

June 21, 2021

Funding Opportunity Edition

Jefferson Science Fellows Program

The National Academies of Sciences, Engineering, and Medicine (NAEM) announced a call for applications for the 2022 [Jefferson Science Fellows \(JSF\) program](#). Established by the Secretary of State in 2003, this fellowship program serves as an innovative model for engaging the American academic science, technology, engineering, and medical communities in U.S. foreign policy and international development through on-site work at the U.S. Department of State and the U.S. Agency for International Development (USAID).

The JSF program is open to tenured, or similarly ranked, faculty from U.S. institutions of higher learning who are U.S. citizens.

The JSF program is a means for providing the U.S. Department of State access to additional high-level science and technology expertise. This resource can be especially helpful at a time when the Department has given a high priority to science, technology, and engineering in meeting our global diplomacy and development challenges. The Fellows bring a broad range of scientific and technical expertise in areas such as physics, chemistry, information technology, life sciences, engineering, environment, agriculture, health, and social sciences.

To learn more about the JSF program and to apply, visit www.nas.edu/jsf.

Online applications will be accepted from August 2, 2021 through October 15, 2021 at 4 PM.

Education Research Opportunities

There are a number of open funding opportunities for Education Research, including:

- [IES NCSE: Research to Accelerate Pandemic Recovery in Special Education](#)
- [IES: Education Research - Statistics](#)
- [Spencer Foundation: Education Research Conference Grants](#)
- [Spencer Foundation: Research-Practice Partnerships](#)
- [Spencer Foundation: Small Research Grants on Education](#)

Upcoming Limited Submission Program Deadlines

[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. Email notifications of interest to ndsu.researchdev@ndsu.edu.

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

- [NIH: Bridges to the Baccalaureate](#)
Notification Deadline: 06/30/2021
- [NEH: Infrastructure and Capacity Building Challenge Grants](#)
Notification Deadline: 07/14/2021

There are a number of limited submission grant programs with upcoming agency deadlines for which we did not receive any notifications of interest. A full list of those programs is available on the [Limited Submissions page](#). 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. Email notifications of interest to ndsu.researchdev@ndsu.edu.

- [William T. Grant Foundation: Scholars Program](#)
Deadline: 07/07/2021
- [NSF: Partnerships for Innovation](#)
Deadline: 07/14/2021
- [Breast Cancer Alliance: Young Investigator Grants](#)
Deadline: 07/23/2021
- [NSF: ADVANCE](#)
Letter of Intent deadline: 08/02/2021
- [NEA: Our Town](#)
Deadline: 08/05/2021
- [NIH: Director's Early Independence Awards](#)
Deadline: 09/03/2021
- [NSF: Research Traineeship Program \(NRT\)](#)
Deadline: 09/06/2021

FUNDING OPPORTUNITIES

- [DARPA: COmpact Front-end Filters at the ElEment-level \(COFFEE\)](#)
- [DARPA: Morphogenic Interfaces – Proposers Day](#)
- [DEPSCoR: Research Collaboration](#)
- [IES NCSEr: Research to Accelerate Pandemic Recovery in Special Education](#)
- [IES: Education Research - Statistics](#)
- [NDSU Foundation: Impact Fund](#)
- [NEH / NSF: Documenting Endangered Languages](#)
- [NEH: Humanities Connections](#)
- [NIH NIA: Research and Entrepreneurial Development Immersion](#)
- [NIH NIDA: Animal Genomics Program](#)
- [NSF: Biophotonics](#)
- [NSF: Nanoscale Interactions](#)
- [NSF: Science of Organizations](#)
- [Spencer Foundation: Education Research Conference Grants](#)
- [Spencer Foundation: Research-Practice Partnerships](#)
- [Spencer Foundation: Small Research Grants on Education](#)
- [Valent: Carbon Sequestration in Agricultural Soils](#)

EVENTS

- [SHARPhub Webinars for Innovators and Entrepreneurs](#)
- [Workshops for Health Professionals](#)

Looking for more funding opportunities?



On January 1, NDSU transitioned to a new funding opportunity database subscription: SPIN by InfoEd Global. SPIN is free for current NDSU faculty, staff, and students.

For more information, visit the [SPIN page](#) on the RCA website. If you have questions, please contact nds.researchdev@nds.edu.

DARPA: COmpact Front-end Filters at the EIElement-level (COFFEE)

The Defense Advanced Research Projects Agency (DARPA) Microsystems Technology Office (MTO) seeks innovative proposals in the area of radio frequency (RF) filtering, with the specific aim to produce front-end RF filters that protect the elements of digital Active Electronically Scanned Arrays (AESAs) against interference in increasingly crowded RF spectrum environments. [Learn more >>](#)

Abstract deadline: July 19, 2021

[^^](#)

DARPA: Morphogenic Interfaces – Proposers Day

The Defense Advanced Research Projects Agency (DARPA) Defense Sciences Office (DSO) is sponsoring a Proposers Day webcast to provide information to potential proposers on the objectives of an anticipated Broad Agency Announcement (BAA) for the Morphogenic Interfaces (MINT) program. The Proposers Day will be held via prerecorded webcast on

July 9, 2021 from 10:00 AM to 2:00 PM. [Advance registration](#) is required for viewing the webcast and interacting with DARPA to post questions and sidebar discussions.

The MINT program will enhance the performance and persistence of electrochemical systems that power and / or protect critical DoD hardware and platforms. MINT addresses a long-standing challenge in the design of electrochemical systems, namely the irreversible morphological degradation that occurs at the functional interface between different materials. This challenge has forced a trade-off between performance and persistence in electrochemical systems such as batteries and anti-corrosion coatings. By enabling self-regulating interfaces that maintain optimal functionality and performance in electrochemical systems over their entire planned operational life cycle, MINT will break this trade-off resulting in a transformational impact across many electrochemical systems.

Examples of applications that will benefit from the MINT program include long lasting anticorrosion and antifouling coatings, and energy storage and conversion systems with unprecedented combinations of energy density and cycle life. MINT development efforts will be focused across two application-centric Focus Areas (FAs). FA1 will be focused on solid / solid charge transfer interfaces to enable solid-state batteries with unprecedented combinations of energy density and cycle life. FA2 will be focused on solid / liquid and solid / vapor interfaces for high performance corrosion resistant coatings and alloys.

DARPA anticipates releasing the MINT BAA in June 2021. [Learn more >>](#)

[^^](#)

DEPSCoR: Research Collaboration

The objectives of the Defense Established Program to Stimulate Competitive Research (DEPSCoR) are to:

1. increase the number of university researchers in eligible States / Territories capable of performing science and engineering (S&E) research responsive to the needs of the Department of Defense (DoD);
2. enhance the capabilities of institutions of higher education (IHEs) in eligible States / Territories to develop, plan, and execute S&E research that is relevant to the mission of the DoD and competitive for Federal funding; and
3. increase the probability of long-term growth in the competitively awarded Federal funding.

The Research Collaboration funding opportunity [[FOA-AFRL-AFOSR-2021-0007](#)] aims to create basic research collaborations between a **pair** of researchers, namely

1. Applicant / Principal Investigator (PI), a full-time faculty member who has never served as a PI on a prior DoD directly funded research Prime award; and
2. Collaborator/co-Principal Investigator (co-PI), an investigator who will provide mentorship to the Applicant **and** has served as a PI on a DoD directly funded research Prime award active between October 1, 2014, and September 30, 2021.

This structure is aimed at introducing potential applicants to the DoD's unique research challenges and its supportive research ecosystem. Topic areas of interest include:

- Physics of Sensing;
- Complex Networks;
- Modeling of Complex Systems;
- Biomathematics;
- Solid Mechanics;
- Environmental Chemistry;
- Electronic Sensing;
- Nanoscale Computing Devices and Systems;
- Additive Manufacturing; and
- Social Networks and Computational Social Science.

See the full list in the FOA.

Deadline: September 20, 2021

[^^](#)

IES NCSER: Research to Accelerate Pandemic Recovery in Special Education

The National Center for Special Education Research (NCSER) in the Institute of Education Sciences (IES) released its funding announcement for Fiscal Year 2022 (FY 2022): [Research to Accelerate Pandemic Recovery in Special Education](#).

This program seeks to address the urgent challenges districts and schools face in

supporting students with or at risk for disabilities, their teachers, and their families in the aftermath of the pandemic. Grants will support research that

- is directly related to a pandemic-related problem, issue, or intervention (program, policies, practices);
- has the potential to significantly and rapidly improve outcomes for students with or at risk for disabilities; and / or
- will provide actionable and timely results to districts and schools.

There are two sets of deadlines for this competition.

- For the **first deadline**, letters of intent (optional but encouraged) are due June 30, 2021, and the application deadline is August 2, 2021.
- For the **second deadline**, letters of intent (optional but encouraged) are due July 15, 2021, and the application deadline is September 9, 2021.

Grants awarded through this program will be supported by the American Rescue Plan. Due to limited Research in Special Education funds available for new awards, NCSER will not release any additional competitions in FY 2022.

More information about the IES research programs, application process, and deadlines are available on the [IES Funding Opportunities web page](#).



IES: Education Research - Statistical and Research Methodology in Education

The National Center for Education Research (NCER) Institute of Education Sciences (IES) released a funding announcement for Fiscal Year 2022 (FY 2022) for the [Statistical and Research Methodology in Education](#) Grant Program.

This program provides a wide range of methodological and statistical tools that will better enable applied education scientists to conduct rigorous education research. In FY 2022, IES invites applications for Core Grants (previously named Regular Grants) and Early Career Grants.

- The **Core Grants** topic supports the development of new and improved methods as it has in the past, and it now specifically supports the compilation of existing research and information into such products as toolkits, guidelines, compendia, and review papers.
- The **Early Career Grants** topic supports the development of new and improved methods by early career researchers and the maximum award has been increased to \$300,000 to support greater collaboration among researchers and allow greater involvement of postdoctoral fellows and graduate students in the work.

More information about the IES research programs, application process, and deadlines are available on the [IES Funding Opportunities web page](#).

Application deadline: August 12, 2021



NDSU Foundation: Impact Fund

The NDSU Foundation Grants Committee is accepting applications for the 2021 Impact Fund Grant Program, which provides funding for projects that make a significant impact on excellence and the educational experience for students at North Dakota State University. The Impact Fund Grant Program offers grants of \$20,000 to \$75,000 and is supported by annual contributions from alumni and friends of the University.

Applications are accepted from faculty, staff, and recognized student groups.

For additional information and to apply, go to: <https://www.ndsufoundation.com/impact-fund>.

Email Janna Swanson, NDSU Foundation Grants Committee liaison, at janna.swanson@ndsufoundation.com, with further questions.

Deadline: July 26, 2021



NEH / NSF: Dynamic Language Infrastructure - Documenting Endangered Languages

This funding partnership between the National Science Foundation (NSF) and the National Endowment for the Humanities (NEH) supports projects to develop and advance knowledge concerning dynamic language infrastructure in the context of endangered human languages—languages that are both understudied and at risk of falling out of use. Made urgent by the imminent loss of roughly half of the approximately 7,000 currently used languages, this effort aims to exploit advances in human-language technology to build computational infrastructure for endangered language research. The program [[NSF 20-603](#)] supports projects that contribute to data management and archiving, and to the development of the next generation of researchers. Funding can support fieldwork and other activities relevant to the digital recording, documentation and analysis, and archiving of endangered language data, including the preparation of lexicons, grammars, text samples, and databases. Funding is available in the form of one- to three-year senior research grants and conference proposals. Fellowship support is available through a separate funding opportunity administered by NEH: <https://www.neh.gov/program/dli-del-fellowships>.

Deadline: September 15, 2021

^^

NEH: Humanities Connections

The [Humanities Connections](#) program seeks to expand the role of the humanities in undergraduate education at two- and four-year institutions. Awards support innovative curricular approaches that foster productive partnerships among humanities faculty and their counterparts in the social and natural sciences and in pre-service or professional programs (such as business, engineering, health sciences, law, computer science, and other technology-driven fields) in order to encourage and develop new integrative learning opportunities for students.

Humanities Connections projects have four core features:

1. substantive and purposeful integration of the subject matter, perspectives, and pedagogical approaches of two or more disciplines (with a minimum of one in and one outside of the humanities);

2. collaboration between faculty from two or more separate departments or schools at one or more institutions;
3. experiential learning as an intrinsic part of the curricular plan; and
4. long-term institutional support for the proposed curriculum innovation(s).

The Humanities Connections program includes two categories: **Planning** and **Implementation**.

The 2021 Funding Opportunity Announcement will be available July 14, 2021. The 2020 program guidelines are available now for review.

Deadline: September 14, 2021



NIH NIA: Research and Entrepreneurial Development Immersion

The National Institute on Aging (NIA) Research and Entrepreneurial Development Immersion (REDI) program has released several requests for applications (RFAs):

- **Entrepreneurship Enhancement Award** (R25 Clinical Trial Not Allowed) [[RFA-AG-22-003](#)]

The purpose of this program is to promote the development of entrepreneurial education programs that are designed to broaden the skillset of graduate students and postdocs, as well as early career master's, Ph.D., and Dr.P.H. scientists, in fields relevant to the mission of NIA.

Deadline: September 4, 2021

- **Entrepreneurial Small Business Transition Award** (R43/R44 Clinical Trial Optional) [[RFA-AG-22-007](#)]

The goal of this Small Business Innovation Research (SBIR) Grant is to foster the career development of early career scientists with an interest in entrepreneurship by simultaneously supporting their entrepreneurial development and facilitating their transition to industry.

Deadline: September 26, 2021

- **Entrepreneurial Small Business Transition Award** (R41/R42 Clinical Trial Optional) [[RFA-AG-22-014](#)]

The goal of this Small Business Technology Transfer (STTR) Grant is to foster the career development of early career scientists with an interest in entrepreneurship

by simultaneously supporting their entrepreneurial development and facilitating their transition to industry.

Deadline: September 26, 2021

^^

NIH NIDA: Animal Genomics Program

The purpose of the National Institute on Drug Abuse (NIDA) Animal Genetics Program [[PAR-21-244](#)] is to identify genetic, genomic, and molecular (epi)genetic variants that underlie:

1. phenotypes associated with addictive behaviors and / or vulnerability to distinct stages along the substance use disorder (SUD) trajectory (e.g. initial / acute use, escalation of use, acquisition of tolerance, dependence, uncontrolled use, abstinence and relapse or recovery);
2. behaviors associated with SUD (e.g. impulsivity, novelty seeking, delayed discounting, and other genetically-associated phenotypes); and
3. comorbidities that demonstrate genetic correlations with phenotypes and behaviors linked with SUD (e.g. anxiety, stress, poor maternal care, social defeat, and other paradigms).

Applications may examine any type of variant, including single nucleotide variants (SNVs), indels, large and small structural variants, and all types of mobile DNA. NIDA encourages applications that take genomics, multi-omics, and / or data-based approaches that integrate multi-level 'omics data, delineate gene networks, and / or uncover the function of known or newly discovered genetic or epigenetic variants. NIDA expects these studies to uncover novel mechanisms that contribute to SUD and facilitate the discovery of targets for intervention and guide the development of individualized therapeutics to treat these different aspects of SUD.

Upcoming deadlines: July 26, 2021; March 02, 2022

^^

NSF: Biophotonics

The goal of the Biophotonics program [[PD 21-7236](#)] is to explore the research frontiers in photonics principles, engineering and technology that are relevant for critical problems in fields of medicine, biology and biotechnology. Fundamental engineering research and

innovation in photonics is required to lay the foundations for new technologies beyond those that are mature and ready for application in medical diagnostics and therapies. Advances are needed in nanophotonics, optogenetics, contrast and targeting agents, ultra-thin probes, wide field imaging, and rapid biomarker screening. Low cost and minimally invasive medical diagnostics and therapies are key motivating application goals.

Research topics in this program include:

- imaging in the second near infrared window;
- macromolecule markers;
- low coherence sensing at the nanoscale;
- neurophotonics;
- microphotonics and nanophotonics; and
- optogenetics.

Innovative proposals outside of these specific interest areas may be considered. However, prior to submission, it is recommended that the Principal Investigator contact the program director to avoid the possibility of the proposal being returned without review.

Proposals accepted anytime.

^^

NSF: Nanoscale Interactions

The goal of the Nanoscale Interactions program [[PD 21-1179](#)] is to support research to advance fundamental and quantitative understanding of the interactions of nanomaterials and nanosystems with biological and environmental media.

Materials of interest include one- to three-dimensional nanostructures, heterogeneous nano-bio hybrid assemblies, dendritic and micelle structures, quantum dots, and other nanoparticles. Such nanomaterials and systems frequently exhibit novel physical, chemical, photonic, electronic, and biological behavior as compared to the bulk scale. Collaborative and interdisciplinary proposals are encouraged.

Research areas supported by the program include:

- characterization of interactions at the interfaces of nanomaterials and nanosystems, including both simple nanoparticles and complex and / or

heterogeneous composites and nanosystems, with surrounding biological and environmental media;

- development of predictive tools based on the fundamental behavior of nanostructures to advance cost-effective and environmentally benign processing and engineering solutions over full-life material cycles;
- examination of the transport, interaction, and impact of nanostructured materials and nanosystems on biological systems and the environment;
- simulations of nanoparticle behavior at interfaces, in conjunction with experimental comparisons, and new theories and simulation approaches for determining the transport and transformation of nanoparticles in various media; and
- investigations of quantum vibronic and spin phenomena with correlations to nano phenomena.

Proposals accepted anytime.

^^

NSF: Science of Organizations

Organizations -- private and public, established and entrepreneurial, designed and emergent, formal and informal, profit and nonprofit -- are critical to the well-being of nations and their citizens. They are of crucial importance for producing goods and services, creating value, providing jobs, and achieving social goals. The Science of Organizations (SoO) program [[PD 11-8031](#)] funds basic research that yields a scientific evidence base for improving the design and emergence, development and deployment, and management and ultimate effectiveness of organizations of all kinds.

SoO funds research that advances our fundamental understanding of how organizations develop, form and operate. Successful SoO research proposals use scientific methods to develop and refine theories, to empirically test theories and frameworks, and to develop new measures and methods. Funded research is aimed at yielding generalizable insights that are of value to the business practitioner, policy-maker and research communities.

Deadline: September 3, 2021

^^

Spencer Foundation: Education Research Conference Grants

The [Conference Grant Program](#) provides support to scholars to organize small research conferences, focused symposia, or other forms of convenings around important issues in education research. This program is intended to bring together researchers, practitioners, policymakers, and other important collaborators whose expertise, substantive knowledge and practice, theoretical insight, or methodological expertise can be engaged in ways that help to build upon and advance education research. The Foundation encourages applicants to think creatively about how convenings can expand the substantive work and impact of educational research on advancing racial equity. This grant program supports proposals with budgets of \$50,000 or less.

The Foundation rotates the area of focus for this program annually to generate fresh ideas and perspectives on pressing educational challenges. **For this funding cycle Spencer will support conferences related to the topic of critical issues in advancing racial equity in education research.**

Upcoming Deadline: October 13, 2021



Spencer Foundation: Research-Practice Partnerships - Collaborative Research for Educational Change

The [Research-Practice Partnership \(RPP\) Grants Program](#) is intended to support education research projects that engage in collaborative and participatory partnerships with project budgets up to \$400,000 and durations of up to three years. The Foundation accepts Intent to Apply forms once a year in this program.

The Foundation views partnerships as an important approach to knowledge generation and the improvement of education, broadly construed. Over the long term, Spencer anticipates that research conducted by RPPs will result in new insights

into the processes, practices, and policies that improve education for learners, educators, schools, universities, families, and communities.

Intent to Apply deadline: November 10, 2021; Noon



Spencer Foundation: Small Research Grants on Education

The [Small Research Grants Program](#) supports education research projects that will contribute to the improvement of education, broadly conceived, with budgets up to \$50,000 for projects ranging from one to five years. The Foundation accepts applications three times per year.

This program is “field-initiated” in that proposal submissions are not in response to a specific request for a particular research topic, discipline, design, method, or location. The goal for this program is to support rigorous, intellectually ambitious and technically sound research that is relevant to the most pressing questions and compelling opportunities in education.

Deadline: September 1, 2021



Valent: Carbon Sequestration in Agricultural Soils

Valent BioSciences / Valent U.S.A. is seeking novel technologies, methods, and approaches to advance the science of detecting, quantifying, predicting, and enhancing soil organic carbon sequestration. Solutions of interest include:

- novel microbial strains or consortia that promote soil health factors, including the development of stable soil aggregates and the potential to reduce the use of synthetic fertilizers;
- formulation, production, and scale-up technologies for novel microbial strains;
- modelling the long-term impact of the soil microbiome in cycling and storage of soil organic carbon; and

- innovative techniques, including remote sensing, for sampling and quantifying soil carbon.

[View funding opportunity >>](#)

Brief (1-page) proposals due July 23, 2021.

[^^](#)

SHARPhub Webinars for Innovators and Entrepreneurs

The [SHARPhub Program](#) assists life science innovations that have been developed (or are developing) into a startup company with its headquarters and R&D operations in Kansas, Oklahoma, Nebraska, North Dakota, or South Dakota. SHARPhub is hosting a number of upcoming webinars:

June 22, 2021 / 2-3pm

Entrepreneur Workshop Series: Licensing and Partnering agreements

Join the next session in this workshop series, hosted by NIA OSBR and the National Heart, Lung, and Blood Institute Small Business Program. The workshop includes breakout rooms on startup and university license agreements, partnerships and collaboration agreements, and negotiation tips.

[Register now >>](#)

June 25, 2021 / 11:45am-1pm

Taking human health innovation to a new level through SBIR / STTR grants

Learn how to use SBIR funding for new medical technologies, write successful grant applications and avoid the most common mistakes in writing a human health SBIR / STTR grant application.

[Register now >>](#)

[^^](#)

Workshops for Health Professionals

June 24, 2021 / 8:30am-12:30pm

Paul Casella, MFA, is a writer, teacher, editor and producer. Since 1988, Paul has worked with health professionals to improve the clarity and effectiveness of their manuscripts for

publication, formal presentations, grant applications, slides, posters, videos, and other media for scientific purposes.

On June 24, 2021, Paul will visit the NDSU campus to conduct a series of workshops for health professionals:

- Writing for Publication
- Writing Effective NIH Grant Proposals
- Speaking for Success: Strategies for Effective Medical and Scientific Presentations

[Learn more and register >>](#)

This workshop is hosted by NDSU, UND, and the DaCCoTA. The workshop is sponsored by Great Plains IDeA-CTR.

[^^](#)

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.

North Dakota State University does not discriminate on the basis of age, color, disability, gender expression/identity, genetic information, marital status, national origin, public assistance status, race, religion, sex, sexual orientation, or status as a U.S. veteran. Direct inquiries to: Equal Opportunity Specialist, Old Main 201, 701-231-7708 or Title IX/ADA Coordinator, Old Main 102, 701-231-6409.