

May 31, 2023

FROM THE INTERIM DEAN

Summer Break

I wanted to take a moment to express my gratitude for your commitment and hard work throughout the academic year. You have shown immense dedication to our institution and the success of our students, and I couldn't be prouder of the accomplishments we have achieved together.

With the summer break upon us, I encourage you to take some time to recharge and refresh your minds, bodies, and spirits. It is essential to recognize that while our work is undoubtedly rewarding, we all need periods of rest and rejuvenation.

Remember, self-care is not a luxury but a vital component of a healthy work-life balance. It allows us to return to our roles with renewed energy, creativity, and a fresh perspective. By taking time to recharge and refresh, we invest in our own well-being, which in turn enables us to better serve our students, colleagues, and the community at large.

During this time, let us also take a moment to reflect on our achievements, celebrate our successes, and learn from the challenges we faced. It is through self-reflection and growth that we can continuously improve and deliver an even more impactful educational experience for our students in the upcoming academic year.

Together, we have achieved remarkable milestones, including winning legislative support for a new building, and I am confident that we will return in the fall with renewed energy and enthusiasm to continue our journey towards excellence.

Alan R. Kallmeyer, Ph.D.
Interim Dean | College of Engineering

IN THE NEWS

Student selected for Astronaut Scholarship

CONGRATULATIONS

Please let <u>College Happenings</u> know about honors, awards, new grants and other announcements so we can share them with other faculty and staff.

UPCOMING EVENTS

June 12-16, **BisonCyber Camp**. The Department of Computer Science is offering a BisonCyber camp for high school students. The camp will cover topics in cybersecurity, artificial intelligence, programming and robotics.

July 10-13, **STEM Kids Camp Session 1**. Students in grades K-8 will be on campus for a variety of summer kids camps focused on topics in STEM. Morning sessions will run from 9 a.m. - 12 p.m., and afternoon sessions will run from 1 p.m. - 4 p.m.

July 17-20, **STEM Kids Camp Session 2**. Students in grades K-8 will be on campus for a variety of summer kids camps focused on topics in STEM. Morning sessions will run from 9 a.m. - 12 p.m., and afternoon sessions will run from 1 p.m. - 4 p.m.

July 24-27, **STEM High School Camp**. Mornings will be spent on campus working with NDSU faculty in the labs and afternoons students will be going out on engineering industry visits.

Wednesday, August 9, Academic Leaders Orientation and Retreat for Department Chairs/Heads and Deans.

Tuesday, August 15, **New Faculty Orientation**. This event is intended for faculty that have started at NDSU since August 16, 2022. Register Here

Wednesday, August 16, **Annual Faculty/Academic Staff Conference**. Presentations by NDSU faculty and staff demonstrating best practices for research, instruction, advising, assessment, campus climate, inclusion, mentoring, leadership, and classroom technologies. <u>Register Here</u>

ORIENTATION VOLUNTEERS

Student Success Programs is searching for volunteers to assist students and guests during Orientation dates. Volunteers will guide groups to different areas on campus. This is an opportunity to showcase NDSU's hospitality and student focus to the newest members of the NDSU community. We thank you for helping to make Orientation a success and to help students and their guests know they have made an excellent decision to attend NDSU!

SIGN UP HERE

SAFE ZONE AND COMMUNITY OF RESPECT TRAINING

Community of Respect

The Office of the Vice Provost for Faculty and Equity will be offering a series of Cultural and Cultural Diversity Trainings as part of the Community of Respect series. Sessions will be via zoom and zoom link will be sent out to those registered a few days prior.

Dates offered will be:

- Module 1 Cultural and Cultural Diversity, Wednesday, June 14 from 1:00 pm -3:00 pm
- Module 2, Redefining Diversity, Wednesday, June 21 from 1:00 pm- 3:00 pm
- Module 3, Microaggressions, Wednesday, June 28 from 1:00 pm- 3:00 pm
- Module 4, Confronting Bias, Wednesday, July 5 from 1:00 pm- 3:00 pm

To Register go to the following link: https://www.ndsu.edu/facultyaffairs/inclusion/trainings/community of respect/

The objective of the Community of Respect seminars are to teach individual participants about cultural differences and to encourage them to think critically about the impact of their cultural values in their relationships with others. The curriculum is organized into four separate modules with distinct learning outcomes outlined in each.

Safe Zone

The Office of the Vice Provost for Faculty and Equity will be offering the Safe Zone Training series. Sessions will be via zoom and zoom link will be sent out to those registered a few days prior.

Dates offered:

- Level 1 "Becoming an Ally", Tuesday, June 13 from 10:00 am-noon
- Level 2 "Gender Identity and Expression" Tuesday, June 20 from 10:00 am noon
- Level 3 "Upstander", Tuesday, June 27 from 10:00 am-noon

To Register please go to the following link: https://www.ndsu.edu/facultyaffairs/inclusion/trainings/safe zone/

Safe Zone is a program designed to:

- Educate people about sexual orientation and gender identity/expression issues.
- Create a visible network of Allies to provide support to the NDSU lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQ+) community.
- Provide accurate information about sexual orientation and gender identity/expression diversity, issues, and resources within the community

FUNDING OPPORTUNITIES

DoD: Young Investigator Program

The Fiscal Year 2024 Air Force Young Investigator Research Program [YIP] intends to support early in career scientists and engineers who have received Ph.D. or equivalent degrees by 1 April 2016 or later showing exceptional ability and promise for conducting basic research. The program objective is to foster creative basic research in science and engineering; enhance early career development of outstanding young investigators; and increase opportunities for the young investigator to recognize the Air Force and Space Force mission and related challenges in science and engineering.

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White Paper Deadline: June 12, 2023

DOE: Energy Improvement in Rural or Remote Areas

The Department of Energy (DOE) Energy Improvements in Rural or Remote Areas (ERA) Program [DE-FOA-0003045] aims to fund clean energy projects with three specific goals:

- 1. Deliver measurable benefits to energy customers in rural or remote areas by funding replicable energy projects that lower energy costs, improve energy access and resilience, and/or reduce environmental harm;
- 2. Support new rural or remote energy system models using climate-resilient technologies, business structures that promote economic resilience, new financing mechanisms, and/or new community engagement practices; and
- 3. Build clean energy knowledge, capacity, and self-reliance in rural America.

Pre-application deadline: July 13, 2023; 4pm

RECENTLY SUBMITTED PROPOSALS

- Sudarshan Kumar Srinivasan (PI). FET: Small: Formal Verification For Quantum Circuits: 10 Million Gates and Beyond. \$566,804 from the National Science Foundation. 12/1/2023 11/30/2026.
- Majura Fortunatus Selekwa (PI) Sulaymon Eshkabilov (CPI), Simone Ludwig (CPI). Development and Evaluation of Autonomous Electric Vehicles For Agriculture Applications. \$1,306,949 from the National Science Foundation. 1/1/2024 12/31/2027.
- Kalpana Katti (PI), Dinesh R Katti (CPI). Investigation of Gastric Cancer Omental Interactions. \$93,679 from the National Institutes of Health. 7/1/2023 6/30/2024.
- Xin Sun (PI). Intelligence On-farm Sugarbeet Weed Management Solution based on Edge AI and Unmanned Automation Systems (UAV and UGV). \$391,000 from the Agricultural Research Service. 9/1/2023 8/31/2027.
- Long Jiang (PI). Using Nanotechnology to Enhance Fungicide Efficacy and Duration for Sugarbeet Disease Control. \$72,995 from the Agricultural Research Service. 8/1/2023 7/31/2024.
- Ewumbua Monono (PI), Niloy Chandra Sarker (CPI), Ademola Monsur Hammed (CPI). Develop and Optimize Novel Techniques in Beet Juice Extraction and Storage. \$214,587 from the Agricultural Research Service. 9/1/2023 - 8/31/2027.
- Xinhua Jia (PI). North Dakota Water Resources Research Institute 104b Program 2023. \$146,840 from the U.S. Geological Survey. 9/1/2023 8/31/2024.
- Joao Paulo Cassol Flores (PI). Using drone imagery to implement site-specific tillage for weed control in sugarbeets. \$117,036 from the Agricultural Research Service. 9/1/2023 8/31/2025.
- Joao Paulo Cassol Flores (CPI). STARS Soil Testing, Analysis, and Risk-management System: Developing precision tools to enhance soil health. \$1,769,738 from the National Institute of Food & Agriculture. 9/1/2023 8/31/2027.
- Joao Paulo Cassol Flores (CPI). SOYGEN3: Building Capacity to Increase Soybean Genetic Gain for Yield and Composition through Combining Genomics-Assisted Breeding with Characterization of Future Environments.
 \$57,644 from the North Central Soybean Research Program. 10/1/2023 - 9/30/2024.

RECENT PUBLICATIONS

For 2023, 75 publications by authors with the College of Engineering affiliation have appeared in various journals, according to the ISI Web of Science and submissions from faculty. Here are some of the most recent publications:

- Nasab, Mohsen Tahmasebi, and Xuefeng Chu. 2023. "Impacts of Temperature Data Sets on Macroscale Snowmelt Simulations in the Missouri River Basin." *Journal of Cold Regions Engineering* 37 (2): 04023003. https://doi.org/10.1061/JCRGEI.CRENG-580.
- Zhang, Yu, Ryan Striker, Moruf Disu, Ewumbua Monono, Allen Peckrul, Gurmukh Advani, Bingcan Chen, Benjamin Braaten, and Xin Sun. 2023. "Dielectric Constant-Based Grain Mass Estimation Using Radio Frequencies Sensing Technology." *Applied Engineering in Agriculture* 39 (2): 207–14. https://doi.org/10.13031/aea.15121.

See your name on this list? Help us get the word out about your amazing work by submitting it as a **Breakthrough Alert**. This online form is an easy, step-by-step guide for summarizing published research for the general public.

College Happenings is distributed to the NDSU College of Engineering staff and faculty every other Tuesday.

Read past issues of College Happenings here.

Deadline for submissions to *College Happenings* is 12:00 p.m. Fridays.

Contact kyle.bosch@ndsu.edu to submit items for College Happenings.

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