

NDSU OFFICE OF
RESEARCH AND CREATIVE ACTIVITY

RCA UPDATE

October 29, 2018

Meet NDSU's New Assistant Professors

Throughout the year, RCA will feature new assistant professors.
Full profiles are available on the [RCA website](#).

Beena Ajmeera, Ph.D. Civil and Environmental Engineering

What are your primary research and scholarly interests?

Geotechnical earthquake engineering, static and dynamic behavior of soils and rocks, static and dynamic laboratory soil testing, fundamental behavior of geomaterials from mineralogical and chemical analyses, use of recycled materials in soil modification, ground improvement techniques, and soil and rock slope stability.



Where are you from and where did you pursue your education?

I was born and raised in Southern California. I obtained my Bachelors of Science in Civil Engineering, Bachelors of Arts in Applied Mathematics and Masters of Science in Civil Engineering from California State University, Fullerton and my Ph.D. in Civil

Engineering with focus in Geotechnical Engineering from Virginia Tech.

What excites you about NDSU?

I am excited about being in a research institution that is also strongly student centered. I am looking forward to working with my colleagues in the Civil and Environmental Engineering Department as well as across campus on new and exciting projects as well as educating and mentoring the next generation of civil engineers.

What motivates you?

I am motivated by doing work that will positively affect lives. This could be through research findings, coaching and mentoring the next generation, or serving on committees making an impact. I am also motivated by the opportunity to learn new things and to improve my own abilities.

[Read more about Beena >>](#)

Jeff Lind, Ph.D.
Educational Leadership

What are your primary research and scholarly interests?

Leadership, Organizational Behavior, Education Policy and Finance.

Where are you from and where did you pursue your education?

I am a native of North Dakota and a recently retired K-12 school administrator. For the past six years I served as the assistant superintendent of schools in Mandan, North Dakota. I earned both my B.S. and M.Ed. here at NDSU, and hold an Ed.D from the University of North Dakota.

What excites you about NDSU?



Being part of the Educational Leadership department that contributed so much to my professional growth as a K-12 educator.

What motivates you?

Envisioning what the future holds for students and leading change.

[Read more about Jeff >>](#)



In addition to the **Funding Opportunities** and the **Expertise Profiles** databases that Pivot offers, there is another relatively new feature. The **Papers Invited** database consists of detailed, comprehensive information about calls for papers with deadlines regarding forthcoming conferences and special issues of scholarly journals.

These calls for papers are issued by professional bodies, journal editors, and other conference organizers in all disciplines and from all over the world. Thus, the database serves as an alerting service for researchers, scholars, and students seeking opportunities to present and publish their research. To check it out, access Pivot at pivot.cos.com, and click on the [Papers Invited](#) tab on the green top menu bar. Enter a search term related to your area of interest and click on Search, or browse the subject links provided as you scroll down. You can also search for specific conferences by name.

If you have questions about Pivot or want to schedule a training session, please email ndsu.researchdev@ndsu.edu. In addition, if you have any examples of how Pivot has been helpful to you, please let us know.

CONTENTS

FUNDING OPPORTUNITIES

- [DOD-CDMRP: Biomedical Research](#)
- [NEH: Digital Humanities Grants](#)
- [NIH: BRAIN Initiative - Ethical Implications](#)
- [NIH: Addressing Caregiver Symptoms through Technological Tools](#)
- [NSF: Partnerships for Innovation](#)

EVENTS

- [Unmanned Aircraft User Group Meetings](#)
- [Save the Date: NSF CAREER 101](#)
- [Aldevron Breakthrough Symposium](#)



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[NDSU Scholars
Database](#)**



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Equipment?
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Database](#)**

DOD-CDMRP: Biomedical Research

The Department of Defense (DOD), through its [Congressionally Directed Medical Research Programs \(CDMRP\)](#), provides significant funding for research in many biomedical topic areas. CDMRP also manages Congressional Special Interest Medical Research Programs (CSI) encompassing breast, prostate, and ovarian cancers, neurofibromatosis, military health, and other specified areas. Below is a synopsis of some current programs of interest. Programs are cyclic, so watch for future deadlines in instances where the 2018 application deadline is past.

- [Bone Marrow Failure](#)
- [Breast Cancer](#)
- [Defense Medical Research and Development Program](#)
- [Duchenne Muscular Dystrophy](#)
- [Gulf War Illness](#)
- [Hearing Restoration](#)
- [Lupus](#)
- [Orthotics and Prosthetics Outcomes](#)
- [Peer Reviewed Orthopaedic](#)

- [Psychological Health/Traumatic Brain Injury](#)
- [Reconstructive Transplant Research](#)
- [Vision](#)

Application deadlines vary depending on topic.



NEH: Digital Humanities Advancement Grants

National Endowment for the Humanities (NEH) [Digital Humanities Advancement Grants](#) support digital projects at different stages throughout their lifecycles, from early start-up phases through implementation and sustainability. Experimentation, reuse, and extensibility are hallmarks of this program, leading to innovative work that can scale to enhance scholarly research, teaching, and public programming in the humanities. A discussion of the forms that experimentation can take is available in the [Frequently Asked Questions](#) document.

Proposals are welcome for digital initiatives in any area of the humanities.

Projects may involve:

- Creating or enhancing experimental, computationally-based methods, techniques, or infrastructure that contribute to the humanities;
- Pursuing scholarship that examines the history, criticism, and philosophy of digital culture and its impact on society; or
- Conducting evaluative studies that investigate the practices and the impact of digital scholarship on research, pedagogy, scholarly communication, and public engagement.

There are three levels of awards:

- **Level I** awards (from \$10,000-\$50,000) are small grants designed to fund exploratory sessions, workshops, early alpha-level prototypes, and initial planning.
- **Level II** awards (from \$50,001-\$100,000) are larger grants that can be used for more fully-formed projects that have completed an initial planning phase.
- **Level III** awards (from \$100,001-\$325,000) support implementation and scaling-up of already established projects.

Through a special partnership and pending availability of appropriated funds, the Institute of Museum and Library Services anticipates providing additional funding to this program to encourage innovative collaborations between museum or library professionals and humanities professionals to advance preservation of, access to, use of, and engagement with digital collections and services. IMLS and NEH may jointly fund some DHAG projects that involve collaborations with museums and/or libraries.

This program is offered twice per year, in January and June.

Draft proposal deadline: December 4, 2018; Final application deadline: January 15, 2019



NIH: BRAIN Initiative - Research on Ethical Implications (R01)

This National Institutes of Health (NIH) funding opportunity announcement (FOA) [[RFA-MH-19-400](#)], in support of the NIH Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative, is one of several

FOAs aimed at supporting transformative discoveries that will lead to breakthroughs in understanding human brain function. Guided by the long-term scientific plan “[BRAIN 2025: A Scientific Vision](#),” this FOA specifically seeks to support efforts addressing core ethical issues associated with research focused on the human brain and resulting from emerging technologies and advancements supported by the BRAIN Initiative. Efforts supported under this FOA are intended to be both complementary and integrative with the transformative, breakthrough neuroscience discoveries supported through the BRAIN Initiative.

Letter of Intent deadline: January 4, 2019

Full Proposal deadline: February 4, 2019; October 9, 2019; October 9, 2020

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NIH: Addressing Caregiver Symptoms through Technological Tools (R21 or R01)

The purpose of this National Institutes of Health (NIH) Funding Opportunity Announcement (FOA) [R21 - [PA-19-024](#); R01 - [PA-19-023](#)] is to encourage grant applications from the scientific community that develop and test tools to address symptoms in caregivers. The key to this announcement is the focus on the caregiver, regardless of patient symptoms or conditions. Research is needed to enhance symptom recognition and assessment in caregivers, and to promote technological strategies to alleviate distress in caregiver symptoms. These studies are needed to advance the science related to caregiver experience of symptoms, caregiving contexts that promote these symptoms, and viable tools to address the symptoms experienced by caregivers. Research should address caregiver symptoms and quality of life through the use of technology. A wide range of technologies should be considered, including

assistive medical devices, remote communication and monitoring tools, sensors (wearables, in-home devices), mobile technologies, alert systems. Machine learning approaches are encouraged to enhance our understanding of caregivers' ongoing symptoms and changing needs for addressing their symptoms. Research proposed through this initiative can assess the relative effectiveness of existing strategies or seek to provide more innovative and far-reaching tools. Additional research areas can focus on the validation of current tools and apply "co-care" models of caregiver-patient communication. Any technological tools proposed should be appropriately tailored to the caregiving situation and symptoms targeted. All strategies should consider age, gender, racial, ethnic, and cultural diversity as these factors may drive the types of communication, support and care needs required of caregivers.

For R21 applications, the proposal deadlines are February 16, June 16, and October 16.

For R01 applications, the proposal deadlines are February 1, June 5, and October 5.

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NSF: Partnerships for Innovation - Limited Submission Program

Limited submission grant programs are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

NSF Partnerships for Innovation: Notify RCA by 11/13/2018, 5:00 p.m. if you intend to apply for the January deadline.

The National Science Foundation (NSF) [Partnerships for Innovation \(PFI\) Program](#) within the Division of Industrial Innovation and Partnerships (IIP) offers researchers the opportunity to transform new knowledge into societal benefits through translational research and technology development efforts which catalyze partnerships to accelerate innovations that address significant societal needs.

PFI has six broad goals:

1. identifying and supporting Foundation-sponsored research and technologies that have the potential for accelerated commercialization;
2. supporting prior or current Foundation-sponsored researchers, institutions of higher education, and non-profit organizations that partner with an institution of higher education to undertake proof-of-concept work, including the development of technology prototypes that are derived from NSF-funded research and have potential market value;
3. promoting sustainable partnerships between Foundation-funded institutions, industry, and other organizations within academia and the private sector with the purpose of accelerating the transfer of technology;
4. developing multi-disciplinary innovation ecosystems which involve and are responsive to the specific needs of academia and industry;
5. catalyzing professional development activities, mentoring, and best practices in entrepreneurship and technology translation for faculty, students and researchers; and
6. expanding the participation of women and individuals from underrepresented groups in innovation, technology translation, and entrepreneurship.

The solicitation offers two broad tracks for proposals in pursuit of the six goals: The Technology Transfer (TT) Track and the Research Partnership (RP) Track. There is no limit on the number of PFI-TT proposals an organization may submit to a deadline of this solicitation, however, an organization may not

submit more than one new or resubmitted PFI-RP proposal to a deadline of this solicitation.

Proposal deadline: January 17, 2019 and July 10, 2019



Unmanned Aircraft User Group Meetings

Monthly brown bag meetings are scheduled to provide an informal opportunity to share information and ask questions about using unmanned aircraft. At the November meeting researchers from the Department of Agricultural and Biosystems Engineering and Department of Plant Sciences will discuss their experiences from this past summer. Please join us:

Unmanned Aircraft User Group Meeting
Friday, November 2, 2018 | 12-1 p.m.
Memorial Union Room of Nations

For more information about unmanned aircraft (drones), visit the [NDSU Unmanned Aerial Vehicles webpage](#).



NSF CAREER 101

Are you interested in the NSF CAREER program but are not sure where to start or what is involved? This session is designed for those new to the program. It will include a program overview, proposal requirements, planning for an application, and opportunities for Q&A.

NSF CAREER 101

Tuesday, December 11, 2018 | 12-1 p.m.

The National Science Foundation (NSF) Faculty Early Career Development ([CAREER](#)) Program is a prestigious grant award program that supports early career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Activities pursued by early-career faculty should build a firm foundation for a lifetime of leadership in integrating education and research.

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Aldevron Breakthrough Symposium

Aldevron is hosting the first-ever [Breakthrough Symposium](#) November 6-7, 2018, at the Hilton Garden Inn. This event is bringing together individuals and organizations that lead the biotechnology community and provides an opportunity for participants to network with these thought leaders.

Aldevron is offering complimentary [registration](#) for NDSU participants. The code is AldevNDSU.

A full list of speakers and the schedule can be found [here](#). Below are some of the session topics:

- **Learn about the novel developments in gene therapy to treat cancer** from Laurence Cooper, CEO of Ziopharm Oncology and David Courtman, CSO of Northern Therapeutics.
- **Discover the potential for gene editing and CRISPR/Cas9** from Matthew Porteus, Associate Professor, Department of Pediatrics, the

Institute of Stem Cell Biology and Regenerative Medicine at Stanford University and Kris Saha, Department of Biomedical Engineering, University of Wisconsin-Madison

- **Collaborate on the latest gene therapy manufacturing developments** with Andrew Moreo, Operations Manager, GMP and Viral Vector Core Facilities, Nationwide Children's Hospital and Anne Kantardjieff, Director of Plasmids and Small Molecules Manufacturing, bluebird bio
- **Hear about the progress in AAV gene therapy** from Luk H. Vandenberghe, Assistant Professor at Harvard Medical School and Mark Osborn, Assistant Professor, University of Minnesota
- **Be inspired by the story of Emily Whitehead** presented by Tom Whitehead, Emily's father and the co-founder of the Emily Whitehead Foundation.

Tours of Aldevron's new facility will also be offered.

Please contact the NDSU Research Development office (ndsu.researchdev@ndsu.edu) if you have any questions.



Have questions, ideas, or suggestions for the RCA Update?

[Contact Us](#)



The Office of Research and Creative Activity (RCA) sends weekly emails to NDSU faculty and staff to provide current information on various topics including funding opportunities, grant program changes, research resources, deadlines, notices, and training.

You are receiving this notification through the NDSU official employee listserv or sub-list. The official listserv refreshes after each pay period.

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