Early Career / New Investigator Opportunities

Multiple early investigator funding programs currently have open solicitations. These programs exist to provide research and career development opportunities for early career faculty. Details on eligibility requirements can be found in the respective solicitations. If you have any questions about eligibility, please contact ndsu.researchdev@ndsu.edu.

Early Career / New Investigator Programs with Open Solicitations:

- NIH Stephen I. Katz ESI Research Grant Program
  Deadline: January 26, 2021
- DOE Early Career Research Program
  Deadline: February 15, 2021
- USDA-NIFA New Investigator Grants
  Deadlines vary
- NSF CAREER Program
  Deadline: July 26, 2021

NSF: Mid-Career Advancement
The Mid-Career Advancement (MCA) program [NSF 21-516] offers an opportunity for scientists and engineers at the Associate Professor rank (or equivalent) to substantively enhance and advance their research program through synergistic and mutually beneficial partnerships, typically at an institution other than their home institution. Projects that envision new insights on existing problems or identify new but related problems previously inaccessible without new methodology or expertise from other fields are encouraged.

Partners from outside the PI's own sub-discipline or discipline are encouraged, but not required, to enhance interdisciplinary networking and convergence across science and engineering fields.

By (re)-investing in mid-career investigators, NSF aims to enable and grow a more diverse scientific workforce (more women, persons with disabilities, and underrepresented minorities) at high academic ranks, who remain engaged and active in cutting-edge research.

The MCA is the only cross-directorate NSF program specifically aimed at providing protected time and resources to established scientists and engineers targeted at the mid-career (Associate Professor rank or equivalent) stage. Participating programs in the Directorates for Biological Sciences (BIO), Geosciences (GEO), Engineering (ENG), Social, Behavioral and Economic Sciences (SBE), and Education and Human Resources (EHR) will accept MCA proposals. PIs are encouraged to discuss the suitability of their MCA proposal with a program officer from the appropriate directorate (see https://www.nsf.gov/bio/MCA_contacts.jsp).

Deadline: February 1, 2021

FUNDING OPPORTUNITIES

- CDC: Informing Pandemic Response and Recovery
- DoD: Air Force Office of Scientific Research BAA
- DOE: Early Career Research Program
- NEH: Preservation Assistance Grants
- NEH: Sustaining Cultural Heritage Collections
• NIH: Pilot Projects Enhancing Utility and Usage of Common Fund Data Sets
• NIH: Stephen I. Katz ESI Research Grant Program
• North Central Regional Sun Grant Center: Biobased Economy
• NSF / DOE: Distributed Chemical Manufacturing and Engineering the Elimination of End-of-Life Plastics
• NSF: Harnessing the Data Revolution: Data Science Corps
• NSF: CAREER Program
• NSF: Social and Economic Sciences
• Pardee Foundation: Cancer Research
• RWJF: Health Data for Action Data Access Award
• Simons Foundation: Collaboration Grants for Mathematicians
• Spencer Foundation: Racial Equity in Education
• USDA-NIFA: AFRI Sustainable Agricultural Systems
• USDA-NIFA: New Investigator Grants
• William T. Grant Foundation: Improving the Lives of Children and Youth

Looking for Collaborators? Search Researcher Profiles

In Search of Equipment? Check the NDSU Equipment Database

Need to update your profile? Click here to learn how!
**CDC: Conducting Research to Inform Pandemic Response and Recovery of Emergency-Affected Populations by Determining Public Health Needs, Improving Methods, and Integrating Services to Mitigate Morbidity and Mortality (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.

**CDC Informing Pandemic Response and Recovery**: Notify RCA by 12/01/2020, 5:00 p.m. if you are interested in submitting to this program.

The purpose of this funding opportunity [RFA-GH-21-004] is to understand the needs of emergency-affected and displaced populations and estimate morbidity and mortality in the context of the COVID-19 pandemic. The overall goals of this operational research are to a) improve mortality and cause of death estimation during the acute emergency phase, b) understand COVID-19 disease transmission, contributing factors and secondary health consequences, c) study the effects of various hand hygiene interventions on mitigating the spread of COVID-19 and d) understand the mental health impact of COVID-19 to reduce associated morbidity and mortality among displaced populations and in emergency settings.

**LIMITED SUBMISSION**: Only one application per institution is allowed.

**DoD: Air Force Office of Scientific Research BAA**

The Air Force Office of Scientific Research (AFOSR) plans, coordinates, and executes the Air Force Research Laboratory’s (AFRL) basic research program in response to technical guidance from AFRL and requirements of the Air Force. Additionally, the office fosters, supports, and conducts research within Air Force, university, and industry laboratories; and ensures transition of research results to support U.S. Air Force needs. The focus of AFOSR is on research areas that offer significant and comprehensive benefits to our national war fighting and peacekeeping capabilities. These areas are organized and managed in two
scientific Departments, each with specific topic areas of interest.

**Engineering and Information Science**
- Dynamic Materials and Interactions
- GHZ-THz Electronics
- Energy, Combustion, and Non-Equilibrium Thermodynamics
- Unsteady Aerodynamics and Turbulent Flows
- High-Speed Aerodynamics
- Aerospace Composite Materials
- Multiscale Structural Mechanics and Prognosis
- Space Propulsion and Power
- Agile Science of Test and Evaluation

**Physical and Biological Sciences**
- Computational Cognition and Machine Intelligence
- Computational Mathematics
- Dynamical Systems and Control Theory
- Dynamic Data and Information Processing
- Information Assurance and Cybersecurity
- Mathematical Optimization
- Science of Information, Computation, Learning, and Fusion
- Trust and Influence
- Complex Networks
- Cognitive and Computational Neuroscience

*Download the Broad Agency Announcement (BAA) >>*

*This BAA is open until superseded*

---

**DOE Early Career Research Program**
The Department of Energy Office of Science (DOE SC) Early Career Research Program supports the development of individual research programs of outstanding scientists early in their careers and to stimulate research careers in the areas supported by SC, including:
- Advanced Scientific Computing Research (ASCR);
- Basic Energy Sciences (BES);
NEH: Preservation Assistance Grants for Smaller Institutions - 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.

NEH Preservation Assistance Grants: Notify RCA by 11/18/2020, 5:00 p.m. if you are interested in submitting to this program.

Preservation Assistance Grants help small and mid-sized institutions — such as libraries, museums, historical societies, archival repositories, cultural organizations, town and county records offices, and colleges and universities — improve their ability to preserve and care for their significant humanities collections. These may include special collections of books and journals, archives and manuscripts, prints and photographs, moving images, sound recordings, architectural and cartographic records, decorative and fine art objects, textiles, archaeological and ethnographic artifacts, furniture, historical objects, and digital materials. Allowable activities include:

- general preservation assessments;
- consultations with preservation professionals to address a specific preservation issue, need, or problem;
- purchase of storage furniture and preservation supplies;
- purchase of environmental monitoring equipment; and
• education and training.

**LIMITED SUBMISSION**: Only one application is allowed per applicant. Distinct collecting entities of a larger organization may apply under this announcement, such as the library and museum of a university or two historic sites within a historical society.

**NEH: Sustaining Cultural Heritage Collections**
The Sustaining Cultural Heritage Collections program helps cultural institutions meet the complex challenge of preserving large and diverse holdings of humanities materials for future generations by supporting sustainable conservation measures that mitigate deterioration, prolong the useful life of collections, and support institutional resilience: the ability to anticipate and respond to disasters resulting from natural or human activity.

A pre-application webinar for prospective applicants will be held December 3, 2020 at 12:00 p.m. Registration is not required, and a recording will be available for those unable to attend. [Please use this link to join the webinar]

*Optional draft deadline: December 10, 2021
Application deadline: January 14, 2021*

**NIH: Pilot Projects Enhancing Utility and Usage of Common Fund Data Sets (R03 Clinical Trial Not Allowed)**
Several valuable and widely available data sets have been generated by multiple **NIH Common Fund** programs. The purpose of this funding opportunity announcement (**RFA-RM-21-007**) is to announce the availability of funding to demonstrate and enhance the utility of selected Common Fund data sets, including generating hypotheses and catalyzing discoveries. Award recipients are asked to provide feedback on the utility of the Common Fund data resources

*Deadline: February 19, 2021*
NIH Stephen I. Katz ESI Research Grant Program (R01)

Early stage investigators (ESIs) may apply for this opportunity to support their innovative ideas if they are proposing research that is a change in direction from their past work and experience, and for which they have no preliminary data. For those ESIs who have preliminary data for research projects or those who want to continue on with their current research direction, NIH’s Parent R01 funding opportunities are still available.

Katz ESI Research Grant Program Solicitation
Standard R01 deadlines apply; next deadline is January 26, 2021.

North Central Regional Sun Grant Center: Biobased Economy

The Sun Grant Program (SGP) is a national network of land-grant universities working in collaboration with national laboratories and government agencies, partnering to build a viable biobased economy. Sun Grant institutions are charged with making significant advances in biobased industries for the benefit of America’s independent farmers, rural communities, and the public-at-large. The Sun Grant Program – North Central Region (SGP-NCR), located at South Dakota State University (SDSU), is the administrative unit for the region composed of the states of Illinois, Indiana, Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Wisconsin, and Wyoming.

Through a grant from the U.S. Department of Agriculture – National Institute of Food and Agriculture (USDA-NIFA), the SGP-NCR will be awarding approximately $1.65 million for projects in 2021. The SGP-NCR is emphasizing the importance of the need for forming multidisciplinary, multi-institutional teams for addressing critical challenges in the bioeconomy. The intent of this solicitation is to foster the formation and operation of research teams to pursue BOLD, TRANSFORMATIVE, and HIGH-IMPACT activities and outcomes that will become a road map leading to long-term success. In other words, this program is seeking to have the successful project teams use this to leverage for larger competitive opportunities, both while the project is active and after completion.

Funded grants will support:
Projects must seek to accomplish the following and clearly articulate this in the proposal:

1. Enhance *national security* through the development, distribution, and implementation of biobased energy and value-added product technologies;
2. Promote *economic diversification and stability* in rural areas of the United States through biobased energy and product technologies;
3. Promote *environmental sustainability* of agricultural production in the United States through biobased energy and product technologies;
4. Enhance the *effectiveness and impact* of biomass, biotransformation, bioenergy and bioproducts research and development programs through effective coordination and collaboration among -
   a. The U.S. Department of Agriculture,
   b. Additional appropriate Federal agencies,
   c. Land-grant and non-land grant colleges and universities, and
   d. Industry; and
5. *Leverage the activities and outcomes* of the proposed project for future and larger funding opportunities via NIFA-funded programs, additional Federal agencies, public-private partnerships, and others.

*Pre-proposal deadline: February 1, 2021*

---

**NSF / DOE: Distributed Chemical Manufacturing and Engineering the Elimination of End-of-Life Plastics**

The Emerging Frontiers in Research and Innovation (EFRI) program of the NSF Directorate for Engineering (ENG) serves a critical role in helping ENG focus on important emerging areas in a timely manner. This solicitation [NSF 20-614](#) is a funding opportunity for interdisciplinary teams of researchers to embark on rapidly advancing frontiers of fundamental engineering research. For this solicitation, NSF will consider proposals that aim to investigate emerging frontiers in one of the following two research areas:
• Distributed Chemical Manufacturing (DCheM)
• Engineering the Elimination of End-of-Life Plastics (E3P)

This solicitation will be coordinated with the Directorate for Biological Sciences, the Directorate for Mathematical and Physical Sciences and the Directorate for Social, Behavioral and Economic Sciences.

EFRI seeks proposals with potentially transformative ideas that represent an opportunity for a significant shift in fundamental engineering knowledge with a strong potential for long term impact on national needs or a grand challenge. The proposals must also meet the detailed requirements delineated in this solicitation.

FURTHER INFORMATION: Further information about the EFRI program may be obtained by viewing the slides from the FY20 EFRI informational webinar. Please click here to view the FY20 slides.

Letter of Intent deadline: December 9, 2020
Pre-proposal deadline: January 5, 2021

NSF: Harnessing the Data Revolution (HDR): Data Science Corps (DSC)

NSF’s **Harnessing the Data Revolution (HDR) Big Idea** is a national-scale activity to enable new modes of data-driven discovery that will allow fundamental questions to be asked and answered at the frontiers of science and engineering. In 2019, the HDR Big Idea launched three parallel efforts in pursuit of these aims: Institutes for Data-Intensive Research in Science and Engineering (I-DIRSE), HDR: Transdisciplinary Research In Principles Of Data Science Phase I (HDR TRIPODS Phase I), and Data Science Corps (DSC).

The *Data Science Corps* is one of the components of the HDR ecosystem enabling education and workforce development by focusing on building capacity for harnessing the data revolution at the local, state, and national levels to help unleash the power of data in the service of science and society. The *Data Science Corps* will provide practical experiences, teach new skills, and offer learning opportunities in different settings. This solicitation [NSF 21-523](#) prompts the community to envision creative educational pathways that will transform data
science education and expand the data science talent pool by enabling the participation of undergraduate and Master’s degree students with diverse backgrounds, experiences, skills, and technical maturity in the Data Science Corps. These activities are envisioned to be inherently collaborative, with a lead organization and one or more collaborating organizations.

Submission window: January 26, 2021-February 12, 2021

---

**NSF CAREER Program**

The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation’s most prestigious awards in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Successful PIs will propose creative, effective research and education plans, developed within the context of the mission, goals, and resources of their organizations, while building a firm foundation for a lifetime of contributions to research, education, and their integration.

[NSF CAREER Solicitation [NSF 20-525]

Deadline: July 26, 2021

---

**NSF: Social and Economic Sciences**

Several Programs of the National Science Foundation (NSF) Division of Social and Economic Sciences have upcoming deadlines:

- **Accountable Institutions and Behavior**

  This program supports basic scientific research that advances knowledge and understanding of issues broadly related to attitudes, behavior, and institutions connected to public policy and the provision of public services. **Deadline: January 15, 2021**

- **Law and Science**

  This program considers proposals that address social scientific studies of law and law-like systems of rules, as well as studies of how science and technology are applied in legal contexts. The program is inherently
interdisciplinary and multi-methodological.

**Deadline: January 15, 2021**

- **Security and Preparedness**
  This program supports basic scientific research that advances knowledge and understanding of issues broadly related to global and national security.
  **Deadline: January 15, 2021**

- **Sociology**
  This program supports basic research on all forms of human social organization -- societies, institutions, groups, and demography -- and processes of individual and institutional change.
  **Deadline: January 15, 2021**

- **Decision, Risk and Management Sciences**
  This program supports scientific research directed at increasing the understanding and effectiveness of decision making by individuals, groups, organizations, and society.
  **Deadline: January 18, 2021**

- **Economics**
  This program 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.
  **Deadline: January 18, 2021**

---

**Pardee Foundation: Cancer Research**

The [Elsa U. Pardee Foundation](https://www.pardeefoundation.org) funds research to investigators in United States non-profit institutions proposing research directed toward identifying new treatments or cures for cancer. The Foundation funds projects for a one-year period which will allow establishment of capabilities of new cancer researchers, or new cancer approaches by established cancer researchers. It is anticipated that this early stage funding by the Foundation may lead to subsequent and expanded support using government agency funding. Project relevance to cancer detection, treatment, or cure should be clearly identified. By design, there are no limits set on the grant amount that can be requested. It must be reasonably and clearly supported by the scope of the project outlined in the application.

**Deadline: December 31, 2020**
RWJF: Health Data for Action Data Access Award

Robert Wood Johnson Foundation’s (RWJF) Health Data for Action (HD4A) data access award aims to reduce the barriers often faced in accessing rich data by serving as a conduit between data owners and interested researchers. Through this HD4A call for proposals (CFP), RWJF will make valuable data from unique data owners available to researchers.

The purpose of the 2020 HD4A CFP is primarily to award data access at no cost from one of eight anticipated data providers to successful applicants. Most selected projects will not receive a financial award for personnel or other project-related costs. However, limited funding up to $100,000 per project is available for a small number of projects from principal investigators who have not previously received external research funding.

The HD4A program will support innovative research that uses the available data to answer important research questions. Applicants under this CFP will write a proposal for a research study using data from one of the following anticipated data providers including: athenahealth; CareJourney VRDC T-MSIS Research Collaborative; the Center for Improving Value in Health Care (CIVHC); Geisinger; the Health Care Cost Institute (HCCI); HealthShare Exchange (HSX); OCHIN ADVANCE Collaborative; and TransUnion.

Eligible research projects can focus on a variety of topics, including health care utilization and spending; benefit design; quality of care; prescribing patterns and medication adherence; chronic disease; maternal and child care; complex conditions; employer-sponsored insurance; public and private insurance; consolidation; integration, and market competition; social determinants of health and disparities; COVID-19 patient characteristics and outcomes; financial distress; mental health; housing instability; opioid use and treatment; and geographic variation in health.

Deadline: December 17, 2020

Simons Foundation: Collaboration Grants for Mathematicians
The Simons Foundation Mathematics and Physical Sciences division invites applications for **Collaboration Grants for Mathematicians** to stimulate collaboration in the field primarily through the funding of travel and related expenditures. The goal of the program is to substantially increase collaborative contacts between accomplished, active mathematicians in the United States who do not otherwise have access to funding that could provide support for travel and visitors.

Each collaboration grant provides $8,400 per year for up to five years: $6,000 per year for collaboration, travel and research funds for the awardee; $1,000 per year in discretionary funds for the awardee’s department to enhance the research atmosphere of the department; and 20 percent ($1,400) per year in indirect costs.

**Deadline: January 28, 2021**

See also: [Simons Foundation Targeted Grants in Mathematics and Physical Sciences](#)

---

**Spencer Foundation: Racial Equity in Education Special Research Grants**

The Spencer Foundation has launched [The Racial Equity Special Research Grants program](#) to support education research projects that will contribute to understanding and ameliorating racial inequality in education. The Foundation is interested in funding studies that aim to understand and disrupt the reproduction and deepening of educational inequality in education, and which seek to remake and imagine anew forms of equitable education. The Foundation is also interested in research projects that are working to reimagine educational opportunities in a multiplicity of education systems, levels, settings, and developmental ranges and that reach beyond documenting conditions and paradigms that contribute to persistent racial inequalities.

*Letter of Intent deadline: December 15, 2020; Noon*

---

**USDA-NIFA: AFRI Sustainable Agricultural Systems**
Applications to the Agriculture and Food Research Initiative (AFRI) - Sustainable Agricultural Systems (SAS) **Request for Applications (RFA)** must focus on approaches that promote transformational changes in the U.S. food and agriculture system. USDA-NIFA seeks creative and visionary applications that take a systems approach for projects focused on the themes in the USDA Science Blueprint:

1. sustainable agricultural intensification;
2. agricultural climate adaptation;
3. value-added innovation; and / or
4. food and nutrition translation.

These projects are expected to significantly improve the supply of affordable, safe, nutritious, and accessible agricultural products, while fostering economic development and rural prosperity in America. These approaches must demonstrate current needs and anticipate future social, cultural, behavioral, economic, health, and environmental impacts. Additionally, the outcomes of the work being proposed should result in societal benefits, including promotion of rural prosperity and enhancement of quality of life for all those involved in food and agricultural value chains from production to utilization and consumption.

*Deadline varies by Program Area Priority; Letter of Intent due January 7, 2021.*

---

### USDA-NIFA New Investigator Grants

Through the USDA-NIFA Agriculture and Food Research Initiative (AFRI), applicants who meet eligibility requirements as a New Investigator can apply for a seed grant or a New Investigator standard grant.

An individual who is beginning their career, does not have an extensive scientific publication record, and has fewer than five years postgraduate career-track experience (i.e., positions in which the individual's institution allows them to submit competitive grant applications as Project Director beyond a fellowship) can apply for a New Investigator Grant for research, education, and/or extension activities. The new investigator may not have received competitively awarded federal research funds as Project Director (PD), with the exception of pre- or postdoctoral grants or AFRI Seed Grants. However, if the applicant received Federal funding as Co-PD of previously awarded competitive grants, it will not count against their eligibility as a New Investigator. Eligibility requirements for a New Investigator Grant apply only to
the PD and not to Co-PDs or collaborators.

Starting in FY 2021, two types of New Investigator Grants are available:

- **New Investigator Standard Grant**, which is an AFRI Standard Grant in all respects except that the Project Director meets the eligibility criteria for New Investigators.
- **New Investigator Seed Grant**, which is available under each program area priority within NIFA. Applications from New Investigators will be reviewed with other Seed Grant applications, with special consideration given to funding New Investigator Seed Grant applications.

AFRI Seed Grants provide funds to help investigators collect preliminary data through either domestic or international collaborations or to complete other preliminary activities to prepare for applying for future AFRI grants. They are not intended to fund stand-alone projects, but rather projects that will lead to further research in one of the AFRI-funded priority areas. Seed Grants are limited to a total of $300,000 (including indirect costs) for up to two years and are not renewable. An individual applicant may submit only one Seed Grant as PD during the current fiscal year. New Investigators also may only receive one New Investigator Seed Grant as PD during their career.

Find out more about AFRI funding opportunities and program area priorities [here](#); learn more about AFRI grant types (including New Investigator grants) [here](#).

*Deadlines vary.*

**William T. Grant Foundation: Improving the Lives of Children and Youth**

The William T. Grant Foundation has been interested in facilitating a better understanding of how children and youth develop and thrive. Currently, the Foundation is interested in research with the potential to improve the lives of young people between the ages of 5 and 25 in the following areas:

- **Reducing Inequality**: The Foundation seeks studies that aim to build, test, or increase understanding of programs, policies, or practices to reduce
inequality in the academic, social, behavioral, or economic outcomes of young people. Studies about reducing inequality on the basis of race, ethnicity, economic standing, language minority status, or immigrant origins are prioritized.

- **Improving the Use of Research Evidence**: The Foundation seeks studies that identify, build, and test strategies to enhance the use of research evidence in ways that benefit youth. Of particular interest is research on improving the use of research evidence by state and local decision makers, mid-level managers, and intermediaries.

*Letter of Inquiry Deadline: January 13, 2021*

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

[Contact Us](mailto:contactus@ndsu.edu)

---

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.