

COLLEGE HAPPENINGS

April 16, 2024

FROM THE INTERIM DEAN

Advising Reminders

Thank you for the time you spend working with your advisees to inform and educate them about internship and career options, and keeping them on track for graduation by helping them choose appropriate courses for the coming semesters. The advising process is critical to the success of our students in their timely progression through the curriculum as well as helping them to achieve their career goals. Meaningful advising helps both our retention and placement rates, and leaves a lasting impression among our graduates.

As of last week, a majority of College of Engineering students have registered for Fall 2024 courses, but we still have around 500 students who haven't yet registered – and timely re-enrollment is an important aspect of our retention efforts. I would like to encourage each of you to reach out to any of your advisees who haven't registered yet. It would be great to get our current students registered before new students start registering at the end of April.

Also, I would like to remind everyone that it is an expectation of all faculty advisors in the College to utilize the new Civitas/Bison Advise platform that was implemented last year. Our students have been encouraged to use this platform to contact and schedule appointments with their advisors. If you haven't yet set up your advisor availability in this platform, our professional advisors have all said they are willing to help any faculty get that accomplished and/or set up messages in the system. I greatly appreciate your assistance in reaching out to your advisees and providing them with options to connect with you.

Alan R. Kallmeyer, Ph.D.

Interim Dean | College of Engineering

IN THE NEWS

[NDSU Clean Snowmobile Team finishes second](#)

[NDSU students awarded at Student Research Days](#)

[USB charging ports in public places can pose cybersecurity risk](#)

[Excellence in Instruction Award Graduate Teaching Assistant Recipients Announced](#)

[March Innovation in Teaching Award Recipients Announced](#)

CONGRATULATIONS

Madison Ashbach, a graduate student in the **Department of Electrical and Computer Engineering**, was awarded 2024 National Science Foundation Graduate Research Fellowship Award. GRFP recognizes and supports outstanding graduate students who have demonstrated the potential to be high achieving scientists and engineers, early in their careers.

Himani Yadav, a graduate student in the **Department of Civil, Construction and Environmental Engineering**, was named a 2024 Excellence in Instruction Award winner by the NDSU Graduate School and the Office of Teaching and Learning.

Pratap Kotala, a professor of practice in the **Department of Computer Science**, was among the recent recipients of the monthly Innovation in Teaching Award from the NDSU Office of Teaching and Learning.

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, April 17, **Open Forum on Shared Governance**. 2:00 - 3:00 p.m. in the A. Glenn Hill Center, room 130/132. Watch your email for more information on the open forum logistics and format.

Thursday, April 18, **NDSU Staff Recognition Social**. 1:00 – 2:30 p.m. in the MU Ballroom. The awards are given to acknowledge outstanding achievement on the job, exceptional contributions toward the effectiveness and efficiency of operations or outstanding service to other employees, students or visitors.

Thursday, May 2, **Spring Senior Design Expo**. The Spring Senior Design Expo will showcase capstone projects from all departments in the College of Engineering and give you the chance to interact with our amazing students and learn more about their work. 12 – 3 p.m. in the NDSU Oreti Sakowin Ballroom.

Friday, May 10, **Spring Ring and Pin Ceremony**. The biannual Ring and Pin Ceremony is a blending of two significant and celebratory events, the [Order of the Engineer](#) and the [Pledge of the Computing Professional](#).

Saturday, May 11, **Spring Commencement**. 2:00 p.m. at the Fargodome. Faculty and staff who wish to participate in the academic procession along with our graduation class will wear caps and gowns. [Register to participate](#).

SPRING COMMENCEMENT STAFF/FACULTY VOLUNTEER SIGN-UP

Spring Commencement is quickly approaching, and the Office of Registration and Records is looking for volunteers to assist students and their families as they celebrate this accomplishment. There will be two ceremonies on Saturday, May 11th at the Fargodome: 10:00 a.m. and 2:00 p.m. We are looking for guest assistants/greeters, photo stop assistants, student line-up assistants, and reader card table assistants for both ceremonies. Volunteers are asked to be at the Fargodome at **8:30 or 9:30 a.m.** for the 10:00am ceremony and **12:30 or 1:30 pm** for the 2:00pm ceremony depending on the role. Volunteers, with the exception of photo stop assistants, should plan to stay for the first 15-30 minutes of the ceremony.

We have analyzed our needs for the ceremonies, and we will need 30 staff or faculty volunteers total between both ceremonies. Sign up can be done through this link: [Spring Commencement Staff Volunteer Sign-up](#)

PRESIDENT DEAN L. BRESCIANI ENDOWED CHAIR IN LEADERSHIP

The Office of the Provost is pleased to announce the opening of nominations for the inaugural President Dean L. Bresciani Endowed Chair in Leadership. The fund and Leadership Chair award was established by benefactors in appreciation of Dr. Bresciani's leadership during his presidential tenure.

Historically, in higher education, an endowed chair nomination would be reserved only for faculty. However, this unique nomination and selection opportunity recognizes that leadership that advances the university can occur by people in positions across the institution. Nominations are open to regular full-time faculty or staff who are program directors, executive administrators, or coaches.

The nominee who is selected will receive funds to continue the work for which they were nominated, and carry the title, “President Dean L. Bresciani Endowed Chair in Leadership” for three years. Nominations will be accepted through April 30, 2024 and require a completed nomination form, a letter from the nominator, and two supporting letters.

Submit completed nominations to:

Bresciani Leadership Chair Selection Committee
NDSU Foundation
1241 University Drive North
Fargo, ND 58102
office@ndsufoundation.com

FUNDING OPPORTUNITIES

Air Force Fiscal Year 2025 Young Investigator Program

The Fiscal Year 2025 Air Force Young Investigator Research Program (YIP) intends to support individual early in career scientists and engineers who have received Ph.D. or equivalent degrees by 01 April 2017 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.

Individual awards are made to U.S. institutions of higher education, industrial laboratories, for-profit, or non-profit research organizations where the principal investigator (PI) is employed on a full-time basis and holds a regular, non-contractor position. A YIP PI must be a U.S. citizen, national, or permanent resident. Researchers working at a Federally Funded Research and Development Center, or a Department of Defense (DoD) Laboratory are not eligible for this competition.

Deadline: June 21, 2024 | [Learn more and apply >>](#)

DOE: Reaching a New Energy Sciences Workforce

Reaching a New Energy Sciences Workforce (RENEW) aims to build foundations for Office of Science (SC) research through traineeships at academic institutions that have been historically underrepresented in the SC portfolio. RENEW leverages SC’s unique national laboratories, user facilities, and other research infrastructure to provide training opportunities for students and postdoctoral researchers from these institutions. The hands-on experiences gained through RENEW will open new career avenues for trainees, forming a nucleus for a future pool of talented young scientists, engineers, and technicians with the critical skills and expertise needed for the full breadth of SC research activities.

Deadline: July 23, 2024 | [Learn more and apply >>](#)

RECENTLY AWARDED GRANTS

- Xin Sun (Principal Investigator), Sulaymon Eshkabilov (Co-PI), Kirk Howatt (Co-PI). Intelligence on farm weed control solution based on Edge-AI and UGV systems. \$590,397 from the National Institute of Food & Agriculture. 3/1/2024 - 2/29/2028.
- Clairmont Clementson (Principal Investigator), Kenneth Hellevang (Co-PI), Ewumbua Monono (Co-PI). Optimal drying temperature for drying soybeans. \$36,782 from the ND Soybean Council. 7/1/2024 - 6/30/2025.

- Febina Merlin Mathew (Principal Investigator), Nitha Rafi (Co-PI), Francisco Bittara Molina (Co-PI), Joao Paulo Cassol Flores (Co-PI). Biology and Managing Seedling Pathogens in North Dakota. \$43,358 from the ND Soybean Council. 7/1/2024 - 6/30/2025.
- Inbae Jeong (Principal Investigator). PMMI Skills Fund Future Workforce. \$5,000 from the PMMI Foundation. 8/15/2023 - 8/14/2024.
- Inbae Jeong (Principal Investigator). PMMI Skills Fund Future Workforce - Aagard Match. \$5,000 from the Aagard Group. 8/15/2023 - 8/14/2024.
- Yildirim Bora Suzen (Principal Investigator). 2024 AIAA Design Build Fly Competition Travel. \$12,000 from the University of North Dakota. 1/1/2024 - 5/15/2024.

RECENTLY SUBMITTED PROPOSALS

- Ewumbua Monono (Principal Investigator), Niloy Chandra Sarker (Co-PI), Ademola Monsur Hamed (Co-PI). Design and testing of a pilot scale sugarbeet diffuser and press to evaluate optimum microbial control mechanisms. \$353,933 from the Agricultural Research Service. 1/1/2025 - 12/31/2028.
- Kalpana Katti (Principal Investigator), Dinesh R Katti (Co-PI), Kalidas Shetty (Co-PI). Development and commercialization of high value North Dakota specialty crops for creating value-added anticancer nutraceutical products. \$64,748 from the ND Department of Agriculture. 6/1/2024 - 5/31/2025.
- Di Wu (Principal Investigator). Development and Demonstration of Graph-Based Sensor Data Analytics Tool for Grid Stability Monitoring and Control. \$513,949 from the National Energy Technology Laboratory. 10/1/2024 - 9/30/2027.
- Shuvashis Dey (Principal Investigator). NSF-AoF: Sparse Array Beamforming Transceivers With Highly Integrated On-Package Antennas for 6G (SPIN6G). \$299,809 from the National Science Foundation. 1/1/2025 - 12/31/2027.
- Danling Wang (Principal Investigator). Fiber optic microsensor for in situ determination of dissolved inorganic carbon in aquatic environments. \$328,934 from Schmidt Sciences. 2/1/2025 - 1/31/2027.

RECENT PUBLICATIONS

For 2024, 45 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:

- Liao, Yangchao, Oriana Molares Palmero, Amara Arshad, Long Chen, and Wenjie Xia. 2024. "Molecular Dynamics Simulations of Crumpling Polymer-Grafted Graphene Sheets: Implications for Functional Nanocomposites." *ACS APPLIED NANO MATERIALS*, March. <https://doi.org/10.1021/acsnm.4c00425>.
- Mulligan, Lawrence J., Julian Thrash, Ludmil Mitrev, Douglas Folk, Alyssa Exarchakis, Daniel Ewert, and Jeffrey C. Hill. 2024. "Evaluation of Vascular Aging on Measures of Cardiac Function and Mechanical Efficiency: Insights from *in-Silico* Modeling." *FRONTIERS IN CARDIOVASCULAR MEDICINE* 11 (March): 1351484. <https://doi.org/10.3389/fcvm.2024.1351484>.
- Quader, Raihan, Leo Klinstein, David Grewell, and Lokesh Karthik Narayanan. 2024. "Evaluation of the Influence of Ultrasonic Vibration on Physical, Tensile, and Morphological Properties of Fused Deposition Modeled Specimens." *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, March. <https://doi.org/10.1007/s00170-024-13410-4>.
- Salam, Abdul, Amna Siddique, Muhammad Mubin, and Shagufta Riaz. 2024. "Cotton Fabric Coated with Functionalized Zn-Doped Fe₂O₃ NPs for a Visible-Light Activated Durable Antibacterial, UV-Shielding, and Organic Degradation." *INORGANIC CHEMISTRY COMMUNICATIONS* 162 (April): 112173. <https://doi.org/10.1016/j.inoche.2024.112173>.
- Wang, Hui, Lili Wu, Xiang Xu, and Zhibin Lin. 2024. "Experimental Study on Bond Durability of GFRP Bar/Engineered Cementitious Composite Exposed to Freeze-Thaw Environments." *JOURNAL OF BUILDING ENGINEERING* 84 (May): 108592. <https://doi.org/10.1016/j.jobbe.2024.108592>.

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.

