

COLLEGE HAPPENINGS

July 9, 2024

FROM THE INTERIM DEAN

Graduate Student Registration and Tuition

As we approach the fall semester, I would like to remind our faculty to reach out to their graduate students and encourage them to register for classes, if they have not done so already. Historically, many of our graduate students have waited until the start of the semester to register, making it difficult to establish enrollment projections and determine which classes will be viable to teach. By registering earlier, our graduate students can be assured that the classes they need to take will be offered each semester.

In addition, please remind your graduate students that our graduate tuition waiver policies have changed, effective this fall. These changes, necessitated by budgetary constraints, will have a modest impact on all of our students. The key changes include a) the waivers will only apply to base tuition, not the full engineering tuition, b) students must register for a minimum of 6 credits per semester during the fall and spring semesters (with some exceptions), and c) there is a cap on the total number of credits that may be waived. [The full details of the new policies can be found here.](#)

Our graduate students are the lifeblood of our research programs. In order to foster an environment of discovery and scholarship that will allow us to perform ground-breaking research to solve the challenges facing North Dakota and the world, it is imperative that we provide the support necessary to grow our graduate enrollments while preserving fiscal responsibility. I believe the changes we have made to our tuition waiver policies strike an appropriate balance between our growth objectives and the fiscal limitations we are facing. Please don't hesitate to reach out to me with any questions, concerns, or suggestions you may have.

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

IN THE NEWS

[NDSU engineering students changing lives in Guatemala](#)

[NDSU researchers developing tech to treat diabetes](#)

[North Dakota Governor's School wraps up at NDSU](#)

[NDSU, North Dakota Air National Guard partner for student success](#)

CONGRATULATIONS

Please let [College Happenings](#) know about honors, awards, new grants and other announcements so we can share them with other faculty and staff.

UPCOMING EVENTS

Monday, July 15, **STEM Kids Camp Week 1**. Students in grades K-8 will be on campus and around the College of Engineering for a variety of summer kids camps focused on topics in STEM.

Monday, July 22, **STEM Kids Camp Week 2**. Students in grades K-8 will be on campus and around the College of Engineering for a variety of summer kids camps focused on topics in STEM.

Monday, July 29, **Explore Engineering High School Camp**. This week-long camp introduces students to the different disciplines of engineering. Mornings will be spent on campus working with NDSU faculty in the labs and in the afternoons students will be going out on engineering industry visits.

Friday, August 2, **Summer Poster Session**. You're invited to an afternoon of research presentations from undergraduate and high school students who have conducted research at NDSU this summer. 1:00 - 3:00 p.m. in Oceti Sakowin Ballroom B.

COLLEGE OF ENGINEERING STAFF AWARD NOMINATIONS

Nominations for our 2024 College of Engineering Staff Awards are still open. Any NDSU staff member, faculty member, or student may submit a nomination. The nomination consists of just a letter of two pages or less describing the nominee's contributions to the success of the College of Engineering.

Nominations for outstanding staff awards can be submitted to alissa.k.kuntz@ndus.edu until 5:00 p.m. on Friday, August 9, 2024.

The College of Engineering introduced an Outstanding Staff Award in 2019 to honor dedication and outstanding contributions by staff members to the success of the college. Each year two staff members are recognized, one at the paraprofessional/office support level and one at the professional level.

OFFERDAHL HALL CONSTRUCTION UPDATES

We've received some updates regarding the Engineering Administration building demolition and construction timelines. Here are the latest tentative dates:

- **Week of July 8th** – Modifications begin in ECE 125 (classroom) and ENG 102 (formerly ITS computer lab) to create emergency egresses. These new egresses will be required during the construction phase, since many of the current building entrances will be blocked. These two rooms will be inaccessible while the egresses are constructed.
- **Week of July 15th** – Installation of fencing around the demolition/construction zone. Building traffic will be routed to other exits.
- **Week of July 22nd** – Removal of vegetation and roots in the construction zone.
- **Week of July 29th** – Temporary shoring of tunnels in the construction zone (several underground tunnels run through the courtyard around the Engineering Admin Building).
- **Week of August 5th** – Skywalks are demolished.
- **Week of August 12th** – Engineering Administration Building is demolished.

SUMMER POSTER SESSION

Are you working with high school and undergraduate students this summer? Encourage them to register for the Summer Poster Session.

Registration link: [2024 Summer Poster Registration](#) (Abstract not required to register)

Due date: Friday, July 19

Training: Poster Presentation Preparation and Writing an Abstract Workshop, Friday July 12, 2:30-4:00 p.m., A. Glenn Hill Center 300

Presenters: Kristina Caton, Senior Writing Consultant; Stephen Disrud, Director of Center for Writers

Questions: Kirstin Saulsbury, kirstin.saulsbury@ndsu.edu or Dr. Ying Huang, ying.huang@ndsu.edu.

The Summer Poster Session will be held Friday, August 2 from 1:00 – 3:00 p.m. in the Memorial Union Oceti Sakowin Ballroom B.

FUNDING OPPORTUNITIES

Interdisciplinary Research Planning Grants

Proposals will be accepted on an ongoing basis until all funds are obligated. Pending continued availability of funds, the competition will continue into FY2025 with a final proposal deadline of October 1, 2024

This planning grant program seeks to initiate early-stage project development to help catalyze collaborative, interdisciplinary teams among diverse disciplines in order to pursue innovative, ambitious solutions to impactful research questions that fit within NDSU's [strategic priorities](#), or align with prior and/or existing research investments at NDSU. Priority will go to teams without a prior track record of collaboration, or to teams that are expanding to include new disciplinary expertise.

Team composition should be reflective of the nature of the proposed research and the team's approach should rely on the perspective and expertise of multiple disciplines. This program is intended to help teams develop collaborations and prepare to pursue external sponsored research support for the proposed project. North Dakota has made it a priority to invest in the diversification of the state economy through research, and NDSU faculty are uniquely poised to bring their expertise together in teams to address challenges that cannot be solved by a single discipline.

NDSU Foundation 2024 Impact Fund Grant Program

The Impact Fund Grant Program provides funding for projects that make a significant impact on excellence and the educational experience for students at North Dakota State University. This program is supported by annual contributions from alumni and friends of the University.

Applications are accepted from faculty, staff, and recognized student groups. The Impact Fund Grant Program offers grants of \$20,000 to \$75,000. Find more information on the [NDSU Foundation website](#).

The application deadline is Wednesday, July 24, 2024, by 4:30 p.m.

Questions? Email Janna Swanson, Grants Committee Staff Liaison, at janna.swanson@ndsufoundation.com.

RECENTLY AWARDED GRANTS

- Lokesh Karthik Narayanan (Principal Investigator), Chad A Ulven (Co-PI). SUSTAINABLE NATURAL FIBER-BASED PACKAGING FOR E-COMMERCE APPLICATION. \$299,954 from the National Institute of Food & Agriculture. 7/1/2024 - 6/30/2026.
- Jiale Xu (Principal Investigator). Removal of Herbicide Carryover by Safeners under Sunlight Irradiation. \$4,900 from the NDSU Foundation. 5/7/2024 - 10/31/2025.

- Mijia Yang (Principal Investigator), Yao Yu (Co-PI), Qifeng Zhang (Co-PI). Harness of Sunlight through Solar Snow Fence: Implementation. \$40,020 from the MN Department of Transportation. 6/30/2022 - 3/31/2025.

RECENTLY SUBMITTED PROPOSALS

- Jeremy A Straub (Principal Investigator). A Cybersecurity and AI-focused Intelligence Community Center of Academic Excellence. \$2,499,594 from the Office-Director of National Intelligence. 1/1/2025 - 12/31/2034.
- Juan Li (Principal Investigator). Development and Validation of a Digital Twin for Personalized Diabetes Management and Glycemic Optimization. \$542,318 from the National Institutes of Health. 4/1/2025 - 3/31/2028.
- Minwei Xu (Principal Investigator), David J Boehm (Co-PI), Changhui Yan (Co-PI). Increasing the Efficiency of Selecting High-Quality Soybeans for Tofu Processors and Breeders with Machine Learning: Phase 2. \$33,750 from the MN Soybean Research & Promotion Council. 9/1/2024 - 8/31/2025.
- Di Wu (Principal Investigator). Dynamic Assessment of Networks Using Model-based and Data-driven Optimization (DYNAMO). \$299,999 from the Department of Energy. 1/1/2025 - 12/31/2027.
- Adam Curtis Gladen (Principal Investigator). Ammines for Energy Storage and Ammonia Production Enhancement. \$7,360 from the Bank of North Dakota. 6/24/2024 - 5/31/2026.
- Minwei Xu (Principal Investigator), David J Boehm (Co-PI), Changhui Yan (Co-PI). A Novel Soybean Selection Method for Tofu Production Using Machine Learning. \$18,019 from the ND Soybean Council. 7/1/2024 - 11/30/2024.

RECENT PUBLICATIONS

For 2024, 72 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:

- Li, Guanyi, Pengle Cheng, Yong Li, and Ying Huang. “Lightweight Wildfire Smoke Monitoring Algorithm Based on Unmanned Aerial Vehicle Vision.” *SIGNAL IMAGE AND VIDEO PROCESSING*, June 28, 2024. <https://doi.org/10.1007/s11760-024-03377-w>.
- Liu, Chenxi, Huanhai Xin, Di Wu, Huisheng Gao, Hui Yuan, and Yuhan Zhou. “Generalized Operational Short-Circuit Ratio for Grid Strength Assessment in Power Systems With High Renewable Penetration.” *IEEE TRANSACTIONS ON POWER SYSTEMS* 39, no. 4 (July 2024): 5479–94. <https://doi.org/10.1109/TPWRS.2023.3340158>.
- McLean, Jayse, Mehran Fereydoonpour, Mariusz Ziejewski, and Ghodrath Karami. “Modal Analysis of the Human Brain Using Dynamic Mode Decomposition.” *Bioengineering* 11, no. 6 (June 12, 2024): 604. <https://doi.org/10.3390/bioengineering11060604>.
- Souri, Javad, Hossein Omidvarmohammadi, Seyed Ali Akbar Salehi Neyshabouri, Chonoor Abdi Chooplou, Ehsan Kahrizi, and Hassan Akbari. “Numerical Simulation of Aeration Impact on the Performance of A-Type Rectangular and Trapezoidal Piano Key Weirs.” *MODELING EARTH SYSTEMS AND ENVIRONMENT*, June 27, 2024. <https://doi.org/10.1007/s40808-024-02058-4>.

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*.

Follow the College of Engineering on social media.

