

RCA UPDATE

September 23, 2019

Meet NDSU's New Assistant Professors

Throughout the year, RCA will be highlighting new faculty in the weekly newsletter. Full profiles are available on the [RCA website](#).

Elizabeth Hilliard, Ph.D.

Health, Nutrition, and Exercise Science

What are your primary research and scholarly interests?

Promoting breastfeeding in the workplace.
Supporting working, breastfeeding mothers.
Maternal, infant, and child health.

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

I'm from Dayton, Ohio and earned my B.S. in applied health science with a concentration in dietetics from Indiana University, Bloomington, IN. I earned my M.S. in



nutrition from East Carolina University, Greenville, NC and my PhD in exercise science and nutrition from NDSU.

What excites you about NDSU?

I love the collegiality of my coworkers and the relationships that faculty are able to build with students.

What motivates you?

Promoting justice and equality in healthcare and in the work setting.

[Learn more about Elizabeth >>](#)

Research Development and Grant Writing News

The Research and Creative Activity office holds a subscription to Research Development and Grant Writing News, a monthly newsletter full of helpful tips and information about funding agencies and writing successful grant proposals. Here are some articles you will find in recent editions:

- Selected URLs for Humanities, Social Sciences, and Arts (HSSA) Funding
- What Is Your Great Idea and Why Is It Important?
- Tips for Effective Proposal Graphics
- How to Convince Reviewers to Fund Your Proposal
- Gain an Advantage in Funding Success by Reviewing Project Abstracts
- And many more!

You can access the [newsletter archive](#) with your NDSU network log-in information.

New RCA Website: Institutional Information

Many sponsor proposal application forms require standard information about the university, including frequently used numbers (DUNS, Congressional District, Cage Code), contact information, and the authorized organizational representative. You can find this and other information on the [Institutional Information](#) page. If you have questions, please contact Sponsored Programs Administration at ndsuh.research@ndsuh.edu.

On August 19, the Office of Research and Creative Activity (RCA) launched a [new website](#). Our goal was to create a more user-friendly site to provide the NDSU community with information as quickly as possible. If you have questions, or would like to provide feedback, see the [Contacts Page](#).



NIH R01: Preliminary Data

NIH's early investigator proposals, [R01s](#), should include strong preliminary data. However, preliminary data is difficult to achieve without funding. [This article](#) discusses how much preliminary data is enough and the possibility of needing funding to generate preliminary data.

NIH R15: AREA or REAP?

NIH has made changes to the [R15](#) [Research Enhancement Award] application process and is now providing two separate applications:

1. Academic Research Enhancement Award (AREA) for Undergraduate-Focused Institutions
2. Research Enhancement Award Program (REAP) for Health Professional Schools and Graduate Schools

This change has led to applicants being unsure of which application to use. NIH has made a [decision tree](#) to assist the PI in choosing the relevant application package: REAP or AREA.

If you have questions about NIH R15 applications, please contact ndsu.research@ndsu.edu.

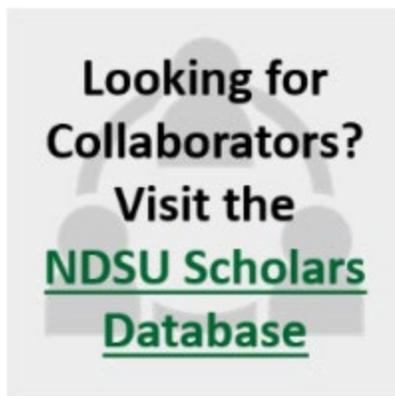
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Need to update your profile?
Click here to learn how!

ARPA-E: Performance-based Energy Resource Feedback, Optimization, and Risk Management (PERFORM)

The Advanced Research Projects Agency–Energy (ARPA-E) announced a new [Funding Opportunity](#) to quantify and manage risk on the grid. The Performance-based Energy Resource Feedback, Optimization, and Risk Management

(PERFORM) projects will develop a transformative and disruptive risk-driven grid management paradigm that optimally utilizes all assets to reduce costs and improve reliability.

As emerging technologies are increasingly deployed on the U.S. grid, management systems must leverage all capabilities of these emerging assets. Existing management practices were designed for conventional generation grid assets. Grid management needs a fundamental shift in its approach to risk to optimally integrate and utilize all grid assets. The PERFORM program seeks to develop methods to quantify and manage risk at the asset level and at the system level. This will allow the grid to remain economical and reliable, while transitioning to a modern, clean, and sustainable electric power sector. ARPA-E expects PERFORM awardees to build on existing practices and expertise from the finance, insurance, and actuarial science communities, which have a long history of defining, quantifying, and hedging risk. Applicants should pursue partnerships with these communities along with domain-specific experts (e.g., engineers, operations researchers, and market designers) to achieve technically relevant innovative solutions. PERFORM is targeting all power sectors: (i) bulk and distribution systems, (ii) centralized and decentralized paradigms, and (iii) vertically integrated utilities, markets, and peer-to-peer transactive energy systems.

For more information on ARPA-E's PERFORM program, click [here](#). Additional information, including the full FOA and how to find project teaming partners, is available on ARPA-E's online application portal, [ARPA-E eXCHANGE](#).

Concept Paper Deadline: October 28, 2019, 8:30AM CST

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NEH: A More Perfect Union

"[A More Perfect Union](#)" is a special initiative of the National Endowment for the Humanities (NEH) advancing civic education and commemorating the Nation's 250th anniversary.

Under “A More Perfect Union,” NEH welcomes consideration of diverse topics in American history, from Native American culture to rural life to the rise of the industrial city, from the Civil War to the Cold War to the Civil Rights movement, projects that examine foundational documents in U.S. history, etc., as well as projects that examine historical objects, places, traditions, events, and individuals who collectively shaped our states and nation. Applications about the contributions of under-represented communities are highly encouraged. As part of the initiative, NEH is also placing a specific focus on strengthening the nation’s humanities infrastructure, civic education, and veterans programming.

Current grant programs with special emphasis for “A More Perfect Union” projects include:

- [Scholarly Editions and Translations](#)
- [Short Documentaries](#)
- [Humanities Discussions](#)
- [Preservation Assistance Grants for Smaller Institutions](#)

Please see NEH's [funding opportunities](#) for further information about how your project can become part of the “A More Perfect Union” initiative.

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NIH: Centers of Biomedical Research Excellence (P20) - 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.

NIH COBRE: [Notify RCA](#) by 9/30/2019, 5:00 p.m. if you intend to apply.

The National Institutes of Health Centers of Biomedical Research Excellence

(COBRE) [\[PAR-19-313\]](#) are thematic, multidisciplinary centers that augment and strengthen institutional biomedical research capacity. This is accomplished by expanding and developing biomedical faculty research capability and enhancing research infrastructure, including the establishment of core facilities needed to carry out the objectives of a multidisciplinary, collaborative program. Only institutions in IDeA (EPSCoR) states are eligible to apply. An application in response to this funding opportunity announcement (FOA) must have a thematic scientific focus in a specific area in basic, clinical, or translational research including community engagement and outreach research as appropriate. **Applications addressing health challenges of rural populations in IDeA states are encouraged.**

The PD(s)/PI(s) must be an established biomedical or behavioral research scientist, who leads, as the principal investigator, at least one peer-reviewed research grant from NIH, NSF or other Federal or non-Federal sources that is closely related to the scientific theme of the proposed Center and has mentoring and administrative experience to lead the COBRE program to meet its goals.

[View a list of currently active COBRE centers >>](#)

NDSU has had three previously funded COBRE centers, one each in the Departments of Chemistry, Psychology, and Pharmaceutical Sciences.

*Letter of Intent due: December 28, 2019 (30 days prior to deadline);
Final application deadline: January 28, 2020.*

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NSF: Cultivating Cultures for Ethical STEM - 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 CCE: [Notify RCA](#) by 10/14/2019, 5:00 p.m. if you intend to apply.

The National Science Foundation (NSF) Cultivating Cultures for Ethical STEM ([CCE STEM / NSF 18-532](#)) program funds research projects that identify (1) factors that are effective in the formation of ethical STEM researchers and (2) approaches to developing those factors in all the fields of science and engineering that NSF supports.

CCE STEM solicits proposals for research that explores the following: 'What constitutes responsible conduct for research (RCR), and which cultural and institutional contexts promote ethical STEM research and practice and why?' Factors one might consider include: honor codes, professional ethics codes and licensing requirements, an ethic of service and/or service learning, life-long learning requirements, curricula or memberships in organizations (e.g. Engineers without Borders) that stress responsible conduct for research, institutions that serve under-represented groups, institutions where academic and research integrity are cultivated at multiple levels, institutions that cultivate ethics across the curriculum, or programs that promote group work, or do not grade. Do certain labs have a 'culture of academic integrity'? What practices contribute to the establishment and maintenance of ethical cultures and how can these practices be transferred, extended to, and integrated into other research and learning settings?

Successful proposals typically have a comparative dimension, either between or within institutional settings that differ along these or among other factors, and they specify plans for developing interventions that promote the effectiveness of identified factors.

CCE STEM research projects will use basic research to produce knowledge about what constitutes or promotes responsible or irresponsible conduct of research, and how to best instill students with this knowledge. In some cases, projects will include the development of interventions to ensure responsible research conduct.

NSF: Improving Undergraduate STEM Education - Education and Human Resources (IUSE:EHR)

Through the NSF *Improving Undergraduate STEM Education* (IUSE) initiative [[NSF 19-601](#)], the agency continues to make a substantial commitment to the highest caliber undergraduate STEM education through a Foundation-wide framework of investments. The IUSE: EHR is a core NSF STEM education program that seeks to promote novel, creative, and transformative approaches to generating and using new knowledge about STEM teaching and learning to improve STEM education for undergraduate students. NSF places high value on educating students to be leaders and innovators in emerging and rapidly changing STEM fields as well as educating a scientifically literate public. In pursuit of this goal, IUSE: EHR supports projects that seek to bring recent advances in STEM knowledge into undergraduate education, that adapt, improve, and incorporate evidence-based practices into STEM teaching and learning, and that lay the groundwork for institutional improvement in STEM education. In addition to innovative work at the frontier of STEM education, this program also encourages replication of research studies at different types of institutions and with different student bodies to produce deeper knowledge about the effectiveness and transferability of findings.

IUSE: EHR also seeks to support projects that have high potential for broader societal impacts, including improved diversity of students and instructors participating in STEM education, professional development for instructors to ensure adoption of new and effective pedagogical techniques that meet the changing needs of students, and projects that promote institutional partnerships for collaborative research and development. IUSE: EHR especially welcomes proposals that will pair well with the efforts of [NSF INCLUDES](#) to develop STEM talent from all sectors and groups in our society.

For all the above objectives, the National Science Foundation invests primarily in evidence-based and knowledge-generating approaches to understand and improve STEM learning and learning environments, improve the diversity of

STEM students and majors, and prepare STEM majors for the workforce. In addition to contributing to STEM education in the host institution(s), proposals should have the promise of adding more broadly to our understanding of effective teaching and learning practices.

The IUSE: EHR program features two tracks: (1) Engaged Student Learning and (2) Institutional and Community Transformation. Several levels of scope, scale, and funding are available within each track, as summarized in the [solicitation](#).

Deadlines vary depending on Track / Level.



NSF: Smart and Connected Health

The goal of the interagency Smart and Connected Health (SCH): Connecting Data, People and Systems program [[NSF 18-541](#)] is to accelerate the development and integration of innovative computer and information science and engineering approaches to support the transformation of health and medicine. Approaches that partner technology-based solutions with biomedical and biobehavioral research are supported by multiple agencies of the federal government including the National Science Foundation (NSF) and the National Institutes of Health (NIH). The purpose of this program is to develop next-generation multidisciplinary science that encourages existing and new research communities to focus on breakthrough ideas in a variety of areas of value to health, such as networking, pervasive computing, advanced analytics, sensor integration, privacy and security, modeling of socio-behavioral and cognitive processes and system and process modeling. Effective solutions must satisfy a multitude of constraints arising from clinical/medical needs, barriers to change, heterogeneity of data, semantic mismatch and limitations of current cyberphysical systems and an aging population. Such solutions demand multidisciplinary teams ready to address issues ranging from fundamental science and engineering to medical and public health practice.

The SCH Program:

- takes a coordinated approach that balances theory with evidenced-based analysis and systematic advances with revolutionary breakthroughs;
- seeks cross-disciplinary collaborative research that will lead to new fundamental insights; and
- encourages empirical validation of new concepts through research prototypes, ranging from specific components to entire systems.

The purpose of this interagency program solicitation is to support the development of technologies, analytics and models supporting next generation health and medical research through high-risk, high-reward advances in computer and information science, engineering and technology, behavior and cognition. Collaborations between academic, industry, and other organizations are strongly encouraged to establish better linkages between fundamental science, medicine and healthcare practice and technology development, deployment and use. This solicitation is aligned with national reports calling for new partnerships to facilitate major changes in health and medicine, as well as healthcare delivery and is aimed at the fundamental research to enable these changes. Realizing the promise of disruptive transformation in health, medicine and/or healthcare will require well-coordinated, multi-disciplinary approaches that draw from the computer and information sciences, engineering, social, behavioral, cognitive and economic sciences, biomedical and health research. Only Integrative proposals (INT) spanning up to 4 years with multi-disciplinary teams will be considered in response to this solicitation.

Application Deadline: December 11, 2019



The Retirement Research Foundation

The [Retirement Research Foundation](#) funds projects that have a regional or national impact on older Americans. Of particular interest are projects that seek causes and solutions to significant problems facing older adults, ages 65 and older, through support of applied and policy research for which federal funding is not available.

LOI Deadline: December 1, 2019

Proposal Deadline: February 1, 2020

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Spencer Foundation: Small Education Research Projects

The [Spencer Foundation](#) was established in 1962 to investigate ways in which education, broadly conceived, can be improved around the world. The foundation is committed to supporting high-quality investigation of education through its research programs and to strengthening and renewing the educational research community through its fellowship and training programs and related activities.

To advance this mission, the foundation is accepting applications for its [Small Research Grants Program](#), which supports education research projects with budgets of \$50,000 or less. Projects may not be longer than five years in duration.

In keeping with the Foundation's mission, the Program aims to fund academic work that will contribute to the improvement of education, broadly conceived. Historically, grants have supported research projects on a range of topics and disciplines, including education, philosophy, neuroscience, psychology, sociology, economics, history, and anthropology, and that employ a wide range of research methods. The foundation welcomes methodological diversity in answering pressing questions and is open to projects that use a wide array of

research methods, including quantitative, qualitative, ethnographies, design-based research, participatory, and historical.

Proposal Deadline: November 1, 2019

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Innovation Challenge is coming! This year's event occurs September – December, 2019 and participation has been opened to tri-college students. Students will compete for over \$21,000 in cash and additional prizes. Hype Night takes place September 24 from 5:30-8:00 pm at The NDSU Alumni Center. Everyone is welcome to this kick-off event – invite your students and come learn more about Innovation Challenge!

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FDA Public Meeting: Smarter Food Safety

The U.S. Food and Drug Administration (FDA) has announced that it will hold a public meeting on October 21, 2019, to hear from a broad cross-section of stakeholders on a modern approach, called "[A New Era of Smarter Food Safety](#)," that the agency is planning to take to strengthen its protection of the food supply. The input received at this meeting, and in comments submitted to the accompanying [Federal Register docket](#), will help shape an FDA Blueprint for a New Era of Smarter Food Safety. The intent is for the strategic plan to outline how this new approach will address public health challenges, including being able to trace sources of contaminated foods and using new predictive

analytics tools like artificial intelligence to assess risks and prioritize the agency's work and resources.

- [Learn more about the New Era >>](#)
- [Learn more about the meeting >>](#)
- [Register to attend in-person or online >>](#)

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NDSU Rodent Training Series

The NDSU Rodent training series is a 4 course training series which covers basic mouse handling and techniques. The series is designed to provide foundational training and experience for faculty, staff, and students. Participation in all sessions is encouraged. Space is limited so register early.

Fall Course Schedule:

- **Anesthesia, Euthanasia, Necropsy**
Wednesday, October 9 | 8-9:30 AM | Sudro 207
[Register for this session >>](#)
- **Breeding, Genotyping, Injections**
Wednesday, October 30 | 3-4:30 PM | Van Es 107
[Register for this session >>](#)
- **Venipuncture**
Wednesday, November 20 | 3-4:30 PM | Van Es 107
[Register for this session >>](#)

The Rodent Training Series is sponsored by the Vice President for Research and Creative Activity. If you have questions about these sessions, please contact the IACUC Administrator, Josie Hayden, at 701.231.8114 or josie.hayden@ndsu.edu.

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National Council of University Research Administrators Education Program Workshops

Sponsored Programs is sponsoring three webinars that are a part of the National Council of University Research Administrators (NCURA) education program.

NIH Fundamentals Workshop:

The NIH Fundamentals provides a primary basis of understanding of proposals to and awards from the National Institutes of Health (NIH). This workshop will give you the basics and we will walk you through the grants process, and give you an overview of key resources and websites you will need to be successful. The program is perfect for someone new to Research Administration, as well as for Research Administrators seeking to expand their knowledge of federal funding agencies. The curriculum provides an overview of the policies and procedures essential to preparing successful proposals to and managing grant awards from the NIH.

Date: October 16, 2019

Time: 1:30PM – 5:00PM

Location: Research 1, Room 148/154

Financial Research Compliance Workshop:

The Financial Research Compliance workshop is a professional development opportunity that focuses primarily on the financial regulatory compliance aspects of Research Administration. This workshop provides an in-depth look at financial compliance issues through a combination of lecture, case studies, review of Federal audit reports, and a discussion of best practices.

Date: November 20, 2019

Time: 1:30PM – 5:00PM

Location: Research 1, Room 148/154

NSF Fundamentals Workshop:

The NSF Fundamentals workshop provides a primary basis of understanding of proposals to and awards from the National Science Foundation (NSF). The program is perfect for someone new to research administration, as well as for research administrators seeking to expand their knowledge of federal funding agencies. The curriculum provides an overview of the policies and procedures essential to preparing successful proposals to and managing grant awards from NSF.

This workshop took place September 18, 2019.

[Access the recording >>](#)

If you have any questions about these webinars, please contact the Sponsored Programs Office at ndsu.research@ndsu.edu or call 701-231-8045.

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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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