

COLLEGE HAPPENINGS

February 7, 2023

FROM THE INTERIM DEAN

In Pursuit of a New Building

The engineering complex, built primarily in the 1960's, was designed to accommodate an enrollment of roughly half the current student population. Our laboratories, which were designed primarily for teaching, now house graduate students and faculty research projects, student design projects, as well as undergraduate education activities. As our mission has changed, so has the utilization of our space. And the need for new facilities has never been greater.

President Cook recognizes our need for a new building and has listed a new engineering/computer science facility as the top capital improvement priority for NDSU. As the higher education budget has been debated in the current legislative session, President Cook has strongly advocated for funding for a new building. We have enlisted the support of our Advisory and Advancement Board members, as well as state and regional employers of our graduates, to help us raise support among legislators for this funding. The feedback we have received thus far has been encouraging. There is broad recognition of the need for more engineering and computer science graduates in the state, and expanded facilities will be crucial to our efforts to attract and educate these students in a collaborative, hands-on environment. NDSU has a strong reputation for producing knowledgeable, hard-working, field-ready engineers and computer scientists. To maintain this tradition of excellence, the time is right to invest in our future.

While there is still a long way to go in this legislative session, we remain optimistic that our message is being heard and our legislators will provide some level of support to advance our objectives. We also recognize that private donations will need to make up a sizeable portion of the funding for a new facility, which will take a coordinated effort by the NDSU Foundation to help us build support among our alumni and friends. As you engage and interact with students, alumni, and industry partners, I encourage all of you to help us make the case for a new facility that will allow us to achieve our full potential of growth in our educational and research programs.

Alan R. Kallmeyer, Ph.D.

Interim Dean | College of Engineering

IN THE NEWS

[NDSU to receive \\$175,000 grant for computer engineering research](#)

[Artificial Intelligence in the Classroom](#)

['I found my future career'](#)

[NDSU student veterans attend national convention](#)

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

Wednesday, February 8, **Spring Career Expo**. The Spring Career Expo will feature more than 250 employers allows students to connect with different industries, explore careers, and apply for full-time positions, part-time positions, and internships/co-ops. 11 a.m. – 3 p.m. at the FargoDome.

Wednesday February 8, **NDSU Day of Honor**. The NDSU Day of Honor commemorates the lives of NDSU students, faculty, and staff who have passed away during the previous calendar year. 2:00 p.m. Oceti Sakowin Ballroom and via Zoom.

Wednesday, February 15, **How to Pursue Funding from Mission Agencies**. This virtual workshop will provide insights for researchers on how to approach mission agencies, analyze funding opportunities, and develop white papers, quad charts, and proposals to these agencies. [Learn more>>](#)

Thursday, February 16, **3 Minute Thesis Competition**. Attend the championship round of the 2023 3MT competition where students share their research in 180 seconds. 2:00 p.m. in the Memorial Union Anishinaabe Theater.

Tuesday, April 18, **Student Research Day**. NDSU Student Research Day is a one-day event dedicated to providing graduate and undergraduate students an opportunity to present their research and creative works. [Learn more and register](#).

COLLEGE OF ENGINEERING AWARDS

Each year, the College of Engineering recognizes outstanding teaching activities of faculty and graduate students by awarding the Teacher of the Year awards; the unique research accomplishments of faculty and graduate students by conferring the Researcher of the Year awards; and the dedication and contributions of our staff members through the presentation of the Outstanding Staff Awards.

Nominations for each of these awards are now being accepted for 2023. The eligibility requirements and nomination documents for each award can be found at the following link: https://www.ndsu.edu/coe/faculty_staff/college_awards/.

CHANGES TO NSF PROPOSAL SUBMISSIONS

The National Science Foundation (NSF) has released the updated Proposal and Award Policy and Procedure Guide ([PAPPG 23-1](#)) which will be effective for proposals with deadlines on or after January 30, 2023. There are a number of major changes introduced with this update:

- **FastLane will be Decommissioned.** NSF is preparing to transition the preparation and submission of all new proposals from FastLane to Research.gov on January 30, 2023. Previously submitted FastLane proposals and supplemental funding requests will be available for the research community to access until Friday, September 29, 2023.
- **New Certification Requirements for Biographical Sketches and Current and Pending Support.** Senior Personnel will be required to certify that the information provided in their Biographical Sketch and Current and Pending Support documents are accurate, current, and complete. This certification will be included in both SciENCv and the NSF fillable format for proposals submitted or due on or after January 30, 2023.

- **Effective October 2023, SciENcv will be required for preparation of biographical sketches and current and pending support.** Other formats, including the fillable PDF form, will no longer be accepted.

FUNDING OPPORTUNITIES

NDSU Foundation Grants

The NDSU Foundation Grants Committee is now accepting applications from NDSU faculty and staff for six grant opportunities for the Spring 2023 Grant Program. By providing funding for these grants through philanthropy, benefactors help enhance the NDSU experience by supporting faculty and staff innovation.

Faculty and staff can obtain application forms and additional information for the available grants at the NDSU Foundation website: <https://www.ndsufoundation.com/grant-applications>.

The deadline to submit your application is March 14, 2023, by 4:30 p.m.

- **The Board of Trustees Endowment** can provide maximum awards of \$1,000, with a total of \$6,300 available. This grant fund supports general programs across campus.
- **The Centennial Endowment** can provide maximum awards of \$5,000, with a total of \$24,000 available. This grant fund supports professorships, scholarships, biotechnology, faculty development, libraries, and cultural arts.
- **The Gordon A. Larson Foundation Fund** has \$16,500 available to award. This grant fund supports competitive grants for agricultural research efforts conducted at North Dakota State University.
- **The Library Endowment** has \$5,990 available to award. This grant fund supports requests from any academic unit on campus for materials that will enhance the collections and/or operations of university libraries.
- **The Carl A. and Jean Y. White Memorial Endowment for Agriculture Research** has \$6,100 available to award. This grant fund supports faculty and research staff to encourage Agricultural research initiatives.
- **The Engebretson Family Research Fund** has \$19,000 available to award. This grant fund is available every other year (odd years) and was established to support the advancement of pharmaceutical research, by encouraging the discovery and development of new drug therapies and delivery systems.

For questions, please email Janna Swanson at janna.swanson@ndsufoundation.com

The NDSU Foundation will notify applicants of funding decisions by May 15, 2023.

RECENTLY SUBMITTED PROPOSALS

- Surya Sarat Chandra Congress (PI). Improving Safety of Grade Crossings Using UAV-CRP Data Analysis. \$119,009 from the Federal Railroad Administration. 9/1/2022 - 7/31/2023.
- Zhibin Lin (PI), Danling Wang (CPI). Ultrasensitive, robust, and multifunctional sensing technology to monitor, detect, locate, and quantify the ultra-trace concentration of hydrogen emission. \$1,434,874 from the Department of Energy. 8/16/2023 - 8/15/2026.
- Jeremy A Straub (PI). Research regarding cybersecurity assessment for small firms and startups and outreach activities. \$39,875 from Montana State University. 3/1/2023 - 8/31/2024.
- Trung Bao Le (PI). Flow limitation patterns in obstructive sleep apnea patients. \$59,296 from the National Institutes of Health. 9/1/2023 - 8/31/2024.
- Adam Curtis Gladen (PI). RII Track-2 FEC: Sustainable Engineering Infrastructures and Solutions for Tribal Energy Sovereignty. \$560,000 from the National Science Foundation. 8/16/2023 - 8/15/2027.
- Wenjie Xia (PI). Collaborative Research: Mechanics of Morphogenesis in Plants. \$599,845 from the National Science Foundation. 9/1/2023 - 8/31/2027.

- Jiale Xu (PI), Ying Huang (CPI). RII Track-2 FEC: The Kentucky, Louisiana and North Dakota Cleaner Earth Initiative (KeNLAND-CEI): Research, Education and Training on Climate Change, Health and Equity. \$1,600,000 from the National Science Foundation. 9/29/2023 - 9/30/2027.
- Sulaymon Eshkabilov (CPI), Xin Sun (CPI). Teaming Up Against Climate Change (TEAM-ACE): A Concerted Effort to Advance Research Capacity and Develop Resilient Agricultural and Food Systems for Sustainable Communities. \$5,985,538 from the National Science Foundation. 9/1/2023 - 8/31/2027.
- Surya Sarat Chandra Congress (CPI), Qifeng Zhang (CPI). Center for Climate-Conscious Agricultural Technologies (CCAT). \$1,245,646 from the National Science Foundation. 7/1/2023 - 6/30/2027.

RECENT PUBLICATIONS

For 2023, 22 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:

- Congress, Surya, and Anand Puppala. 2023. “Eye in the Sky: Condition Monitoring of Transportation Infrastructure Using Drones.” *Proceedings of the Institution of Civil Engineers - Civil Engineering* 176 (1): 40–48. <https://doi.org/10.1680/jcien.22.00096>.
- Patel, Aman, Weigang Lu, Blake Birmingham, Michael Johnson, Danling Wang, Zhenrong Zhang, and Kai Wang. 2023. “Enhanced Photoluminescence of Potassium-Doped Tungsten Oxide by Acetone Exposure.” *RSC Advances* 13 (2): 1236–44. <https://doi.org/10.1039/d2ra06267d>.
- Ullah, Al Habib, Charles Fabijanic, Nick L. Thomas, Bora Suzen, and Jordi Estevadeordal. 2023. “Experimental Investigation of Flow Past Three-Cylinder Rotating System.” *Experimental Thermal and Fluid Science* 142 (April): 110827. <https://doi.org/10.1016/j.expthermflusci.2022.110827>.

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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