NDSU COLLEGE OF ENGINEERING COLLEGE HAPPENINGS

August 17, 2021

FROM THE DEAN

Start of the New Academic Year

Every August for the past 29 years, I've experienced the excitement of a new academic year on a college campus. However, this week I'm sharing it from a new perspective, as a parent. I spent the past two days driving with my oldest son across the country, and today he is moving into his dorm to begin his college career. My wife and I spent 18 years preparing him to transition into adulthood, so saying goodbye is both an exciting and emotional time.

Like my son, the students we welcome to campus next week will become more mature and independent each day. And the quality education they receive will change not just what they know, but who they are. Thanks to all of you who welcome the new and returning students to NDSU's campus next week and the role you play in our mission to prepare our students to be innovative problem solvers to improve lives.

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IN THE NEWS

Engineering faculty member awarded national fellowship

Engineering Study Abroad: 'I feel prepared for any role I take on'

CONGRATULATIONS

Jessica Vold, assistant professor of engineering entrepreneurship and innovation in the **Department of Mechanical Engineering**, has been named an Engineering Unleashed Fellow for her leadership in undergraduate engineering education.

Kelly Rusch, professor in the **Department of Civil, Construction and Environmental Engineering**, was named as a member of the Visioning the Future of NSF EPSCoR Committee. The committee will operate as a subcommittee to NSF's Committee on Equal Opportunities in Science and Engineering.

Please let <u>College Happenings</u> know about honors, awards, new grants and other announcements so we can share them with other faculty and staff.

UPCOMING EVENTS

Wednesday, August 18, **Annual Faculty and Academic Staff Conference**. Presentations will include demonstrating best practices for research, instruction, advising, assessment, campus climate, inclusion, mentoring, leadership, and classroom technologies. <u>Register here</u>.

Monday, August 23, **College of Engineering Welcome Week Event**. 8:30 – 10:30 a.m. at the Bentson-Bunker Fieldhouse.

Friday, September 10, **College of Engineering Scholarship and Awards Reception**. Join us as we celebrate our scholarship recipients and donors and to recognize the accomplishments of outstanding faculty, staff and students 3:00 – 4:30 p.m. in the Oceti Sakowin Ballroom. <u>Register here</u>.

Friday, October 8, **College of Engineering Homecoming Showcase**. 12:00 – 1:30 p.m. in the Oceti Sakowin Ballroom.

SYLLABUS STATEMENTS ON MASKING

As of August 9, 2021, NDSU is strongly recommending that all people wear masks in indoor spaces when social distancing cannot be maintained. Further, faculty may require masks to be worn in their classes at their discretion. However, any inclass mask requirement implemented by faculty applies to all students, including those who are fully vaccinated. Faculty may not set different requirements for those who are unvaccinated or vaccinated.

Faculty may use one of the two statements below in their syllabi to state in-class mask expectations for their classes. Given the changing conditions associated with the pandemic, faculty reserve the right to modify the in-class mask status of their class(es) during the semester. In case of any changes, faculty should notify their students and update their syllabus.

1. For instructors who do not have any additional mask requirement:

Currently (or at the time of writing this syllabus or as of August 9, 2021), NDSU is strongly recommending that all people wear masks in indoor spaces when social distancing cannot be maintained. Further, faculty may require masks to be worn in their classes at their discretion. Consistent with NDSU's recommendations, **in this class all participants**, **including those who are fully vaccinated**, **are strongly encouraged to wear a face covering**. Given the changing conditions associated with the pandemic, this class' faculty member has reserved the right to modify the mask status of the class during the semester. If at any time a University-level face mask requirement is in effect, face masks will be required in this class. In case of any changes, you will be notified and this syllabus will be updated.

2. If you as an instructor prefer to wear a mask and require that students wear a mask in your classroom:

Currently (or at the time of writing this syllabus or as of August 9, 2021), NDSU is strongly recommending that all people wear masks in indoor spaces when social distancing cannot be maintained. Further, faculty may require masks to be worn in their classes at their discretion. In case of any changes, you will be notified and this syllabus will be updated. Consistent with NDSU's recommendations, **in this class all participants**, **including those who are fully vaccinated**, **are required to wear a face covering**. If you fail to properly wear a face covering, you will not be admitted to the classroom. Given the changing conditions associated with the pandemic, this class' faculty member has reserved the right to modify the mask status of the class during the semester. The following will be used as needed: referral to Dean of Students Office or administrative removal from class.

• Students who cannot wear a face covering due to a medical condition or disability, or who are unable to remove a mask without assistance may seek an accommodation through the Disability Services (701-231-8463; https://www.ndsu.edu/disabilityservices/).

• In accordance with NDSU Policy 601, failure to comply with instructions, including the mask requirement, may be handled according to the Code of Student Conduct resolution process and may result in disciplinary sanctions.

IT UPDATES

Start of Semester Checklist for Instructors

To help with the beginning of your fall semester, Learning and Applied Innovation Center (LAIC) staff put together a <u>Start</u> of the <u>Semester Overview and Checklist</u>. This has everything you need to have a successful beginning of the academic year.

Respondus 4.0 - Installation Password Update Required

If you have Respondus 4.0 installed on your Windows computer, you must update the installation password to continue using the software after July 31, 2021. Follow directions at: <u>https://kb.ndsu.edu/104036</u>

Trainings and Workshops

Classroom Technology Overview – during the week of August 16-20

- How to use the basic equipment in our instrumented classrooms.
- These sessions will only be offered in-person, as they are designed to help you use the equipment in the classroom, but we are keeping numbers small in each session.
- See all scheduled times and register at: <u>https://kb.ndsu.edu/112823</u>

HyFlex Best Practices for Student Engagement – during the week of August 16-20

- Covers mechanics and pedagogical approaches to classroom engagement strategies.
- Learn how to run the new Zoom Room technology, lecture capture and other classroom recording with our new equipment.
- See all scheduled times and register at: <u>https://kb.ndsu.edu/112825</u>

Teaching Workshops for Instructors - throughout August

- Learning and Applied Innovation Center (LAIC) staff are offering several workshops to plan, manage, and organize your courses.
- Learn how to use Blackboard, Zoom, YuJa, TurningPoint and other tools for teaching, as well as best practices for Universal Design for Learning, assessment, and classroom engagement.
- See all scheduled trainings and times at: <u>https://kb.ndsu.edu/teaching-workshops</u>

FUNDING OPPORTUNITIES

DoD: Engineer Research and Development Center BAA

The U.S. Army Engineer Research and Development Center (ERDC) has issued a <u>Broad Agency Announcement (BAA)</u> for various research and development topic areas. The ERDC is responsible for conducting research in the broad fields of hydraulics, dredging, coastal engineering, instrumentation, oceanography, remote sensing, geotechnical engineering, earthquake engineering, soil effects, vehicle mobility, self-contained munitions, military engineering, geophysics, pavements, protective structures, aquatic plants, water quality, dredged material, treatment of hazardous waste, wetlands, physical / mechanical / chemical properties of snow and other frozen precipitation, infrastructure and environmental issues for installations, computer science, telecommunications management, energy, facilities maintenance, materials and structures, engineering processes, environmental processes, land and heritage conservation, and ecological processes.

This BAA is open until superseded. Applications are accepted at any time.

NSF DCL: Toward an Equitable National Cyberinfrastructure

The National Science Foundation (NSF), through its Campus Cyberinfrastructure (CC*) program (<u>NSF 21-528</u>), invests in coordinated campus-level networking and cyberinfrastructure improvements, innovation, integration, and engineering for science and engineering applications and distributed research projects. The purpose of this <u>Dear Colleague Letter (DCL)</u> is to encourage proposal submissions to CC* for projects that will help overcome disparities in cyber-connectivity associated with geographic location, and thereby enable the populations based in these locales to become more nationally competitive in science, technology, engineering, and mathematics (STEM) research and education. Institutions based in EPSCoR-eligible jurisdictions are especially encouraged to submit.

Deadline: October 11, 2021

NSF: Broadening Participation in Engineering

NSF seeks to strengthen the future U.S. Engineering workforce by enabling the participation of all citizens through the support of research in the science of Broadening Participation in Engineering (BPE). The BPE program [PD 19-7680] is a dedicated to supporting the development of a diverse and well-prepared engineering workforce. BPE focuses on enhancing the diversity and inclusion of all underrepresented populations in engineering, including gender identity and expression, race and ethnicity (African Americans / Blacks, Hispanic Americans, American Indians, Alaska Natives, Native Hawaiians, and Native Pacific Islanders), disability, LGBTQ+, first generation college and socio-economic status.

Proposals accepted anytime

FY 2021 GRANT AWARDS

We've received some updated numbers from the Office of Research and Creative Activity for our Fiscal Year 2021 Grant Award totals, and our very successful year got even better! The new total for awards received in FY 2021 is \$11.997 M a more than \$6 M increase compared to FY 2020. Congratulations to all!

RECENT GRANTS AND PROPOSALS

The transition between People Soft and Novolution at the Office of Research and Creative Activity caused an issue getting data on recent grants and proposals for this week's College Happenings. Our regular reports will return in the next issue. Thanks for your patience.

RECENT PUBLICATIONS

For 2021, 144 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:

- Ahmed, Hafiz Usman, Ying Huang, and Pan Lu. 2021. "A Review of Car-Following Models and Modeling Tools for Human and Autonomous-Ready Driving Behaviors in Micro-Simulation." *Smart Cities* 4 (1): 314–35. https://doi.org/10.3390/smartcities4010019.
- Hance, Jack, and Jeremy Straub. 2020. "Use of Bash History Novelty Detection for Identification of Similar Source Attack Generation." In *2020 IEEE 19th International Conference on Trust, Security and Privacy in Computing and Communications (Trustcom 2020)*, edited by G. J. Wang, R. Ko, M. Z. A. Bhuiyan, and Y. Pan, 759–66. Los Alamitos: Ieee Computer Soc. <u>https://doi.org/10.1109/TrustCom50675.2020.00104</u>.

- Islam, Md Zahirul, Ali Amiri, and Chad A. Ulven. 2021. "Fatigue Behavior Comparison of Inter-Ply and Intra-Ply Hybrid Flax-Carbon Fiber Reinforced Polymer Matrix Composites." *Journal of Composites Science* 5 (7): 184. https://doi.org/10.3390/jcs5070184.
- Liu, Yuan, and Changhui Yan. 2020. "A Novel Spatial Feature For Predicting Lysine Malonylation Sites Using Machine Learning." In *2020 IEEE International Conference on Bioinformatics and Biomedicine*, edited by T. Park, Y. R. Cho, X. Hu, I. Yoo, H. G. Woo, J. Wang, J. Facelli, S. Nam, and M. Kang, 76–79. Los Alamitos: Ieee Computer Soc. <u>https://doi.org/10.1109/BIBM49941.2020.9313184</u>.
- Lu, Yuzhen, Renfu Lu, and Zhao Zhang. 2021. "Detection of Subsurface Bruising in Fresh Pickling Cucumbers Using Structured-Illumination Reflectance Imaging." *Postharvest Biology and Technology* 180 (October): 111624. <u>https://doi.org/10.1016/j.postharvbio.2021.111624</u>.
- Nasrin, Thamina, Chayan Kumer Saha, Rajesh Nandi, Md Sanaul Huda, and Md Monjurul Alam. n.d. "Kinetic Study and Optimization of Total Solids for Anaerobic Digestion of Kitchen Waste: Bangladesh Perspective." *Water Science and Technology*. Accessed August 4, 2021. <u>https://doi.org/10.2166/wst.2021.291</u>.
- Shi, Yinyan, Xiaochan Wang, Md Saidul Borhan, Jennifer Young, David Newman, Eric Berg, and Xin Sun. 2021. "A Review on Meat Quality Evaluation Methods Based on Non-Destructive Computer Vision and Artificial Intelligence Technologies." *Food Science of Animal Resources* 41 (4): 563–88. <u>https://doi.org/10.5851/kosfa.2021.e25</u>.

See your name on this list? Help us get the word out about your amazing work by submitting it as a **Breakthrough Alert**. <u>This online form</u> 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.

