

May 29, 2018

FROM THE DEAN

A CV of Failures

Several years ago, there was a column published in *Nature* titled, "<u>A CV of Failures</u>". In the column, the author explains that, for most of us, our CV's don't accurately reveal the bulk of our academic effort. The CV doesn't capture "the exams I failed, my unsuccessful PhD or fellowship applications, or the papers never accepted for publication." The column explains that "as scientists, we construct a narrative of success that renders our setbacks invisible Often, other scientists' careers seem to be a constant, streamlined series of triumphs. Therefore, whenever we experience an individual failure, we feel alone and dejected."

This certainly rings true for me. In one of our College Happenings messages last month, titled "<u>Persistence in Proposal Writing</u>", I lamented about how logging into NSF's FastLane proposal management system can be disheartening when I see all but a handful of the nearly 30 proposals submitted to NSF over the years with statuses listed as *Declined*.

The columnist goes on to make a suggestion — to compile an 'alternative' CV of failures containing a "log of every unsuccessful application, refused grant proposal and rejected paper." In 2016, a professor at Princeton, Johannes Haushofer, did just that, and posted his <u>CV of failures</u> online for all to see. It went viral; Haushofer noted in the last item in the updated version of his CV of failures, "This darn CV of failures has received way more attention than my entire body of academic work."

While it is important to remain optimistic, and to be persistent in our scholarship and proposal writing, I also think it is healthy to be reminded that there is a lot of chance and randomness in our lives — applications can be a crapshoot — and as such, failure and rejection is "an essential part of what it means" to be an academic. Perhaps that is why Professor Haushofer's alternate CV received so much attention. For senior faculty in our school, I encourage you to share some of your failures with your junior faculty mentees — seeing your success in spite of those failures may inspire them in the face of similar disheartening circumstances.

IN THE NEWS

NDSU Engineering grad starts robotics company

Mechanical Engineering student voted to academic all-district baseball team

NDSU researchers meet with Sen. Hoeven

Two companies graduate from business incubator

Baja team featured live on the Valley Today

Steps being taken to remove odor issue at city lagoon

CONGRATULATIONS

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.

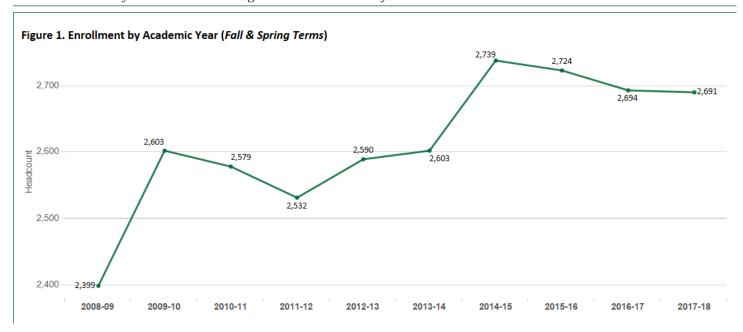
UPCOMING EVENTS

Thursday, June 14th, **Grant Writing Workshop.** 8:00 a.m. -12:20 p.m. Harry D. McGovern Alumni Center. The workshop will cover writing for publication, writing grant applications and speaking for success. <u>Register</u> by June 1st.

Friday, August 17th, NDSU Faculty Conference. Register here.

BY THE NUMBERS

Earlier this year we showed you the enrollment trend using just data from fall, the numbers are now available with fall and spring terms included. Numbers from the Provost show the recent decline in enrollment is expected to continue for the 2018-19 academic year both in the College and at the University.



FALL CLASS FOR NSF GRADUATE RESEARCH FELLOWSHIP

The NDSU Center for Writers is asking CoE faculty to let them know about any potential candidates now so they can start preparing their applications before the busy fall starts.

Some guidelines for GRFP applicants:

- Must be a senior or early graduate student in STEM/STEM Ed
- Must be a US citizen, national, or permanent resident
- Must be able to propose independent, innovative research
- Must have potential for "significant achievements" in a STEM/STEM Ed. research career

More information about the GRFP can be found <u>HERE</u>. More information about the class can be found <u>HERE</u> or by contacting Enrico Sassi, Director of the Center for Writers.

FUNDING OPPORTUNITIES

Applications are now open for the NDSU Impact Fund.

NDSU Impact Fund provides funding for programs that have a direct and positive impact on the lives of students. Available to faculty, staff and recognized student groups, the NDSU Impact Fund is supported by contributions from alumni, parents, friends and Bison Bidders Bowl. The impact fund offers grants of \$20,000 to \$75,000 through the NDSU Impact Fund Grant Program.

Applications are encouraged from the entire campus community and may be submitted from any faculty, staff or recognized student organization. The application deadline is **Monday**, **July 23**, **2018** at 4:00 p.m.

To learn more or apply visit the NDSU Impact page on the NDSU Foundation website: http://www.ndsufoundation.com/annualgiving/impact-fund.

Department of Energy – BioEnergy Engineering for Products Synthesis

<u>BioEnergy Engineering for Products Synthesis</u> is a multi-topic Funding Opportunity Announcement (FOA) from DOE that seeks to develop highly efficient conversion processes for improving the affordability of fuels and products from biomass and waste streams. The FOA seeks early-stage research proposals that cover several topics pertaining to conversion processes:

- Innovative catalysts for thermochemical processing
- New biological approaches for higher conversion efficiency
- Novel bio-based products that outperform conventional materials (e.g., plastics, polymers, etc.)
- Conversion of wet organic wastes to biofuels, bioproducts, and biopower
- Conversion of carbon dioxide (CO₂) to make fuels and products
- New processes to break down lignin and synthesize higher value biofuels and bioproducts

Agency notice of intent deadline: May 30, 2018. Agency application deadline: June 27, 2018.

NSF Planning Grants for Engineering Research Centers (ERC)

The Planning Grants for ERC solicitation, NSF 18-549, is a mechanism for increasing capacity across the engineering academic community to develop ideas, facilitate team formation, and foster stakeholder community networks. As a result of planning grant activities, potential ERC teams should be better equipped to carry out center-scale convergent engineering research with large societal impact. It is anticipated that the solicitation for the next ERC competition will be released during the 2018 calendar year. Planning grants should not exceed \$100,000 and are for one year. The anticipated start date of the planning grants is September 1, 2018. Participation in the planning grants program should not be construed as a proposal for the next ERC competition, and the information presented in a submitted planning grant will not limit in any way a future ERC proposal submission. Note also the FAQ's webpage for more information. *Application deadline: June 6, 2018.*

RECENTLY SUBMITTED PROPOSALS

- John F Nowatzki (PI). UAS Precision Crop Scouting Service. \$28,000 from the ND Department of Commerce. 07/01/2018 08/31/2019.
- Eric Asa (PI), Mijia Yang (CPI), Matthew L Stone (CPI). Workforce Development for the 21st Century Solar Power Industry. \$2,155,831 from the Department of Energy. 09/15/2018 09/14/2023.

- Huojun Yang (PI). Improved Exhaust-to-intake Dilution (Concentration) Calculations. \$45,298 from ASHRAE. 09/01/2018 08/31/2019.
- Jordi Estevadeordal (PI). Advanced Imaging Techniques for Gas Turbine Applications. \$16,535 from GE Global Research. 06/01/2018 08/15/2018.
- Yao Yu (PI), Huojun Yang (CPI). Actual Energy Performance of Secondary Schools and Medium Offices Designed to Comply with ASHRAE Standard 90.1-2010. \$180,061 from ASHRAE. 09/01/2018 04/30/2020.
- Adam Curtis Gladen (PI), Dilpreet Singh Bajwa (CPI). A Novel Thermochemical Adsorption Material Based on a Framework of Nanocellulose from Beet Pulp. \$442, 176 from the Department of Energy. 01/01/2019 – 06/30/2021.
- Mijia Yang (PI). Effect of Strong Earthquake on Concrete Silos Built on Thick Clay Layers. \$59,892 from the U.S. Geological Survey. 01/01/2019 12/31/2019.
- Chad Ulven (PI). A New Design to Improve Life Expectancy of Total Ankle Replacement (TAR) Phase II. \$50,000 from the ND Department of Commerce. 07/01/2018 12/31/2019.
- Yao Yu (PI). Energy Simulation for Steve and Jeannette Ambrose Home. \$2,000 from Meadowlark. 05/21/2018 06/29/2018.
- Achintya Bezbaruah (PI). Nanoparticle-enabled Nitrogen Fertilizers for Improved Nutrient Use Efficiency. \$350,000 from the National Science Foundation. 01/01/2019 12/31/2022.
- Kalpana Katti (PI), Dinesh R Katti (CPI). Tissue Engineering Test-bed for Personalized Care of Breast Cancer Metastasis. \$508,417 from the Department of Defense. 01/01/2019 12/31/2021.

RECENT PUBLICATIONS

For 2018, 46 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:

Banerjee, Abhishek, Nilanjan Ray Chaudhuri, and Rajesh G. Kavasseri. 2018. "A Novel Explicit Disturbance
Model-Based Robust Damping of Interarea Oscillations Through MTDC Grids Embedded in AC Systems." *IEEE*Transactions on Power Delivery 33 (4): 1864–74. https://doi.org/10.1109/TPWRD.2018.2799170.

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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