

# COLLEGE HAPPENINGS

November 1, 2022

## IN THE NEWS

[NDSU engineering alumnus leads NASA rocket team](#)

[Transfer to NDSU: 'My experience was really positive'](#)

[Several chances to visit in November](#)

## 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

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/>

## NSF VIRTUAL GRANTS CONFERENCE

Join the National Science Foundation for the 2022 NSF Virtual Grants Conference, to be held during the week of November 14-17, 2022.

### [Registration is Now Open](#)

Just like the in-person grants conferences, the NSF Virtual Grants Conference is a must, especially for new faculty, researchers and administrators.

Highlights include:

- New programs and initiatives
- NSF Directorate sessions
- Future directions and strategies for national science policy
- Proposal preparation and the merit review process
- Award management topics

The conference is designed to give new faculty, researchers, and administrators key insights into a wide range of current issues at NSF. NSF program officers will provide up-to-date information about specific funding opportunities and answer attendee questions.

## GRANT PROPOSAL TEMPLATE

Are you new to writing grant proposals? And not sure where to start in terms of text layout and section headings? The NDSU Office of Research and Creative Activity has prepared a basic research proposal template for you.

This template will be helpful for graduate students and faculty who are new to seeking funding for research. It's available for download on the [RCA Forms page](#) (Sponsored Programs Administration/proposal development). You will also find budget and budget justification tools on the RCA Forms page.

One last tip; always remember to review the sponsor's proposal guidelines. They are often found on their website and will detail what you need to do to apply for a potential grant.

Contact [the RCA office](#) with any questions.

## FUNDING OPPORTUNITIES

### Cisco Research

Cisco Research engages with academia to share knowledge and experience from the ground and collaborates with research labs across many domains to pave the way for future innovations. Current Requests for Proposals include:

- Sustainability;
- Augmented and Virtual Reality;
- Natural Language Processing;
- Cybersecurity in Emerging Tech Areas;
- Contactless Supply Chain; and
- Ethics in AI.

[See the full list of opportunities >>](#)

### NIH: NLM Research Grants in Biomedical Informatics and Data Science (R01 Clinical Trial Optional)

The National Library of Medicine (NLM) supports innovative research and development in biomedical informatics and data science. This funding opportunity [[PAR-23-034](#)] focuses on biomedical discovery and data-powered health, integrating streams of complex and interconnected research outputs that can be translated into scientific insights, clinical care, public health practices, and personal wellness. The scope of NLM's interest in these research domains is broad, with emphasis on new and innovative methods and approaches to foster data driven discovery in the biomedical and clinical health sciences as well as domain-independent, scalable, and reusable / reproducible approaches to discovery, curation, analysis, organization, and management of health-related digital objects.

*Upcoming deadlines: February 5, 2023; June 5, 2023*

### Corteva: Low-cost, in-field sensors for greenhouse gas emissions from soils in agricultural settings

Corteva Agriscience is seeking [short, non-confidential proposals](#) for developing concepts to prototype or adapting existing technologies for in-field measurements of greenhouse gas emissions from soil. Proposals may be focused on direct measurements as well as highly correlated, ancillary measurements including environmental parameters.

Brief proposals are due November 30, 2022.

## RECENTLY FUNDED GRANTS

- Ying Huang (PI), Zhibin Lin (CPI), Long Jiang (CPI). All-in-One Multifunctional Cured-In-Place Structural Liner for Rehabilitating of Aging Cast Iron Pipelines. \$1,000,000 from Pipeline and Hazardous Materials Safety. 9/30/2022 - 9/29/2025.
- Achintya Nayan Bezbaruah (CPI). Gray Water Fouling Research - Task 2.1 and Task 2.2. \$400,000 from the Office of the Secretary of Defense. 6/14/2022 - 11/30/2023.

## RECENTLY SUBMITTED PROPOSALS

- Trung Bao Le (PI). CROSS-STREAM MOMENTUM TRANSFER OF ICE-COVERED RIVERS. \$173,663 from the National Science Foundation. 12/1/2022 - 11/30/2025.

## RECENT PUBLICATIONS

For 2022, 116 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:

- Asha, Labiba Noshin, Arup Dey, Nita Yodo, and Lucy G. Aragon. 2022. "Optimization Approaches for Multiple Conflicting Objectives in Sustainable Green Supply Chain Management." *Sustainability* 14 (19): 12790. <https://doi.org/10.3390/su141912790>.
- Li, Hou-Chang, Meng-Yu Wang, Bin Liu, Juan Liu, Qi Wang, Xing-Dao He, Hau Ping Chan, Danling Wang, Jinhui Yuan, and Qiang Wu. 2022. "Temperature-Independent Relative Humidity Sensing Properties of Polymer Micro-Bottle Resonators Coated with Graphene Oxide (Vol 196, 111199, 2022)." *Measurement* 203 (November): 111987. <https://doi.org/10.1016/j.measurement.2022.111987>.
- Pordesimo, Lester O., Ighathinathane Cannayen, Basil D. Bevans, and David P. Holzgraefe. 2022. "Potential of Dimensional Measurements of Individual Pellets for Evaluating Feed Pellet Quality." *Applied Engineering in Agriculture* 38 (5): 777–85. <https://doi.org/10.13031/aea.14845>.
- Rosch-Grace, Dominic, and Jeremy Straub. 2021. "Analysis of the Necessity of Quantum Computing Capacity Development for National Defense and Homeland Security." In *2021 IEEE Virtual IEEE International Symposium on Technologies for Homeland Security*. New York: IEEE. <https://doi.org/10.1109/HST53381.2021.9619831>.
- Ticala, Cristina, Camelia-M. Pinteau, Simone A. Ludwig, Mara Hajdu-Macelararu, Oliviu Matei, and Petrica C. Pop. 2022. "Fuzzy Index Evaluating Image Edge Detection Obtained with Ant Colony Optimization." In *2022 IEEE International Conference on Fuzzy Systems (Fuzz-Ieee)*. New York: IEEE. <https://doi.org/10.1109/FUZZ-IEEE55066.2022.9882851>.
- Yodo, Nita, Tanzina Afrin, Om Prakash Yadav, Di Wu, and Ying Huang. n.d. "Condition-Based Monitoring as a Robust Strategy towards Sustainable and Resilient Multi-Energy Infrastructure Systems." *Sustainable and Resilient Infrastructure*. Accessed October 28, 2022. <https://doi.org/10.1080/23789689.2022.2134648>.
- Yuan, Fangzheng, Yao Yu, Mijia Yang, Rui Miao, and Xiaou Hu. 2022. "Cost-Benefit Analysis of Implementing Solar Photovoltaic Structural Snow Fences in Minnesota." *Journal of Cold Regions Engineering* 36 (4): 05022002. [https://doi.org/10.1061/\(ASCE\)CR.1943-5495.0000285](https://doi.org/10.1061/(ASCE)CR.1943-5495.0000285).

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](mailto:kyle.bosch@ndsu.edu) to submit items for *College Happenings*.

Follow the College of Engineering on social media.

