental, Agricultural
 & Occupational Health, for the project: Possible Effects of Nitrate Contaminants in Nebraska
 Waterways on Human Health Student: Balkissa Ouattara, for a Ph.D. in Public Health
- Harkamal Walia, Associate Professor, UNL Agronomy & Horticulture, for the project: Physiological and Molecular Characterization of Nitrogen and Water Stress Responses in Maize Student: Henry Doku, for a Ph.D. in Agronomy & Horticulture, Specialization: Plant Breeding & Genetics

<u>Graduate Students Round Four</u> (first awarded in 2017):

 Yusong Li, Associate Professor, UNL Civil Engineering, for the project: Influence of Climate and Agricultural Clustering on Groundwater Contamination by Trace Organics
 Student: Chuyang Liu, for a Ph.D. in Civil Engineering

Undergraduate (annual awards):

- Joe Luck, Associate Professor, UNL Biological Systems Engineering, for the project: The Analysis of Nitrogen efficiency in non-irrigated corn systems with an in-season sensor-based approach Student: Katie Bathke, UNL Plant Biology
- Platte Basin Timelapse Project: Teagan Gaul, Kara Kielty, Emma Krab, Lena Nelson, Favian Mendez Rodriguez, Maddie Schiltmeyer, advised by Michael Forsberg, Research Assistant Professor, UNL School of Natural Resources and Producer/Project Manager, Mariah Lundgren, UNL School of Natural Resources. While DWFI funds support three interns, the PBT project is leveraging this support in FY22 to support several interns throughout the year. Now retired, Michael Farrell continues to advise and teach students as a Coordinator within UNL SNR.