

RCA UPDATE

May 30, 2023

Sheridan McNeil named Director of Tribal Partnerships

Sheridan McNeil has been named Director of Tribal Partnerships at the North Dakota Established Program to Stimulate Competitive Research (ND EPSCoR) in the Office of Research and Creative Activity at NDSU. From this role, Sheridan will lead strategic engagement opportunities, special projects and other initiatives with the state's tribal nations and Tribal Colleges and Universities as part of statewide efforts to foster competitive research on behalf of the state of North Dakota.



ND EPSCoR partners with 10 North Dakotas institutions of higher learning, including five tribal colleges and universities, to develop, implement, fund and manage several STEM-related projects for students across North Dakota. The ND EPSCoR Steering Committee evaluates and advises the overall program.

McNeil was career and technical education director and dean of instruction at United Tribes Technical College over the past seven years and in public health and education on Standing Rock prior to then. She attained degrees in education, including a master's degree in curriculum and instruction, from Sitting Bull College. She is also a member of the

Standing Rock and Sisseton Wahpeton/Lakota Oyates and a descendant of White Earth Anishinaabe and Spirit Lake Dakota Oyates.

"I am excited to start a new journey with ND EPSCoR as the Director of Tribal Partnerships," says McNeil. "I feel my experiences and knowledge of tribal colleges and tribal communities will help build capacity, strengthen pathways to education and open communication to explore research opportunities that are respectful to our Indigenous nations in North Dakota."

McNeil will report directly to NDSU Vice President for Research and Creative Activity Colleen Fitzgerald with a dotted line to ND EPSCoR Executive Director Jolynne Tschetter.

"We look forward to Sheridan fostering equitable partnerships and ensuring ND EPSCoR resources align with TCU priorities so that programming best serves and supports North Dakota communities in the STEM sphere," said Fitzgerald. "Her background and knowledge will prove valuable to researchers across the state as they work with our partners at the Tribal Colleges and Universities and the tribal nations."

McNeil's first day will be June 5, 2023.

RCA Internal Programs Awardees

In FY2023, the office of Research and Creative Activity supported 66 faculty from 27 departments across all seven academic colleges through its internal funding programs, for a total investment of more than \$100,000.

Congratulations to all awardees!

RESEARCH DEVELOPMENT
TRAVEL AND CONFERENCE
SUPPORT

Steve Travers
Biological Sciences
Anna Maria Visilia
Landscape Architecture

Lisa Arnold

English

Sara Bano

School of Education

Anne Blankenship

History, Philosophy, and Religious

Studies

Sarah Boonstoppel

Political Science

Surya Sarat Chandra Congress

Civil, Construction and

Environmental Engineering

Amanda Cordova

School of Education

Sarah Crary

School of Education

Laura Dahl

School of Education

Joe Deutsch

Health, Nutrition, and Exercise

Sciences

Jordi Estevadeordal

Mechanical Engineering

Elizabeth Gilblom

School of Education

Amy Gore

English

Charlott Greub

Architecture

Huichi Huang

Accounting and Information

Systems

Syeed Md Iskander

Civil, Construction and

Deirdre Voldseth

School of Natural Resource

Sciences

Justin Wageman

School of Education

Nate Wood

School of Education

Wenjie Xia

Civil, Construction and

Environmental Engineering

Mijia Yang

Civil, Construction and

Environmental Engineering

Yao Yu

Civil, Construction and

Environmental Engineering

Yan Zhang

Mechanical Engineering

RESEARCH SUPPORT SERVICES

Samiran Banerjee

Microbiological Sciences

Michael Christoffers

Plant Sciences

Glenn Dorsam

Microbiological Sciences

Jordi Estevadeordal

Mechanical Engineering

Natasha Fillmore

Pharmaceutical Sciences

Rajani Ganesh Pillai

Environmental Engineering

Ajay Kumar Jha
Computer Science

Lei Jiang

School of Education

Daniel Kenzie

Pharmacy Practice

Matthew Kirkwood

Architecture

Chau Le

Civil, Construction and

Environmental Engineering

Trung Le

Civil, Construction and

Environmental Engineering

Ivan Lima

Electrical and Computer

Engineering

Jenny Linker Zarak

Health, Nutrition, and Exercise

Sciences

Shuning Lu

Communication

Zoltan Majdik

Communication

Sijo Mathew

Pharmaceutical Sciences

Christi McGeorge

Human Development and Family

Science

Julia Muzzy Williamson

Pharmacy Practice

Kjersten Nelson

Political Science

Management and Marketing

Barney Geddes

Microbiological Sciences

Amy Gore

English

Ang Guo

Pharmaceutical Sciences

Carolyn Hammer

Animal Science

Erik Hobbie

Physics

Seungmin Kang

Health, Nutrition, and Exercise

Sciences

Shuning Lu

Communication

Onnolee Nordstrom

Management and Marketing

Harun Pirim

Industrial and Manufacturing

Engineering

Birgit Pruess

Microbiological Sciences

Kelsey Slater

Health, Nutrition, and Exercise

Sciences

Steve Travers

Biological Sciences

EQUIPMENT REPAIR MATCH

FUND

Amber O'Shea

School of Education

Cailen O'Shea

School of Education

Sheela Ramamoorthy

Microbiological Sciences

Kolby Schaeffer Fraase

Nursing

Regin Schwaen

Architecture

Teresa Shume

School of Education

Kelsey Slater

Health, Nutrition, and Exercise

Sciences

Mark Strand

Pharmacy Practice

Jeremy Straub

Computer Science

Fardad Azarmi

Mechanical Engineering

Natasha Fillmore

Pharmaceutical Sciences

Jeffrey Johnson

Psychology

Virginia Montgomery

Animal Science

Mukund Sibi

Chemistry and Biochemistry

Sathish Venkatachalem

Pharmaceutical Sciences

Jiale Xu

Civil, Construction, and

Environmental Engineering

Replay of May 25 Economic Diversification Research Fund Zoom session

A replay of the session, featuring NDSU VPR Colleen Fitzgerald is now <u>available</u>.

Original Post:

The higher education funding bill passed by the ND legislature and signed by Governor Burgum includes a new Economic Diversification Research Fund that provides \$5 million in total to NDSU (\$2.5 million each year of the biennium) for research grants.

The fund is aimed to provide grants that meet these criteria:

- Stimulate economic activity across the state through innovation of new technology, concepts, and products
- Promote job creation and career and wage growth
- Enhance health care outcomes
- Address loss of revenue and jobs in communities with economies that depend primarily on the fossil fuel industry
- Provide experiential learning opportunities for students

While the appropriated funds could be available to NDSU as early as July 1, 2023, the SBHE must first approve guidelines for the program prior to any funds being disbursed for research.

Feedback on recent candidates requested

Your feedback for recent candidates for positions in RCA is requested. Review recordings of each open forum and provide your feedback on both roles by EOD Wednesday, May 31.

RCA IED DIRECTOR

- Will Cromarty | Open Forum Recording
- Mark Vaux | Open Forum Recording
- Cynthia Graffeo | Open Forum Recording

Provide feedback for RCA IED Director candidates

NDSU RESEARCH FOUNDATION EXECUTIVE DIRECTOR

• Zane C. Gernhart

Provide feedback for the NDSU Research Foundation Executive Director candidate

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 the May 2023 edition:

- May 2023 Select List of Humanities, HSS, and Arts
 Opportunities & News We list funding
 opportunities for scholars in the humanities, social
 sciences and the arts.
- Understanding Forensic Sciences Funding We discuss funding from the
 National Institute of Justice for the forensic sciences.
- Consider Joining the NSF Rotator Program We discuss opportunities to serve as a Program Officer at NSF and why you should consider participating.
- **Tips for Pursuing Funding from Industry** We discuss what faculty should know about research funding from industry.
- **AFRI Sustainable Agricultural SYSTEMS RFA** We discuss the USDA SAS program and how to define an agricultural system in this context.
- Make Your Case for Value-Added Benefits We discuss why convincing your reviewers and funder that your proposed research will have value-added benefits is a principal consideration in funding decisions (reprinted from August 2015).
- **Welcoming New Faculty** We discuss key things proposal development and sponsored projects offices can do to orient new faculty when they arrive on campus without overwhelming them (reprinted from the August 2015 issue)
- Implicit Requirements ARPA-H, our newest federal research funding agency held a webinar on April 4. We provide an overview of the topics covered (reprinted from the August 2015 issue)

You can access <u>these and many more articles</u> on the RCA website (requires NDSU log-in).





Federal Funding Opportunities for Equipment and Infrastructure

This report produced by Lewis-Burke provides information about federal funding opportunities in equipment and infrastructure.

CONTENTS

- National Institutes of Health
- CO6 Research Facilities Construction Grant
- National Science Foundation
- Major Research Instrumentation
- Mid-Scale Research Infrastructure-1
- Mid-Scale Research Infrastructure-2
- Materials Research Science and Engineering Centers
- Earth Sciences Instrumentation and Facilities
- Oceanographic Facilities and Equipment Support
- Department of Defense
- Defense University Research Instrumentation Program
- National Endowment for the Humanities
- Infrastructure and Capacity Building Challenge Grants
- Economic Development Administration
- Disaster Supplemental Funding

Read the report (requires NDSU log-in).

New NSF Tool - PRoSPCT

Is my project suitable for the proposal?

NSF has launched a tool called <u>PRoSPCT</u> – Program Suitability & Proposal Concept Tool. This tool helps PIs contact NSF to determine if their project is suitable for the proposal prior to submission. PRoSPCT will ask for information about the PI(s), NSF unit(s) and the project idea. An assigned Program Officer will respond to your inquiry.

More information about this tool can be found in the **March 2023** monthly *Research Development & Grant Writing Newsletter* found on the <u>RCA website</u> (requires NDSU log-in).

Funding Agency Requests for Information

- Department of Energy Facilitating a Domestic Critical Minerals Future:
 Carbon Ore, Rare Earths and Critical Minerals (CORE-CM) Initiative [DE-FOA-0003075]
- National Science Foundation Future Topics for Workforce Development in Emerging Technology Career Pathways [NSF 23-100]
- National Science Foundation Capacity of Institutions of Higher Education to Produce Graduates with Degrees, Certificates and Relevant Skills Related to Artificial Intelligence [NSF 23-099]

Biosafety Cabinet Certification service on hold at UND

The UND Department of Public Safety will be putting the Biosafety Cabinet training certification service on hold starting July 31, 2023. The Safety office will make their best efforts to schedule annual certifications until that time.

For future services, the Safety office recommends Kurt Joly, owner of <u>BioCert</u> <u>Testing</u> from Minneapolis (biocerttesting.com)

Contact Brandon Gustafson, Associate Director – Environmental Health and Safety (701) 231-6299 with any questions.

NIH is looking for peer reviewers

The National Institute of Health (NIH) is looking to expand the pool of peer reviewers with mental health researchers who can bring diverse perspectives to the peer review process. Find out why you might want to apply and how to get involved.



Learn how to get <u>involved >></u>

Virtual Biological Material Workshop

Hosted by Department of Biosafety - The University of Texas Medical Branch and the U.S. Customs and Border Protection (CBP)

June 6 & 7, 2023 10:00 AM - 2:00 PM CDT

UTMB and CBP, in collaboration with federal partner government agencies, are holding this event to explore and discuss requirements for international importation and exportation of biological material shipments.



Meeting will be held via WebEx. Questions can be sent to David Blakeman at dsblakem@utmb.edu or Mary Braswell at mary.a.braswell@cbp.dhs.gov



November 28-30, 2023; Washington DC

Entering its eleventh year, the annual Defense TechConnect (DTC) Summit, colocated with the Fall SBIR/STTR Innovation Conference and Operational Energy and Logistics Summit (OE&L), brings together defense, private industry, federal agency, and academic leadership to accelerate state-of-the-art technology solutions for the military and national security. This year's key focus areas include but are not limited to energy, climate, cyber, biodefense, space, advanced manufacturing, and 5G.

<u>Learn more >></u>

Upcoming Events at a Glance

- TIP Updates Webinar (NSF)
 May 31, 2023, 12:30–1:30 p.m. | Learn more and register >>
- NSF Virtual Grants Conference
 June 5, 2PM June 8, 4PM, 2023 | <u>Learn More >></u>
- Notice of Informational Webinar for NIH Research Enhancement award (R15) Programs

Thursday, June 15, 2023 / 1:30-2:30pm | Learn More >>

Funding Opportunities

DOE: Vehicle Technologies Office Program

- EPA: Evaluation of Antimicrobial Resistance in Wastewater
- International Center for Responsible Gaming: Research on the Impact of Gambling Advertising
- <u>Library of Congress: Connecting Communities Digital Initiative Artist/Scholar in</u>
 Residence
- National Archives: Archival Projects
- National Archives: Public Engagement with Historical Records
- NEA: Our Town **LIMITED**
- NEH: Humanities Connections
- NIH: Developing Measures to Advance Access and Quality in Global Mental Health
 Services
- NIH: NOI Leveraging Social Networks to Promote Widespread Individual Behavior
 Change
- NIH: NOSI Synthetic Biology for Biomedical Applications
- NIJ: Innovations in Measuring Community Perceptions Challenge
- NSF: Boosting Research Ideas for Transformative and Equitable Advances in Engineering
- NSF: DCL Clean Energy Technology RAISE or EAGER Proposals
- NSF: DCL Conference Proposals on Clean Energy Topics
- NSF: Economics
- NSF: Major Research Instrumentation LIMITED
- NSF: NSF Convergence Accelerator
- NSF: Synthesis Center for Understanding Organismal Resilience
- NSF: Workplace Equity for Persons with Disabilities in STEM and STEM Education
- Russel Sage Foundation: Social Sciences Research
- Society for Simulation in Healthcare: Early Career Research Award Program

Upcoming Limited Submission Program Deadlines

<u>Limited submission grant programs</u> 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. Email notifications of interest to ndsu.researchdev@ndsu.edu by **close of business** on the notification deadline date.

If you identify a limited submission opportunity that is not on the list below, please notify ndsu.researchdev@ndsu.edu.

• NSF: Biofoundries

Notification deadline: 05/31/2023

• NEA: Our Town

 Notification deadline: 06/07/2023
 NSF: Major Research Instrumentation Notification deadline: 06/07/2023

• NIH: Director's Early Independence Awards (DP5 Clinical Trial Optional)
Notification deadline: 06/07/2023

There are a number of limited submission grant programs with upcoming agency deadlines for which we did not receive any notifications of interest. For these programs, marked "First to Notify," approval to move forward with a full proposal submission to the funder will be given on a first come, first served basis.

- <u>Stanley Smith Horticultural Trust: Stanley Smith Horticultural Trust</u> LOI deadline: 06/15/2023
- NSF: Building the Prototype Open Knowledge Network (Proto-OKN)
 Deadline: 06/20/2023
- NSF: Expanding Al Innovation through Capacity Building and Partnerships
 Deadline: 06/26/2023
- NEA: Grants for Arts
 Deadline: 07/06/2023
- HRSA: Healthy Start Initiative Eliminating Racial/Ethnic Disparities
 Deadline: 07/17/2023
- USDA: Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers and Veteran Farmers and Ranchers

Deadline: 07/25/2023

• Mathers Foundation: Grant Program (STEM)

LOI deadline: 07/28/2023

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DOE: Vehicle Technologies Office (VTO) Program Wide Funding Opportunity Announcement

This <u>Funding Opportunity</u> is seeking innovative solutions for on-road and off-road vehicles to develop and accelerate the charging infrastructure and drastically-reduced GHG emissions in support of Administration goals. In partnership with industry, VTO has established aggressive targets to focus research, demonstration and deployment on cost reduction, efficiency, and emissions reduction that improve air quality and improved mobility.

Topic Areas of Interest:

- Batteries and Electrification
- Combustion and Advanced Fuels
- Lightweight Materials
- Energy Efficient Mobility Systems
- Technology Integration

Concept Paper Deadline: June 26, 2023; 4PM

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EPA: National Priorities - Evaluation of Antimicrobial Resistance in Wastewater and Sewage Sludge Treatment and its Impact on the Environment

This <u>Funding Announcement</u> seeks research that will address knowledge gaps in the occurrence, fate and transport, and persistence of antimicrobial resistant organisms and genes found in municipal wastewater effluent and biosolids. The RFA also requests research on combined sewer overflows, septic systems, and small wastewater systems. Research should provide a better understanding of the impact of ARB and ARGs on receiving waters including information on the relative contribution of ARB and ARGs from wastewater as compared to other sources such as animal agriculture, animal husbandry, hospital sources, and direct industrial sources. Research should also support the development of frameworks and methodologies for quantifying risk related to AMR in treated wastewater discharge, water reuse, and biosolids (and biosolids products) land application and beneficial use. Research results should improve our understanding of the nature, extent, selection, and removal of ARB and ARGs found in municipal wastewater effluent and biosolids.

A minimum 25% cost share/match is required.

The International Center for Responsible Gaming Invites Grant Applications for Research on the Impact of Gambling Advertising

The International Center for Responsible Gaming invites investigators to apply for a twoyear grant to study the impact of gambling advertising, including television, digital push notifications. The goal of this initiative is to determine the aspects of advertising that might promote risky or problematic gambling attitudes and behaviors and provide metrics for the development of advertising guidelines for gambling operators and regulators.

Applicants may request up to a total of \$75,000 per year of up to two years plus 15 percent in Facilities & Administration costs. Total amount that may be requested is \$172,500.

The Request for Application and Large Gant application form are available from ICRG.

Application Deadline: September 15, 2023

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Library of Congress: Connecting Communities Digital Initiative Artist/Scholar in Residence

The <u>Artist/Scholar in Residence program</u> supports artists or scholars in the creation of new scholarly and/or artist's works that imaginatively study, experiment with, and/or critique the Library's digital collections, materials, and/or services. Proposed projects should center on one or more of the following groups: Black, Indigenous, Hispanic or Latino, Asian American and Pacific Islander, and/or other communities of color in the 50 U.S. states, the District of Columbia, territories and commonwealths.

The program is open to a broad array of artists and scholars, including (but not limited to): visual artists, conceptual artists, dancers, journalists, cultural critics, independent scholars, academic scholars, and cultural heritage practitioners, including librarians.

National Archives: Archival Projects

The National Archives seeks <u>Archival Projects</u> that will significantly improve online public discovery and use of historical records collections. They welcome projects that engage the public, expand civic education, and promote understanding of the nation's history, democracy, and culture from the founding era to the present day. The Commission encourages projects focused on collections of America's early legal records, such as the records of colonial, territorial, county, and early statehood and tribal proceedings that document the evolution of the nation's legal history.

Collections that center the voices and document the history of Black, Indigenous, and People of Color are especially welcome. In addition, with the 250th anniversary of the Declaration of Independence approaching, the Commission is particularly interested in projects that promote discovery and access to collections that explore the ideals behind our nation's founding and the continuous debate over those ideals to the present day.

Cost share is required – a minimum of 25%.

Optional draft deadline: August 15, 2023

Deadline: November 2, 2023

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National Archives: Public Engagement with Historical Records

The National Historical Publications and Records Commission seeks projects that encourage <u>public engagement with historical records</u>. The idea behind this program is to form collaborations among archivists, educators, historians (including documentary editors) and people working in community-based archives to involve the public in discovering and using historical records. The NHPRC is looking for collaborative projects that create models, tools, and technologies that other institutions can freely adopt to serve other communities.

Projects that center the voices and document the history of Black, Indigenous, and People

of Color are especially welcome. In addition, with the 250th anniversary of the Declaration of Independence approaching, the Commission is interested in projects that promote discovery and access to collections that explore the ideals behind our nation's founding and the continuous debate over those ideals to the present day.

Cost share is required – a minimum of 25%.

Optional draft deadline: August 15, 2023

Deadline: November 2, 2023

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NEA: Our Town – LIMITED

<u>Limited submission grant programs</u> 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.

Notify RCA by June 7, 2023, 4pm, if you are interested in submitting to this program.

Arts, culture, and design are essential to building strong communities where all people can thrive. Through <u>Our Town</u>, the NEA is proud to support creative placemaking projects that integrate arts, culture, and design into local efforts that strengthen communities over the long-term. The program demonstrates the ways in which artists, culture bearers, and designers can help to:

- Bring new attention to or elevate key community assets and issues, voices of residents, local history, or civic infrastructure
- Inject new or additional energy, resources, activity, people, or enthusiasm into a place, community issue, or local economy
- Envision new possibilities for a community or place—a new future, a way of approaching a new opportunity, overcoming a challenge, or problem-solving
- Connect communities, people, places, and economic opportunity through physical spaces or new partnerships and relationships

Honor traditions shaped by the lived experience of a community's residents, such as music, dance, design, crafts, fashion, cuisine, and oral expression
 Our Town projects engage a wide range of local stakeholders in efforts to advance local economic, physical, or social outcomes in communities. Competitive projects are responsive to unique local conditions, authentically engage communities, advance artful lives, and lay the groundwork for long-term systems change.

LIMITED SUBMISSION: Universities/Institutions are limited to two applications.

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NEH: Humanities Connections

The <u>Humanities Connections</u> program seeks to expand the role of the humanities in undergraduate education at two- and four-year institutions by encouraging partnerships between humanities faculty and their counterparts in other areas of study. Awards support the planning or implementation of curricular projects connecting the humanities to the physical and natural sciences; pre-service or professional programs, including law and business; computer science, data science, and other technology-driven fields; or other non-humanities departments or schools. Projects must incorporate the approaches and learning activities of both the humanities and the non-humanities disciplines involved.

Competitive Humanities Connections proposals will demonstrate:

- How the proposed project expands the role of the humanities in the undergraduate curriculum at the applicant institution(s)
- Substantive and purposeful integration of the subject matter, approaches, and learning activities of two or more disciplines (with a minimum of one in and one outside of the humanities)
- Collaboration between faculty from two or more departments or schools (with a minimum of one in and one outside of the humanities)
- A curricular structure that your institution could sustain over the long term, including interdisciplinary minors or certificates; curricular pathways such as concentrations within majors or general education programs; and other models appropriate to the institution

The Humanities Connections program includes two funding levels: Planning and Implementation.

NIH: Developing Measures to Advance Access and Quality in Global Mental Health Services (R34 Clinical Trail Not Allowed)

This Notice of Funding Opportunity (NOFO) [RFA-MH-23-300] aims to support the development and pilot testing of outcomes-focused access and quality measures that have the potential to be reviewed, approved and implemented by the relevant regulatory or governing bodies in low- and middle-income countries (LMICs) such as Ministries of Health or government-sponsored health insurance schemes. This program intends to foster pilot mental health services research in measure development and testing with the potential for high public health impact. National Institute of Mental Health (NIMH) seeks to advance the development of novel and innovative measures to assess changes in access to mental health care, the effectiveness of evidence-based care, and the quality of care across programs or clinical settings, utilizing real-world data.

All applications are expected to generate implementable measures with existing data or feasible modeling exercises. These applications should provide innovative approaches to sustain the data flow necessary to scale up the use of this measure in different mental health care settings.

NIMH encourages investigators to develop and leverage solid research-practice partnerships with public and private stakeholders, so the research follows a deployment-focused model of services design and testing. Deployment-focused studies consider the perspective of relevant stakeholders and key characteristics of settings intended to implement optimized mental health interventions. This attention to end-user views and characteristics of intended policy, management, clinical and/or community practice settings intends to ensure that resultant interventions and service delivery strategies are feasible and scalable and that the research results will have utility for end users. Such communication and collaboration will ensure findings are relevant and practical, create opportunities for research that is not otherwise feasible, and enable stakeholders to anticipate relevant research initiatives in their planning and activities.

Letter of Intent Deadline: September 18, 2023

NIH: NOI - Intent to Publish a Notice of Funding Opportunity for "Leveraging Social Networks to Promote Widespread Individual Behavior Change" (R01 Clinical Trial Optional)

This Notice [NOT-AG-23-006] informs the research community that the National Institute on Aging (NIA) and the National Cancer Institute (NCI) intend to issue a Request for Application (RFA) for new applications proposing basic observational or experimental behavioral and/or social science R01 research projects that test how intrapersonal and interpersonal mechanisms of behavior change interact with, influence, or are influenced by characteristics of social networks, with implications for health. Research supported through this Funding Opportunity will examine at least two levels of analysis: interpersonal processes and social network characteristics. Projects will identify targets for future social network health behavior change interventions across the lifespan, especially in populations in which such interventions are currently largely underdeveloped and untested (such as populations in mid- and late life). Basic research to develop, refine, or optimize measures (assays) of putative targets (e.g., intra/interpersonal mechanisms of behavior change and/or social network characteristics) will also be supported by this Funding Opportunity.

Estimated Application Deadline: November 17, 2023

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NIH: NOSI – Synthetic Biology for Biomedical Applications

One of the great challenges in biomedical research is to be able to quantitatively predict, test, and harness the complex dynamics of biological systems. Synthetic biology is the design and construction of new biological parts and systems, and the re-design of existing and natural biological systems for specific purposes. In contrast to the traditional genetic engineering approach, which usually focuses on individual genes and proteins, synthetic biology adopts a more systematic approach targeting entire pathways, networks, and whole organisms with quantitative control and modulation. Gaining new insights into the complex and dynamic biological pathways of designer cells and tissues and developing cell-based and cell-free diagnostics and therapies are at the frontiers of biomedical science. Enabling these de novo biological systems will require the ability to design and build complex pathways with endogenous or novel functions and with predictable and

quantitative responses to endogenous or environmental signals. Achieving this paradigm will allow the testing of hypotheses on complex biological systems and the development of novel therapeutic strategies and diagnostic capabilities. To improve the reach and impact of engineering biology on human health, an integrative research plan based on collaborations of synthetic biologists with computational scientists, cell biologists, engineers, geneticists, developmental biologists, and/or physician scientists is strongly recommended.

The overarching goal(s) of this Notice of Special Interest are to:

- Develop tools and technologies to control and reprogram biological systems
- Apply synthetic biology approaches for the development of biomedical technologies
- Increase the fundamental understanding of synthetic biology concepts as they relate to human health
- Gain fundamental biological knowledge through the application of synthetic biology approaches

For a full list of relevant Funding Opportunities related to this Notice of Special Interest (NOSI) [NOT-EB-23-002] please follow the link provided.

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NIJ: Innovations in Measuring Community Perceptions Challenge

This is an open competition to develop new methods for capturing <u>Community</u> <u>Perceptions</u> of police and public safety. To facilitate comparing entries using similar methods, entries will be accepted under two categories; each category measures the same five constructs.

Category 1 is for approaches that use a survey instrument, regardless of whether the sampling design is probability, nonprobability, or a combination of the two. Solutions that solely rely upon law enforcement contact surveys will not be considered.

Category 2 is for approaches that use non-survey instrument methods to measure constructs. For example, those that gather information without direct interaction with community members via social media data, administrative data, and other proxy data, perhaps combined with mobile telephone data, or some combination of the above, to

Deadline: July 31, 2023

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NSF: Boosting Research Ideas for Transformative and Equitable Advances in Engineering (BRITE)

This solicitation [NSF 23-592] seeks proposals that enable experienced researchers with active research programs to take risks not typically associated with proposals submitted to core programs by pivoting to research areas where they have no proven track record, gaining knowledge from a different discipline and using it to forge new directions in their research field, or exploring divergent, bold, and ambitious research ideas where the expected scientific outcomes are highly uncertain and the potential to transform a field is significant, or experienced researchers with a hiatus in research activity to reestablish a foundation for sustained research productivity and broader impacts. It is grounded in the expectation that leveraging prior science and engineering outcomes, harnessing talent from the broad scientific research community, enabling time for reflection and deliberation, including by learning new skills and through immersion in new areas, and supporting intellectual risk taking will lead to scientific and technological innovation.

All BRITE proposals are expected to address fundamental research that creates new knowledge in one or more program areas of the Division of Civil, Mechanical and Manufacturing Innovation (CMMI). BRITE proposals must identify key research outcomes and describe the research plans for the period of funding sought. Although collaborative proposals are not permitted and will be returned without review, the PI can include a collaborator as senior personnel. The role of such senior personnel should be limited to reflect the intended investment in the PI.

The solicitation includes three funding tracks in support of experienced scientists and engineers (tenured or equivalent): Pivot, Relaunch, and Fellow.

The BRITE Pivot Track is intended to enable researchers to quickly adapt to the
fast-moving pace of research by either leveraging their experience when pursuing
a pivot into a field of research where they have no proven track record, or by
incorporating research tools and methodologies from other fields of research to
advance knowledge in their areas of expertise.

- The **BRITE Relaunch** Track is intended to enable researchers who have had a hiatus in research activity to relaunch back into active research by reestablishing a foundation for sustained productivity and broader impacts in the context of a research idea with significant potential for advancing knowledge.
- The BRITE Fellow Track is intended to support researchers who have
 demonstrated significant impact through and beyond scientific output to request
 extended time and freedom to use their intellectual creativity to explore
 divergent, bold, and ambitious research ideas where the expected scientific
 outcomes are highly uncertain and, therefore, high risk.

Deadline: September 28, 2023

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NSF: DCL - Clean Energy Technology RAISE or EAGER Proposals

With this Dear Colleague Letter (DCL) [NSF 23-109], the National Science Foundation (NSF) invites interdisciplinary groups of PIs to develop potentially transformative, convergent, fundamental research proposals in the area of clean energy technologies. Two kinds of proposals will be considered: Research Advanced by Interdisciplinary Science and Engineering (RAISE) and Early-concept Grants for Exploratory Research (EAGER).

Proposals that address barriers and opportunities for technology adoption, economic and societal impacts of technology development, social justice considerations, or social and environmental sustainability of clean energy technologies are strongly encouraged.

RAISE and EAGER proposals require the submission of a Concept Outline that describes the research and how it will benefit clean energy technology as defined above. Concept outlines must focus on one or more of the following areas:

- 1. Hydrogen, fusion, and/or geothermal technologies
- 2. Industrial heat and/or energy efficiency technologies
- 3. Fundamental challenges of enabling offshore wind/wave technologies
- 4. Critical materials for clean energy technologies their recovery, reuse, and recycling
- 5. Net-zero fuels and bioenergy
- 6. Education and workforce development efforts

EAGER Concept Outline Deadline: June 14, 2023 RAISE Concept Outline Deadline: July 12, 2023

NSF: DCL - Conference Proposals on Clean Energy Topics

With this Dear Colleague Letter (DCL) [NSF 23-108], the National Science Foundation (NSF) is calling for conference proposals on identifying collaborative research opportunities for advancing science and technology for clean energy. The goal of these workshops is to initiate new collaborations in clean energy topics within academia or between academia and Federally Funded Research and Development Centers (FFRDCs). It is encouraged that PIs organize a topical workshop in collaboration with one or more FFRDCs that have significant research activity in the proposed topic.

Conference proposals should present promising new ideas and a vision for advancing NSF's investments in fundamental convergent research in the chosen clean energy topic. Conference proposals should include plans to identify activities to catalyze strong new collaborations between FFRDCs and academia or between academic institutions that will advance use-inspired research with high potential for significant societal and sustainability impacts.

Preference will be given to conference themes aligned with the following topics:

- Hydrogen, fusion, and/or geothermal technologies with a focus on enabling new science and technology discovery and deployment within the scope of any of the eight NSF Directorates participating in this DCL
- Industrial heat and/or energy efficiency technologies with a focus on enabling new science and technology discovery and deployment within the scope of any of the eight NSF Directorates participating in this DCL
- Offshore wind and/or wave energy technologies with a focus on enabling new science and technology discovery and deployment within the scope of any of the eight NSF Directorates participating in this DCL
- Critical materials for clean energy technologies their recovery, reuse, and recycling with a focus on enabling new science and technology discovery and deployment within the scope of any of the eight NSF Directorates participating in this DCL
- Net-zero fuels and/or bioenergy with a focus on enabling new science and technology discovery and deployment within the scope of any of the eight NSF Directorates participating in this DCL
- Needs for education and workforce training, including on topics such as understanding of workforce education and training needs; broadening participation opportunities; and new pedagogical approaches in order to advance

and strengthen the U.S. competitiveness in the research areas listed above. A project's scope may span from pre-college through graduate school and career levels.

Concept Outline Deadline: June 30, 2023

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NSF: Economics

The Economics program [PD 23-1320] supports research designed to improve the understanding of the processes and institutions of the U.S. economy and of the world system of which it is a part. This program also strengthens both empirical and theoretical economic analysis as well as the methods for rigorous research on economic behavior. It supports research in almost every area of economics, including econometrics, economic history, environmental economics, finance, industrial organization, international economics, labor economics, macroeconomics, mathematical economics, and public finance.

The Economics program welcomes proposals for individual or multi-investigator research projects, doctoral dissertation improvement awards, conferences, symposia, experimental research, data collection and dissemination, computer equipment and other instrumentation, and research experience for undergraduates. The program places a high priority on interdisciplinary research. Investigators are encouraged to submit proposals of joint interest to the Economics Program and other NSF programs and NSF initiative areas. The program places a high priority on broadening participation and encourages proposals from junior faculty, women, other underrepresented minorities, Research Undergraduate Institutions, and EPSCoR states.

Deadline: August 18, 2023

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NSF: Major Research Instrumentation (MRI) – LIMITED

<u>Limited submission grant programs</u> 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.

Notify RCA by June 7th, 2023, 4pm, if you are interested in submitting to this program.

The National Science Foundation Major Research Instrumentation (MRI) Program [NSF 23-519] serves to increase access to multi-user scientific and engineering instrumentation for research and research training in our Nation's institutions of higher education and not-for-profit scientific / engineering research organizations. An MRI award supports the acquisition or development of a multi-user research instrument that is, in general, too costly and / or not appropriate for support through other NSF programs.

An MRI proposal may request support for either the acquisition or development of a research instrument in one of the following tracks:

• **Track 1**: Track 1 MRI proposals are those that request funds from NSF greater than or equal to \$100,000 and less than \$1,400,000.

Two proposal submissions are allowed per organization.

• Track 2: Track 2 MRI proposals are those that request funds from NSF greater than or equal to \$1,400,000 up to and including \$4,000,000.

One proposal submission is allowed per organization.

• Track 3: Track 3 MRI proposals are those that request funds from NSF greater than or equal to \$100,000 and less than or equal to \$4,000,000 that include the purchase, installation, operation, and maintenance of equipment and instrumentation to conserve or reduce the consumption of helium.

One proposal submission is allowed per organization.

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NSF: NSF Convergence Accelerator Phases 1 and 2 for the 2023 Cohort - Tracks K, L, M

The National Science Foundation (NSF) Convergence Accelerator program [NSF 23-590] addresses national-scale societal challenges through use-inspired convergence research. Using a convergence approach and innovation processes like human-centered design, user discovery, and team science and integration of multidisciplinary research, the Convergence Accelerator program seeks to transition basic research and discovery into

practice — to solve high-impact societal challenges aligned with specific research themes (tracks).

The NSF Convergence Accelerator implements a two-phase program. Phase 1 awardees receive resources to further develop their convergence research ideas and to identify important partnerships and resources to accelerate their projects. Phase 2 awardees receive significant resources leading to deliverable research prototypes and sustainability plans after completing Phase 1.

This solicitation for FY 2023 invites proposals for the following Track Topics:

Track K: Equitable Water Solutions

Track L: Real-World Chemical Sensing Applications

Track M: Bio-Inspired Design Innovations

Phase 1 Letter of Intent Deadline: July 11, 2023

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NSF: Synthesis Center for Understanding Organismal Resilience

NSF's Directorate for Biological Science (BIO) Division of Integrative Organismal Systems (IOS) seeks to establish a new Synthesis Center for Understanding Organismal Resilience [NSF 23-564] and plasticity in response to complex and dynamic environmental circumstances encountered over a lifespan through the synthesis of varied data sets and types that bridge multiple scales and levels.

The Synthesis Center will enable innovative synthesis and analysis of available biological and related data by providing the vision, infrastructure, and expertise to advance new avenues of inquiry in organismal biology focused on organismal resilience and plasticity. To accomplish this vision, the Synthesis Center will adopt approaches that are based on open science, team science, and data-intensive methods that enable data synthesis, sharing and inclusive collaborations among researchers across multiple levels of biological inquiry that may include genomic, physiological, structural, developmental, behavioral, neural, immunological, and microbiological analyses across some or all the IOS subdisciplines. In addition to supporting data and knowledge synthesis, the Synthesis Center should train new generations of researchers in solving challenging research problems through data-intensive, open, cross-disciplinary, and collaborative science. The Synthesis Center is also expected to serve as an example in effectively engaging diverse

scientists from different types of institutions and across multiple disciplines. These types of data syntheses are expected to provide the basis for fundamental scientific discoveries and/or potentially translational, use-inspired research. In doing so, the Synthesis Center will have a profound impact on the progress of science and society.

Preliminary Proposal Deadline: January 12, 2024

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NSF: Workplace Equity for Persons with Disabilities in STEM and STEM Education

The Workplace Equity for Persons with Disabilities in STEM and STEM Education solicitation [NSF 23-593], which is managed by the Division of Equity for Excellence in STEM in the Directorate for STEM Education, supports fundamental, applied, and translational research that advances knowledge and practice about diverse, equitable, inclusive, and accessible STEM and STEM education workplaces and postsecondary training environments for persons with disabilities.

Proposals should focus on one or more of the following three research themes:

- Studying barriers and solutions to diversity, equity, inclusion, and accessibility in STEM and STEM education workplaces and training settings for persons with disabilities
- Applying intersectional social identity perspectives to investigate characteristics and conditions of STEM and STEM education workplaces and training environments that limit and/or improve diversity, equity, inclusion, and accessibility for persons with disabilities
- Conducting use-inspired and solution-oriented translational research about diverse, equitable, inclusive, and accessible STEM and STEM Education workplaces and training settings for persons with disabilities

Research proposals must address key project design components:

- The inclusion of researchers, experts, and organizations with authentic disability experiences
- The identification of disability type(s) to be investigated;
- The specific STEM and/or STEM education workplaces and postsecondary training settings to be studied

- The use of theoretical and/or conceptual frameworks and robust research hypotheses, questions, designs, methodologies, data analyses, and data interpretation
- A plan to assess the success of the project
- A plan for the accessible dissemination of knowledge and practice outcomes to traditional and new audiences

Deadline: September 19, 2023

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Russel Sage Foundation: Social Sciences Research

For its next research grants deadline, The Russel Sage Foundation will accept letters of inquiry (LOIs) under any of its core programs and special initiatives:

- Behavioral Science and Decision Making in Context
- Future of Work
- Immigration and Immigrant Integration
- Race, Ethnicity, and Immigration
- Social, Political, and Economic Inequality.

It will also accept LOIs relevant to any core program that addresses the effects of social movements, such as drives for unionization and mass social protests, and the effects of racial/ethnic/gender bias and discrimination on a range of outcomes related to social and living conditions in the United States.

LOIs must include specific information about the proposed data and research design. After peer review accepted LOIs will be invited to submit a full proposal.

To learn more about their funding priorities and apply follow this link: https://www.russellsage.org/research/categories/requests-proposals

Letter of Inquiry Deadline: July 26, 2023; 1PM

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Society for Simulation in Healthcare: Early Career Research Award Program

The Society for Simulation in Healthcare (SSH) was established to represent the rapidly growing group of stakeholders who utilize a variety of simulation techniques for

education, assessment, and research in health care. The membership is united by its desire to improve healthcare worker performance and reduce errors in patient care using all types of simulation tools including computer screen-based simulators, task trainers, human patient simulators, virtual reality, hybrid devices, and standardized patients.

In 2013, the Research Committee of the SSH established <u>the Early Simulation Career</u>

Research Award Program to support the development of new investigators and research initiatives.

Early career researchers developing methodologically sound simulation-based research projects using quantitative, qualitative, or hybrid, mixed-method approaches are sought for these awards. Studies that are both innovative and have strong potential for a positive impact on the simulation field are encouraged. The potential impact on the applicant's career is also considered.

Letter of Intent Deadline: August 1, 2023 4PM

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Looking for more funding opportunities?



RCA subscribes to SPIN by InfoEd Global, a database of more than 40,000 funding opportunities. Through this subscription, SPIN is free for current NDSU faculty, staff, and students.

For more information and to access this database, visit the <u>SPIN</u> page on the RCA website. If you have questions, please contact <u>ndsu.researchdev@ndsu.edu</u>.

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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We collectively acknowledge that we gather at NDSU, a land grant institution, on the traditional lands of the Oceti Sakowin (Dakota, Lakota, Nakoda) and Anishinaabe Peoples in addition to many diverse Indigenous Peoples still connected to these lands. We honor with gratitude Mother Earth and the Indigenous Peoples who have walked with her throughout generations. We will continue to learn how to live in unity with Mother Earth and build strong, mutually beneficial, trusting relationships with Indigenous Peoples of our region.