

COLLEGE HAPPENINGS

February 20, 2024

FROM THE INTERIM DEAN

Richard Offerdahl '65 Engineering Complex

I hope everyone had an enjoyable long weekend. It certainly got off to an amazing start with our event at the NDSU Alumni Center on Friday announcing a \$25 million gift from Richard and Linda Offerdahl to the College of Engineering. The gift is the largest in history to directly support the College of Engineering at NDSU. In addition, it is the single largest gift in school history to support a building project on campus, whether academic or athletic. Pending State Board of Higher Education approval, the entire engineering complex of buildings — new and some existing — will be named in Richard's honor.

This is truly a momentous event for the College and the University. An opportunity that comes along, perhaps, once in a lifetime. From the very beginning we have seen this project as our opportunity to transform the College of Engineering and propel our college, our university and our state into the future. The impact of this gift and the benefits of this project will be felt for generations to come.

The Offerdahl's historic investment will allow us to enhance our brand of providing a hands-on, interdisciplinary education in a collaborative environment. The new facility will be student-focused, containing state-of-the-art teaching laboratories, student gathering spaces, and an expansive design studio that will spur entrepreneurial activity and invite students from all of our disciplines to work together, exchange ideas, and bring their designs to life. It will be the premier engineering educational facility in the upper Midwest.

This incredible gift will also benefit our research mission by providing funding for substantial renovations in our existing facilities. It will give our students, faculty and staff the resources they need to excel at the highest level, tackle the toughest problems, and find the solutions that make our world a better place.

I would like to invite everyone to offer a word of thanks to our partners at the NDSU Foundation and in NDSU Leadership. They made this project the number one fundraising priority of the University. The North Dakota Legislature agreed to appropriate \$59 million for the project on the condition that donors agreed to a minimum of \$25 million in matching funds. Thanks to hard work and teamwork we've secured approximately \$40 million in gifts for the project in just 10 months.

The construction timeline will now be accelerated, moving up the anticipated completion date by a full year to Fall of 2026. I'll be sharing more details about the schedule and impacts on current facilities in the coming weeks and months.

Alan R. Kallmeyer, Ph.D.

Interim Dean | College of Engineering

IN THE NEWS

[NDSU alumnus gives historic \\$25 million gift to College of Engineering](#)

[Building for the future: Richard Offerdahl gives historic \\$25 million gift to NDSU College of Engineering](#)

[Alum's \\$25M donation sparks construction of new NDSU engineering complex](#)

[NDSU College of Engineering receives \\$25 million donation](#)

[Ada native donates \\$25 million to NDSU College of Engineering](#)

[NDSU student awarded 'prestigious' scholarship from NASA astronaut](#)

[NDSU Student Receives Prestigious STEM Scholarship](#)

[NDSU's online master's programs receive national recognition](#)

[Three Minute Thesis finals set](#)

[Three Minute Thesis winner announced](#)

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

Thursday, February 22, **Talkback to Racism 2024**. In honor of Black History Month, the Anti-Racism Coalition is organizing the fourth annual Talkback to Racism from 3:30- 4:45 p.m. at the MU Anishinaabe Theater.

Thursday, February 22, **STEM Hour**. CoE volunteers will help preschool students at NDSU's Center for Child Development build structures and circuits. 3:30 – 4:30 p.m.

Friday, February 23, **Introduce a Girl to Engineering Day**. The College is hosting over 150 area 8th grade girls as part of National Engineers Week activities. They will take part in engineering activities on campus, interact with students, faculty, staff and alumni, and visit local engineering companies.

Thursday, March 14, **Celebration of Grant Lebahn**. The Department of Civil, Construction and Environmental Engineering is hosting a special event celebrating the outstanding contributions of Grant Lebahn to NDSU and the College of Engineering. 5 – 6 p.m. in the MU Anishinaabe Theater.

STEM KIDS CAMP INSTRUCTORS AND ASSISTANTS NEEDED

NDSU's College of Engineering is looking for instructors to lead sessions for STEM Kids Camp 2024! We also need classroom assistants to help instructors facilitate lessons by distributing supplies and interacting with the students.

The camp will be held 2 separate weeks on the NDSU campus from **July 15 – 18** and again **July 22 – 25**. In both positions, we are looking for strong leaders who have a passion for STEM and enjoy sharing it with K-8 students. Below is more information about the camp:

- Camps run Monday – Thursday each week.
- There are 2 sessions per day each week. The morning session is from 9am – 12pm. Afternoon session is from 1pm – 4pm. pm. hers will be with the same group of students for the entire session.

- Sessions are grouped by grades with maximum of 20 students:
- You can teach up to 4 sessions. You can teach the same topic each session or each session can be different.
- You can use our curriculum or design your own. Curriculum for the week-long camp session needs to be designed to fill 12 contact hours with the students. We will work with you to get your session planned out and ready to present, including all supplies.
- You get paid!

Please contact Angela Gross (angela.gross@ndsu.edu) by Tuesday, March 12, 2024, if you are interested in this summer opportunity.

SCIENCE COMMUNICATION TRAINING FROM THE ALAN ALDA CENTER

The esteemed Alan Alda Center for Communicating Science is visiting NDSU to host a comprehensive Science Communication Training session. This training aims to equip participants with valuable skills to effectively communicate scientific concepts and research to diverse audiences.

- Date/time: May 22, 2024, 8:00 am to 4:00 pm (in-person only)
- Location: Fargo, ND - North Dakota State University - Memorial Union - Ballroom A
- Registration: <https://northdakotastate-ndus.nbsstore.net/science-communication-conference-2024>
- Cost: \$50

For any inquiries or additional information, please reach out to Kimberly Booth at Kimberly.Booth@ndsu.edu.

NDSU SUMMER UNDERGRADUATE BIOMEDICAL RESEARCH PROGRAM

NDSU is offering a summer undergraduate research program featuring the opportunity to study biomedical research within a variety of science and engineering fields. This program is intended to provide a coordinated, educational and dynamic research community to encourage research in undergraduate study. There are 19 research projects to select from, including research areas in different STEM departments.

- WHERE: The NDSU campus
- WHEN: Projects will run for 10 weeks from May 28, 2024, to August 2, 2024.
- WHO: Undergraduate students who are currently enrolled in a degree program at a North Dakota college or university and who will not graduate before December 2024.
- PAY/MATERIALS: Wages of \$15 per hour. Students are expected to work 40 hours per week. Funds (up to \$500) to purchase consumable research materials by your advisor.
- QUESTIONS: Contact Kirstin Saulsbury (kirstin.saulsbury@ndsu.edu).

Encourage your students to [Learn more and apply](#). Applications and two reference letters must be received by March 15, 2024.

FUNDING OPPORTUNITIES

NDSU Foundation Grants

The NDSU Foundation Grants Committee is now accepting applications from NDSU faculty and staff for five grant opportunities for the Spring 2024 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 21, 2024, 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 \$25,600 available. This grant fund supports professorships, scholarships, biotechnology, faculty development, libraries, and cultural arts.
- *The Gordon A. Larson Foundation Fund* has \$19,800 available to award. This grant fund supports competitive grants for agricultural research efforts conducted at North Dakota State University.
- *The Library Endowment* has \$6,000 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 \$4,900 available to award. This grant fund supports faculty and research staff to encourage agricultural research initiatives.

Questions? Please email Janna Swanson at janna.swanson@ndsufoundation.com. The NDSU Foundation will notify applicants of funding decisions by May 20, 2024.

Pilot Grants: NASA EPSCoR

NASA Established Program to Stimulate Competitive Research (EPSCoR) establishes partnerships with government, higher education and industry that are designed to effect lasting improvements in a state or region's research infrastructure, research and development capacity, and its national research and development competitiveness. NASA's overall mission is: Exploring the secrets of the universe for the benefit of all. NASA investigates the unknown in air and space, innovates for the benefit of humanity, and inspires the world through discovery. NASA currently has 80 active science missions, see [here](#) for more information and [here](#) for perspectives from past NASA-funded researchers.

Each proposed NASA EPSCoR pilot project shall perform scientific and/or technical research in areas that support NASA's strategic research and technology development priorities with the goal of ensuring a competitive submission to a NASA funding opportunity. All proposals should emphasize and clearly articulate how the pilot project develops capabilities to compete for funds from NASA.

Proposals for this fiscal year can be up to \$50,000 in direct costs only, no indirect costs will be allowed. Faculty who may be seeking matching funds for a NASA proposal should contact heidi.grunwald.1@ndsu.edu prior to submitting. [Learn more and apply >>](#)

RECENTLY AWARDED GRANTS

- Ali Amiri (PI), Chad A Ulven (CPI). Utilizing Hemp Hurd. Improving Hemp Hurd Performance as Filler in Plastic Manufacturing. \$18,994 from the Center for Bioplastics and Biocomposites. 1/1/2024 - 12/31/2024.

RECENTLY SUBMITTED PROPOSALS

- Inbae Jeong (Principal Investigator), Youjin Jang (Co-PI). Collaborative Research: CPS: Medium: I3-Metaverse: CPS for Real-Time Collaborative Remote Virtual Inspection. \$481,882 from the National Science Foundation. 8/1/2024 - 7/31/2027.
- Yao Yu (Principal Investigator), Qifeng Zhang (Co-PI). Intelligent Digital Twin for Resilient Basing (IDTRB). \$54,033 from the Department of Defense. 8/1/2024 - 2/1/2025.
- Xinhua Jia (Principal Investigator), Xin Sun (Co-PI), Xuefeng Chu (Co-PI). Modeling Cold Regions Flood Control Operations in the NextGen Framework using Knowledge-Guided Machine Learning. \$240,000 from the National Oceanic and Atmospheric Administration. 10/1/2024 - 9/30/2026.

- Ademola Monsur Hammed (Principal Investigator), Ewumbua Monono (Co-PI), Niloy Chandra Sarker (Co-PI). Upscaling, formulation and technoeconomic assessment of biofertilizer from soybean meal. \$67,203 from the ND Soybean Council. 7/1/2024 - 6/30/2025.
- Jiale Xu (Principal Investigator), Md Shahidul Islam (Co-PI). Protect wheat production by simultaneous electrochemical amendment of acidified and brine-contaminated soils. \$47,460 from the ND Wheat Commission. 8/1/2024 - 7/31/2025.
- Clairmont Clementson (Principal Investigator), Ademola Monsur Hammed (Co-PI). Extraction, fractionation and purification of value-added production from soybean meal. \$34,748 from the ND Soybean Council. 7/1/2024 - 6/30/2025.
- Jiale Xu (Principal Investigator). Soybean waste-based materials for electrochemical removal of PFAS in groundwater. \$47,900 from the ND Soybean Council. 7/1/2024 - 6/30/2025.

RECENT PUBLICATIONS

For 2024, 25 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:

- Tang, Fujian, Jiawei Bai, Gang Li, Zhibin Lin, and Hong-Nan Li. 2024. "Monitoring Under-Coating Corrosion of Painted Structural Steel with No-Core Fiber Optic Sensors." *MEASUREMENT* 225 (February): 114075. <https://doi.org/10.1016/j.measurement.2023.114075>.
- Ullah, Al Habib, Charles Fabijanic, and Jordi Esteveadeordal. 2024. "Dynamic Stall Characteristics of Unswept Pitching Wing." *EXPERIMENTAL THERMAL AND FLUID SCIENCE* 152 (March): 111111. <https://doi.org/10.1016/j.expthermflusci.2023.111111>.

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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