

COLLEGE HAPPENINGS

November 28, 2022

IN THE NEWS

[NDSU students compete at annual construction competition](#)

[Football team places 8 on Academic All-District Team](#)

[NDSU soccer has 6 named to CSC Academic All-District Team](#)

[Student-athletes set to receive scholarships during Harvest Bowl](#)

CONGRATULATIONS

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

INTERIM DEAN OPEN FORUMS

The Search Committee for the Interim Dean of the College of Engineering invites you to participate in the campus interviews with the finalists for the position: Dr. **Scott Pryor**, Dr. **Jane Schuh**, and Dr. **Alan Kallmeyer**.

Each candidate will give a 20-minute open forum presentation followed by a 40-minute question-and-answer session.

The open forum schedule is as follows:

- Tuesday, November 29, 10:00 – 11:00 a.m., MU Anishinaabe Theatre
Scott Pryor, Professor, Department of Agriculture and Biosystems Engineering and Associate Dean, College of Engineering
- Wednesday, November 30, 10:00 – 11:00 a.m., MU Prairie Rose
Jane Schuh, Professor, Department of Microbiological Sciences and Director of Special Initiatives, Agricultural Affairs
- Friday, December 2, 10:00 – 11:00 a.m., MU Anishinaabe Theater
Alan Kallmeyer, Professor, Department of Mechanical Engineering and Interim Dean, College of Business

Each candidate's CV and cover letter can be viewed at [Interim Dean COE - Candidate Information](#).

The Search Committee invites campus feedback for all the candidate's campus interviews via the College of Engineering Interim Dean Candidate Feedback Survey:

- [Scott Pryor Feedback Survey](#)
- [Jane Schuh Feedback Survey](#)

- [Alan Kallmeyer Feedback Survey](#)

Please submit your feedback prior to December 5. You are also welcome to reach out to any of the members of the search committee to voice your recommendations. The position description and list of search committee members can be found [here](#).

UPCOMING EVENTS

Tuesday, November 29, **CoE Interim Dean Open Forum with Dr. Scott Pryor**. 10:00 – 11:00 a.m., MU Anishinaabe Theatre.

Wednesday, November 30, **CoE Interim Dean Open Forum with Dr. Jane Schuh**. 10:00 – 11:00 a.m., MU Prairie Rose.

Friday, December 2, **CoE Interim Dean Open Forum with Dr. Alan Kallmeyer**. 10:00 – 11:00 a.m., MU Anishinaabe Theater.

Tuesday, December 6, **College of Engineering Faculty Council Meeting**. The meeting will be at 12:00 pm in the Sahnish room at the Memorial Union. Lunch will be provided.

Tuesday, December 13, **Fall Phi Kappa Phi Faculty Lecture**. Dr. Erin Gillam, Professor of Biological Sciences will present “Listening in The Dark: The Amazing Acoustic World of Bats.” 3:00 p.m. in the Memorial Union Anishinaabe Theater.

Thursday, December 15, **College of Engineering Ring and Pin Ceremony**. This ceremony is a blending of two significant and celebratory events, the Order of the Engineer and the Pledge of the Computing Professional. The ceremony begins at 5:30 pm. All Winter 2022 graduating seniors are invited to participate.

Friday, December 16, **2022 Winter Commencement**. The ceremony for the College of Engineering will be held at 2:00 p.m. at the SHAC. Faculty and staff who wish to participate in the academic processional along with our graduation class will wear caps and gowns. Register here: <http://www.ndsu.edu/commencement/facstaff/>

NDSU GIVING DAY

NDSU’s seventh annual NDSU Giving Day is Tuesday, Nov. 29. The one-day, online fundraising event gives NDSU alumni, students, parents, faculty, staff and friends of the university the opportunity to invest in and enhance the NDSU student experience.

Dollars raised on Giving Day benefit students across campus and support student scholarships, faculty research and programs at NDSU. In 2021, the NDSU community raised \$1.7 million and secured more than 1,950 unique gifts on Giving Day.

More information about matches, challenges, and college and department priorities is available on the [Giving Day website](#). Gifts will be accepted online from 11 p.m. CST Monday, Nov. 28, to 2 a.m. CST Wednesday, Nov. 30.

WINTER COMMENCEMENT VOLUNTEER SIGN-UP

Winter Commencement is quickly approaching, and the Office of Registration and Records is looking for staff volunteers to assist students and their families as they celebrate this accomplishment. The College of Engineering ceremony will be Friday, December 16 at the SHAC: 2:00p.m. Volunteers are asked to be at the SHAC at **12:15 or 1:30p.m.** for the 2:00pm ceremony depending on their role. Volunteers, with the exception of photo stop assistants, should plan to stay for the first 15-30 minutes of the ceremony.

Sign up can be done through this link: [Spring Commencement Staff Volunteer Sign-up](#)

FACULTY LECTURESHIP NOMINATIONS

Nominations for the 2023 [Faculty Lectureship Award](#) are due by December 9, 2022.

The [Faculty Lectureship Award](#), one of the oldest and most prestigious of the faculty awards, recognizes sustained excellence in teaching, scholarly achievement, and service. The Lectureship will be held in April 2023.

Submit as single pdf file: Nomination letter (one letter, no more than 2 pages long), CV (no more than three pages long).

For information on faculty awards please see the awards page at <https://www.ndsu.edu/facultyaffairs/awards/>

MILTECH TO VISIT NDSU

The Office of Research and Creative Activity will be hosting a visit to NDSU by the Director of [MilTech](#) on December 6. MilTech is a Partnership Intermediary established in 2004 as a collaboration between Montana State University and the Office of the Secretary of Defense. Partnership Intermediaries work with the Department of Defense and other federal agencies to facilitate technology transfer, transition, and commercialization activities. They can serve as a convenient and effective intermediary for the DoD to work with academia and non-traditional small business.

The visit will seek to convey detailed information about MilTech and explore opportunities where NDSU research might benefit in working with a Partnership Intermediary.

SCHEDULE: Tuesday, December 6

- Informational meeting: 9-10am Hidatsa, Memorial Union
- Individual meetings and lab tours: 10:30am-3:30pm (contact [Aaron Reinholz](#) if interested)

FY2024 PROGRAMMATIC REQUESTS

Each year congressional delegations have the opportunity to submit programmatic funding requests for federal research programs. Programmatic requests are designed to add additional funding to federal agencies' budgets with the intent that a competitive funding opportunity will be released in connection with the funding increase.

NDSU's process for submitting requests for consideration is on the [RCA website](#). The deadline for FY2024 submissions to RCA is December 20, 2022. If you have questions about the process or would like to discuss a potential idea, please contact ndsu.researchdev@ndsu.edu.

FUNDING OPPORTUNITIES

DOE: Artificial Intelligence and Machine Learning for Autonomous Optimization and Control of Accelerators and Detectors

The Department of Energy (DOE) Office of Science (SC) program in Nuclear Physics (NP) is soliciting applications for research and development efforts directed at artificial intelligence (AI) and machine learning (ML) for autonomous optimization and control of accelerators and detectors of relevance to current or next generation NP accelerator facilities and scientific instrumentation [[DE-FOA-0002875](#)].

Current and planned NP facilities and scientific instrumentation face a variety of technical challenges in simulations, control, data acquisition, and analysis. AI methods and techniques promise to address these challenges and shorten the

timeline for experimental and computational discovery.

Deadline: January 11, 2023

DOE: Bipartisan Infrastructure Law: Long-Duration Energy Storage Demonstrations Funding Opportunity Announcement

The U.S. Department of Energy (DOE) is releasing this [Funding Opportunity Announcement \(FOA\)](#) to solicit emerging Long-Duration Energy Storage (LDES) demonstration projects capable of delivering electricity for 10-24 hours or longer to support a low-cost, reliable, carbon-free electric grid. This \$349 million effort seeks LDES demonstration projects that will validate new technologies, enhance the capabilities of customers and communities to integrate LDES more effectively, and sustain American global leadership in energy storage. LDES demonstration projects are encouraged to have substantial engagement with local and regional stakeholders to ensure that they generate local, regional, and national benefits. Demonstration projects will be expected to carry out meaningful community and labor engagement; invest in America's workforce by creating good-paying jobs with the free and fair choice to join a union; advance diversity, equity, inclusion, and accessibility; and contribute to the President's Justice40 Initiative goal that 40% of the overall benefits of certain federal investments, including those in climate change, clean energy and energy efficiency, flow to disadvantaged communities.

Letter of Intent deadline: December 15, 2022

RECENTLY FUNDED GRANTS

- Zhibin Lin (PI), Hong Pan (CPI), Xingyu Wang (CPI). Accelerating Transition towards Sustainable, Precise, Reliable Hydrogen Infrastructure (Super-H2): Holistic Risk Assessment, Mitigation Measures, and Decision Support Platforms. \$1,000,000 from the Department of Transportation (Pipeline and Hazardous Materials Safety). 9/30/2022 - 9/29/2025.
- Omid Beik (PI). Regenerative Grid Simulator (RGS): An Equipment for Establishing A Power Engineering Teaching Laboratory. \$75,000 from the NDSU Foundation & Alumni Association. 10/15/2022 - 10/31/2024.
- Changhui Yan (CPI). Increasing the Efficiency of Selecting High-Quality Soybeans for Tofu Processors and Breeders with Machine Learning. \$55,000 from the MN Soybean Research & Promotion Council. 9/1/2022 - 8/31/2023.

RECENTLY SUBMITTED PROPOSALS

- Harun Pirim (PI), Ajay Kumar Jha (CPI). A-SYSRV: SYSTEMS BIOLOGY REVERSE VACCINOLOGY, AN INTEGRATED VACCINE PREDICTION TOOL FOR AQUACULTURE PATHOGENS. \$800,000 from the National Institute of Food & Agriculture. 9/1/2023 - 8/31/2026.
- Youjin Jang (PI), Inbae Jeong (CPI). Collaborative Research: SCH: Multimodal Sensor Data-based Personalized Predictive Health Monitoring Platform for the Older Adults Living Alone. \$528,378 from the National Science Foundation. 7/1/2023 - 6/30/2027.
- Xiangfa Wu (PI). Oksana Zholobko (CPI). Adam Curtis Gladen (CPI). Continued Research of Direct Corn-Ethanol Fuel Cells for High-Efficiency Clean Electricity Generation for Electrical and Hybrid Vehicles. \$145,214 from the ND Corn Utilization Council. 7/1/2023 - 6/30/2025.
- Di Wu (PI). Adaptive Protection Against Sub-Synchronous Oscillation in Power Systems with High Penetration of Inverter-Based Resources via Advanced Solid-State Circuit Breaker Technology. \$1,200,116 from the Department of Energy. 7/1/2023 - 6/30/2026.

RECENT PUBLICATIONS

For 2022, 131 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:

- Eshkabilov, Sulaymon, Ismat Ara, and Fardad Azarmi. n.d. “A Comprehensive Investigation on Application of Machine Learning for Optimization of Process Parameters of Laser Powder Bed Fusion-Processed 316L Stainless Steel.” *International Journal of Advanced Manufacturing Technology*. Accessed November 21, 2022. <https://doi.org/10.1007/s00170-022-10331-y>.
- Eshkabilov, Sulaymon, John Stenger, Elizabeth N. Knutson, Erdem Kucuktopcu, Halis Simsek, and Chiwon W. Lee. 2022. “Hyperspectral Image Data and Waveband Indexing Methods to Estimate Nutrient Concentration on Lettuce (*Lactuca Sativa* L.) Cultivars.” *Sensors* 22 (21): 8158. <https://doi.org/10.3390/s22218158>.
- Gladen, Adam, and Fardad Azarmi. 2021. “Using Molding to Fabricate Stable Salt Structures for Thermochemical Energy Storage.” In *Proceedings of the ASME 2021 15th International Conference on Energy Sustainability (ES2021)*, V001T06A004. New York: Amer Soc Mechanical Engineers. <https://www.webofscience.com/wos/woscc/full-record/WOS:000883524500037>.
- Spradling, Matthew, and Jeremy Straub. 2022. “Analysis of the Impact of Age, Education and Gender on Individuals’ Perception of Label Efficacy for Online Content.” *Information* 13 (11): 516. <https://doi.org/10.3390/info13110516>.
- Sun, Bingjian, Pengle Cheng, and Ying Huang. 2022. “Few-Shot Fine-Grained Forest Fire Smoke Recognition Based on Metric Learning.” *Sensors* 22 (21): 8383. <https://doi.org/10.3390/s22218383>.

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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