

COLLEGE HAPPENINGS

September 4, 2018

FROM THE DEAN

Healthy Growth Scan and Grant Consultant

In the [July 24 College Happenings](#), I mentioned that the college is partnering with Sagency, a consulting group in Fargo, on strategic planning. The first step in that process was something called a Healthy Growth Scan, where Mike Meagher and Tom Iverson from Sagency consolidated the data from interviews of select faculty, staff, and advisory board members, and an online survey of faculty, staff, and students. A summary of the information they gathered is available [here](#), and lists some of the perceived strengths, challenges, opportunities, and external threats for the College of Engineering. Using this information as a starting point, the college leadership team held a retreat before the start of classes to begin to develop a new strategic plan for the college. We will continue over the next few months to develop our draft plan, and I will share more details as the plan develops.

One of goals of the plan will involve growing our funded research in the college. However, to achieve significant growth in our research enterprise, our faculty need to prepare more competitive proposals. Towards that aim, I'm pleased to announce that the College of Engineering has contracted with a grant consultant to provide grant writing support to our faculty. The college's new grant writing consultant is Dr. **Christine Strohm**. With a solid academic background (Theoretical Mathematics, B.Sc. from Oxford, Ph.D. from MIT), and after almost 20 years of experience with a major science and engineering publisher (Hanser Publishers), she founded Engineering Science Editors (ESE) in 2012 to support the development of proposals submitted by faculty/staff members of institutions of higher education, with a focus on the wider STEM fields. She lived in Ames, Iowa, until she and her husband, IME's new department chair David Grewell, arrived in Fargo last month. While in Ames, she worked with Iowa State University faculty to develop successful grant proposals (49 grants awarded) for NSF, USDA, NIH, DOE, DOD, DHHS/FDA, DOJ/NIST, DOT, United Soybean Board (administered by USDA), and NextGen (non-profit organization).

Christine is available to help with proposal development (defining all major sections and their content, page limits, supplemental documents), contributing general content (background and introductory content, literature reviews, market overviews, management plans), creating work plans/milestones, Logic Models, illustrations, review, revision, editing, verifying references, ensuring compliance with general guidelines and requirements specific to the funding agency's call, and providing templates for supplements (bio sketches, Gantt charts, org charts, etc.).

I know first-hand that working with Christine on a proposal can have a tremendous improvement on its competitiveness by:

- Aligning proposed work with current funding agency priorities
- Enhancing logic flow of the story board of the proposal
- Ensuring that reviewers easily and quickly grasp the concept of the proposed work

- Ensuring that proposal is complete, compliant, and compelling

If you would like to work with Christine, I encourage you to reach out to her early in the proposal planning. The process is relatively simple. The first step is to contact Christine. Her email address is christine.strohm@ndsu.edu to describe the proposal and funding opportunity, and ask her for a quote. She will also have a campus office in Engineering Administration room 103. That quote will then be sent to the department chair of the PI and then the Dean's office for approval and prioritization. Priority will be given to larger multi-investigator proposals and proposals for young investigators, but all proposals will be considered for support as time and resources allow.



IN THE NEWS

[Professor honored for work with Open Modelling Interface](#)

[NDSU Extension to offer educational activities at Big Iron](#)

[Graduate Student honored at international meeting](#)

[NDSU to host national power symposium](#)

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

Wednesday, September 5th, **Department of Civil and Environmental Engineering Seminar**. Dr. Trung Bao Le will be presenting his work on “High-fidelity simulations for fluid-structure interaction problems in civil and bioengineering applications.” **1:00 – 1:50 p.m. CIE 207.**

LGBTQ Program Coordinator Open Forums

DATE AND TIME	ROOM	CANDIDATE
Thursday, September 6 th at 2:00 PM	Arikara Room, Memorial Union	Kaitlyn Ryan
Friday, September 7 th at 2:00 PM	Century Theater, Memorial Union	Kevin Martin
Thursday, September 13 th at 2:30 PM	A. Glenn Hill Center, Room 334	Kevin Stockbridge

GATEWAYS-ND PROGRAM

Applications for the [Gateways-ND program](#), Cohort Four, are **due Friday, September 14, 2018**. The program offers 30 total spots for STEM faculty. Faculty from ALL STEM disciplines are invited to apply. More than a dozen current COE faculty have participated in the program.

About Gateways-ND

Gateways-ND is a five-year National Science Foundation-funded faculty and staff instructional development program, hosted by NDSU's Office of Teaching and Learning, designed to offer relevant, collaborative, and sustained support to NDSU educators. [Apply here](#).

NSF GRADUATE RESEARCH FELLOWSHIP PROGRAM

Seniors or 1st/2nd-year graduate students who are capable researchers should consider applying for the prestigious National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP), which provides an annual \$34,000 stipend and \$12,000 to the institution for three years of graduate school.

The NDSU Center for Writers offers an 8-week, 1 credit class, UNIV 440/640, which helps students to plan and write their applications. In the last 3 years, 5 students who took the class were awarded GRFPs.

Applications are due at the end of October. More information about the GRFP can be found [HERE](#).

More information about the class can be found [HERE](#), or by contacting Enrico Sassi (enrico.sassi@ndsu.edu).

FUNDING OPPORTUNITIES

NDSU EPSCoR Funding

The NDSU campus of ND EPSCoR has funds available to assist faculty in his/her STEM research and/or outreach activities. Funds are available for the following activities: 1) equipment, 2) student travel, 3) faculty travel, 4) seed awards to collect preliminary data, 5) external proposal review, and 6) seed awards to engage in K12 STEM outreach. The detailed RFP can be found at: <https://www.ndepscor.ndsu.edu/funding-opportunities/resind/stem-rfp-2018/>.

DoD: Naval Engineering Education Consortium (NEEC) Broad Agency Announcement for FY18

The Naval Surface Warfare Center is seeking research of interest in support of the Naval Engineering Education Consortium (NEEC). Many research topics are outlined in the [Broad Agency Announcement](#) (BAA), including advanced materials, electronics, quantum computing, big data, artificial intelligence, cybersecurity, advance manufacturing, advanced computer vision and algorithms, automation/robotics, computational fluid dynamics, sensors, novel computing techniques, as well as other topics. Grant awards made from this BAA are planned to be approximately \$150,000. Work funded under a BAA may include basic research, applied research and some advanced technology development research.
Application deadline: October 31, 2018

[Track this opportunity in Pivot >>](#)

FACULTY AWARD NOMINATIONS

Nominations are open for faculty awards processed through the Office of the Provost.

The deadline for nominations for the [Engberg, Hogoboom, Gehrts Professorships](#) is September 28, 2018.

Nominations may be submitted by faculty, staff, students, alumni, unit administrators or deans. For information on faculty awards please see the [awards page](#).

PROMOTION AND TENURE

The 2018-19 PTE Materials are now available to download from the [Promotion and Tenure website](#). This website contains the Guidelines for Promotion and Tenure Portfolio Preparation, Policy and Procedure Checklist, the Portfolio Cover Sheet, and the NDSU PTE Timeline.

There are also several PTE Information and Training Sessions scheduled:

PTE Training for Reviewers

- Thursday September 6, 2:30-4:30 pm, Mandan, MU. [Register here](#).
- Tuesday September 11, 9:30-11:30 am, Mandan, MU. [Register here](#).
- Wednesday September 19, 9:00-11:00 am, Rose, MU. [Register here](#).

New Faculty PTE Session

- Wednesday November 7, 3:00-4:00 pm, Rose, MU. [Register here](#).
- Thursday November 8, 3:30-4:30 pm, Mandan, MU. [Register here](#).

RECENTLY FUNDED GRANTS

- Kenneth Hellevang (PI). Energy Education Website. \$8,998 from the ND Department of Commerce. 10/01/2018 – 03/20/2019.
- Xiangfa Wu, (PI). DOE-EERE: Low-pressure Electrolytic Ammonia Production. \$515,000 from the Department of Energy. 10/01/2017 – 09/30/2020.
- Na Gong (PI), Scott Christopher Smith (CPI). SHF: Small: Turning Visual Noise into Hardware Efficiency: Viewer-aware Energy-quality Adaptive Mobile Video Storage. \$472,200 from the National Science Foundation. 06/01/2017 – 05/31/2021.
- Dong Cao (PI). High Power High Efficiency Variable Voltage Converter. \$45,000 from the Ford Motor Company. 06/21/2018 – 08/15/2021.

RECENTLY SUBMITTED PROPOSALS

- Mijia Yang (PI). Optimized Concrete Silo Design through Rocking Foundation for Weak Soil and Seismic Intensive Regions. \$273,789 from the National Institute of Standards and Tech. 08/01/2019 – 07/31/2022.
- Rajesh G Kavasseri (PI). Student Support for the 50th North American Power Symposium. \$15,000 from IEEE. 09/01/2018 – 10/30/2018.
- Chad A Ulven (PI). New Design to Improve Performance and Life Expectancy of TAR. \$71,988 from the Orthopedic Research and Education Foundation. 01/01/2019 – 12/31/2020.
- Zhibin Lin (PI). Improving Disaster Resilience of Civil Structures through Machine Learning Methods. \$270,473 from the National Institute of Standards and Tech. 01/01/2019 – 12/31/2021.

RECENT PUBLICATIONS

For 2018, 80 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:

- Al-Kaseasbeh, Qusay, Zhibin Lin, Yechun Wang, Fardad Azarmi, and Xiaoning Qi. 2018. "Electrochemical Characterization of Steel Bridge Welds under Simulated Durability Test." *Journal of Bridge Engineering* 23 (10): 04018068. [https://doi.org/10.1061/\(ASCE\)BE.1943-5592.0001246](https://doi.org/10.1061/(ASCE)BE.1943-5592.0001246).

- Lipus, Daniel, Dhritikshama Roy, Eakalak Khan, Daniel Ross, Amit Vikram, Djuna Gulliver, Richard Hammack, and Kyle Bibby. 2018. "Microbial Communities in Bakken Region Produced Water." *FEMS Microbiology Letters* 365 (12): fny107. <https://doi.org/10.1093/femsle/fny107>.

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.

