NDSU | COLLEGE OF ENGINEERING

COLLEGE HAPPENINGS

November 13, 2018

FROM THE DEAN

Promoting Academic Integrity in the Classroom

There are few values in the academy as paramount as academic integrity. So, it is very important that faculty be diligent about preventing cheating and dealing with academic dishonesty when it occur. One resource for instructors is NDSU Policy 335, Code of Academic Responsibility and Conduct (https://www.ndsu.edu/fileadmin/policy/335.pdf), which serves as the guideline for cases of student academic misconduct.

Setting the tone for academic integrity begins on the first day of class, and faculty should specify in their course syllabi expected behavior and consequences that may result from academic integrity violations (an academic honesty statement for course syllabi is available in NDSU Policy 331.1: https://www.ndsu.edu/fileadmin/policy/331_1.pdf). It is important to provide clear definitions and specific examples of what constitutes cheating at the beginning of the course. For example, in many classes students may be encouraged to collaborate on homework assignments, while in other classes, the expectation may be for homework to be done independently.

There are several things that can be done related to classroom management to reduce the temptation and ability of students to cheat (e.g. using multiple exams, randomize the order of questions for multiple test questions, prohibiting electronic devices, not reusing assignments or exams, scheduling exams simultaneously for multi-section courses). Faculty should also be aware of the risks of recycling tests and homework assignments because of the availability of old tests, assignments, and solution keys. This issue is compounded by the accessibility of electronic depositories such as https://www.coursehero.com/sitemap/schools/1752-North-Dakota-State-University/. Thus, faculty need to be aware of these resources when they contemplate recycling large portions of their assessment materials.

In addition to prevention, we should talk with the students in our classes about the importance of fostering a culture of academic integrity, instilling a value of accountability and motivation to be honest. It may be the most important lesson we give our students.

IN THE NEWS

Hands-on research for hands-off driving

Engineering students race to learn

What it's like to visit NDSU, from the student perspective

NDSU student-athletes to be awarded scholarships during Harvest Bowl

Uniqarta Moves into NDSU Research Building

Greener straws? Bacteria help turn food waste into compostable plastic

CONGRATULATIONS

Om Yadav from the **Department of Industrial and Manufacturing Engineering** as the 2019 IISE Golomski Paper Award winner for his manuscript: **"Selective Maintenance Optimization for Multi-state Systems Operating in Dynamic Environments."**

This award honors an outstanding paper in the proceedings at the annual Reliability and Maintainability Symposium (RAMS), authored or co-authored by a member of the Institute of Industrial and Systems Engineers.

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, November 15th, **Faculty Fellowship Awards Ceremony**, 4:15 p.m. at the McGovern Alumni Center. Please join the College of Engineering in honoring our newest faculty fellows, **Ying Huang and Om Yadav**. These awards, the **Duin Endowed Fellow and Welch Faculty Fellow**, were established through generous donations from two of our alumni, Spencer Duin and Tim Welch.

Friday, November 16th, **Faculty Luncheon: Curricular Design** with Susan Ray-Degges, Rhonda Kitch, RaNelle Ingalls, and Charlene Wolf-Hall. General topics that will be discussed include: undergraduate programs, Gen Ed, unintentional institutional barriers, assessment, program review, and HLC accreditation. **11:30 a.m. – 1:00 p.m. MU Plains Ballroom.**

Tuesday, November 27th, **Booth Professorship Awards Ceremony**, 12:00 p.m. in Dolve 118 (at the start of the Faculty Council meeting). NDSU **President Dean Bresciani** will be honoring our two Walter B. Booth Distinguished Professors, **David Grewell and David Steward**.

Tuesday, November 27th, **Phi Kappa Phi Faculty Lecture** entitled "Are Americans Really Becoming Less Religious?" by **Dr. Clay Routledge**, professor of psychology, 7:00 p.m., in the Plains Room, Memorial Union. A reception will follow the lecture. Registration by November 20 is appreciated but not required. Register here

Thursday, December 13th, **Order of the Engineer Ceremony and College Graduation Celebration**. The Order of the Engineer Ceremony is at **5:30 p.m. in the Memorial Union Century Theater**. The Graduation Celebration follows in the Memorial Union Ballroom. (Faculty and staff who hold an engineering degree and have not previously participated in the ring ceremony are encouraged to do so. **RSVP here** by Friday, November 30th.)

Friday, December 14, **2018 Winter Commencement ceremony**, 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. For your convenience, please go to http://www.ndsu.edu/commencement/facstaff/ and complete the necessary form.

DISTINGUISHED LECTURE SERIES

Dr. Roger Gonzalez will be with us on **November 26 and 27** as guest lecturer in the Distinguished Lecture Series. Dr. Gonzalez is Chair and Professor in the Engineering Education and Leadership Department at the University of Texas at El Paso.

Engineering Leadership – Diversifying Engineering Graduates

- Tuesday, Nov. 27.
- 2 – 3:15 p.m.
- Memorial Union Prairie Rose Room

UPCOMING CONFERENCE

Registration is now open for the 2019 North Dakota Cyber Security Conference.

Thursday, March 14, 2019
North Dakota State University, Fargo, N.D.

This one-day conference serves as the annual gathering for information security professionals in the region.

Secure your spot today and take advantage of early-bird pricing—only $100 to register from now until January 27. Students pay only $25! Learn more and register now: https://www.ndsu.edu/conferences/cybersecurity/

FACULTY AWARDS NOMINATIONS

Several deadlines are approaching for faculty awards nominations processed through the Office of the Provost. Nominations may be submitted by faculty, staff, students, alumni, unit administrators or deans. *Self-nominations will be accepted to ensure that there are multiple pathways to nomination.* Nomination materials should be sent by email to ndsu.provost@ndsu.edu.

The deadline for nominations for the **Faculty Lectureship Award** is **November 16, 2018**.

The deadline for nominations for the **Odney Excellence in Teaching Award**, **Waldron Excellence in Research Award** and **Peltier Innovation in Teaching Award** is **December 21, 2018**.

For information on faculty awards please see the awards page.

DOE SCHOLARS PROGRAM

The DOE Scholars Program introduces students and recent college graduates to the U.S. Department of Energy (DOE) mission and operations.

Being selected as a DOE Scholar offers:

- Stipends starting at $600 per week for undergraduates and $650 per week for graduate students and post graduates during the internship period
- Limited travel reimbursement to/from assigned location
- Direct exposure to and participation in projects and activities in DOE mission-relevant research areas
- Identification of career goals and opportunities
- Development of professional networks with leading scientists and subject matter experts

Eligibility

- Be a U.S. citizenship

- Be an undergraduate, graduate student, or recent graduate of an accredited institution of higher education majoring in science, technology, engineering, mathematics, and related areas.
- Must be pursuing a degree or have received a degree within 5 years of their starting date in a science, technology, engineering or mathematics (STEM) discipline **or** have demonstrated interest or experience in a STEM field that supports the DOE mission.

How to Apply

https://www.zintellect.com/Opportunity/Details/DOE-Scholars-2019

Application deadline: December 17, 2018, 4:00 p.m.

For more information: Visit https://orise.orau.gov/doescholars

FUNDING OPPORTUNITIES

NSF/AFOSR: Emerging Engineering Frontiers

The National Science Foundation (NSF) and the Air Force Office of Scientific Research (AFOSR) are funding four-year awards via the Emerging Frontiers in Research and Innovation (EFRI) program for interdisciplinary teams of researchers to embark on rapidly advancing frontiers of fundamental engineering research. For this solicitation, they will consider proposals that aim to investigate emerging frontiers in one of the following two research areas:

- Chromatin and Epigenetic Engineering (CEE)
- Continuum, Compliant, and Configurable Soft Robotics Engineering (C3 SoRo).

The NSF Engineering directorate will coordinate with the Biological Sciences directorate and Computer and Information Science and Engineering directorate for this initiative. EFRI seeks proposals with transformative ideas that represent an opportunity for a significant shift in fundamental engineering knowledge with a strong potential for long term impact on national needs or a grand challenge. Further information about the EFRI program may be obtained by viewing the slides from the FY18 EFRI informational webinar.

Letters of Intent deadline: November 29, 2018

Preliminary proposals deadline: January 7, 2019

Full proposals deadline: April 25, 2019

RECENTLY SUBMITTED PROPOSALS

- Ghodrat Karami (PI). Microstructural Biphasic Characterization and Damage Analysis of Rate-Dependent Brain Tissue and its Constituents. $862,439 from the National Science Foundation. 06/01/2019 – 05/31/2022.
- John F. Nowatzki (PI). NDSU-Satshot Aerial Applications in the Red River Valley. $98,410 from Microsoft Corporation. 01/01/2019 – 12/312019.

RECENT PUBLICATIONS

For 2018, 106 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:

- Ahsan, A. M. M., Ruinan Xie, and Bashir Khoda. 2018. "Heterogeneous Topology Design and Voxel-Based Bio-Printing." *Rapid Prototyping Journal* 24 (7): 1142–54. https://doi.org/10.1108/RPJ-05-2017-0076.

- Effertz, K., P. Deka, E. Magnuson, A. Bezbaruah, and R. S. Brueggeman. 2018. "Effects of Engineered Nanomaterials on Plant Innate Immune Responses." *Phytopathology* 108 (10).
- Gudagunti, Fleming Dackson, Logeeshan Velmanickam, Dharmakeerthi Nawarathna, and Ivan T. Lima. 2018. "Label-Free Biosensing Method for the Detection of a Pancreatic Cancer Biomarker Based on Dielectrophoresis Spectroscopy." *Chemosensors* 6 (3): 33. https://doi.org/10.3390/chemosensors6030033.

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.