

# RCA UPDATE

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July 25, 2022

## Funding Opportunity Edition

### Lab / Research Space Tours

Sharing what you're doing in your research space is a good first step in initiating collaborations outside of your home unit. You are invited to host a lab tour for your NDSU colleagues and Vice President Fitzgerald. Complete this [short questionnaire](#) to begin the process.

### RCA Pilot Programs: Growing USDA Success

The Research and Creative Activity Office is seeking to grow our success in USDA grant proposals.

To this end, we seek expressions of interest in two pilot programs:

- **USDA-AFRI pre-submission proposal review**
- **Creating a USDA Expert Bank**



[Learn more >>](#)

## NDSU Undergraduate Biomedical Research Program



Faculty interested in hiring an undergraduate researcher for the 2022-2023 academic year on a **biomedical-related research project** are invited to submit an application to the NDSU Undergraduate Biomedical Research Program.

You can learn more and submit an application [here](#). The deadline to apply is Monday, August 8, 2022.

## Upcoming Events

- **SAVE THE DATE: Summer Undergraduate Research Programs Poster Session**  
August 5, 2022; 10am-12pm / A.Glenn Hill Center
- **Webinar: Understanding the New NIH Data Management and Sharing Policy**  
August 11, 2022; 12:30-2:30pm / [Learn more >>](#)
- **REGISTRATION OPEN: DARPA Forward Regional Events on National Security Innovation**  
August-December, 2022 / [Learn more >>](#)
- **Webinar: Diving Deeper into the New NIH Data Management and Sharing Policy**  
September 22, 2022; 12:30-2:30pm / [Learn more >>](#)

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## FUNDING OPPORTUNITIES

1. [AAAS: Science and Technology Policy Fellowships](#)
2. [DOE: Solar Technologies Office Opportunities](#)

3. [DOE: Vehicle Technologies Office](#)
4. [Johnson & Johnson: Women in STEM<sup>2</sup>D – LIMITED](#)
5. [ND EPSCoR: Seed Grants](#)
6. [NEH: Archaeological and Ethnographic Field Research](#)
7. [NEH: Collaborative Research](#)
8. [NIH: Bioengineering Research Grants](#)
9. [NIH: Community Exposures to Environmental Contaminants](#)
10. [NIH: Galvanizing Health Equity - Research Education Program](#)
11. [NIH: NCI Clinical and Translational Exploratory / Developmental Studies](#)
12. [NSF / NEH: Dynamic Language Infrastructure / Documenting Endangered Languages](#)
13. [NSF: Mid-Career Advancement](#)
14. [NSF: Plant Genome](#)
15. [NSF: Research Experiences for Teachers in Engineering and Computer Science](#)
16. [NSF: Smart Health and Biomedical Research in the Era of AI and Advanced Data Science](#)
17. [Spencer Foundation: Large 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](mailto:ndsu.researchdev@ndsu.edu) by close of business on the notification deadline.

If you identify a limited submission opportunity that is not on the list below, please notify [ndsu.researchdev@ndsu.edu](mailto:ndsu.researchdev@ndsu.edu).

- [Johnson & Johnson: Women in STEM<sup>2</sup>D](#)  
Notification Deadline: 08/02/2022
- [NIH: Collaborative Program Grant for Multidisciplinary Teams](#)  
Notification Deadline: 09/15/2022
- [NSF: Scholarships in STEM \(S-STEM\) Program](#)  
Notification Deadline: 09/15/2022

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](mailto:ndsu.researchdev@ndsu.edu).

- [Macy Faculty Scholars Program: Medical and Nursing Education](#)  
Deadline: 08/01/2022
- [NSF: Resilient & Intelligent NextG Systems](#)  
Deadline: 08/01/2022
- [DOE EnergyShed](#)  
Deadline: 08/01/2022
- [LOC: Community Collections](#)  
Deadline: 08/01/2022
- [DOE: RENEW - Basic Energy Sciences](#)  
Deadline: 08/02/2022
- [NEA: Our Town](#)  
Deadline: 08/04/2022
- [DOE: Clean Energy Manufacturing Innovation Institute for Industrial Decarbonization through Electrification of Process Heating](#)  
Deadline: 08/09/2022
- [DOE: RENEW - High Energy Physics](#)  
Deadline: 08/15/2022
- [Templeton Foundation: Spiritual Yearning Research Initiative](#)  
Letter of Inquiry Deadline: 08/19/2022
- [NIH: Director's Early Independence Award](#)  
Deadline: 09/02/2022
- [HRSA: Strengthen Evidence for Maternal and Child Health Programs](#)  
Notification Deadline: 09/08/2022
- [NIH: Bridges to the Baccalaureate](#)  
Deadline: 09/26/2022
- [NIH: Bridges to the Doctorate](#)  
Deadline: 09/27/2022
- [NEH: Infrastructure and Capacity Building Challenge Grants](#)  
Deadline: 09/27/2022

- [LOC: Connecting Communities Digital Initiative](#)  
Deadline: 09/30/2022
- [NSF: Louis Stokes Alliances for Minority Participation - STEM Pathways Implementation-Only](#)  
Deadline: 11/18/2022

### 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 [SPIN page](#) on the RCA website. If you have questions, please contact [ndsu.researchdev@ndsu.edu](mailto:ndsu.researchdev@ndsu.edu).

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## AAAS: Science and Technology Policy Fellowships

The American Association for the Advancement of Science (AAAS) is the largest general scientific society in the world. The [fellowship program](#) offers hands-on opportunities to apply scientific knowledge and technical skills to important societal challenges. Fellows serve a yearlong assignment in a selected area of the executive, legislative, or judicial branch of the federal government in Washington, D.C., enhancing their professional influence by tackling problems and participating in policy development and implementation.

*Deadline: November 1, 2022*

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## DOE: Solar Technologies Office Opportunities

The Department of Energy (DOE) Solar Energy Technologies Office (SETO) has released several opportunities:

- Solar Manufacturing Incubator [[DE-FOA-0002609](#)]  
*Letter of Intent due 09/16/2022*
- Photovoltaics Research and Development [[DE-FOA-0002582](#)]  
*Letter of Intent due 08/03/2022*

Request for Information: Vehicle Photovoltaics [[DE-FOA-0002790](#)]

*Last day to submit comments: 08/22/2022*

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## DOE: Vehicle Technologies Office

This funding opportunity announcement (FOA) [[DE-FOA-0002611](#)] seeks research projects to address priorities in the following areas: the cost-effective deployment of EV charging for those without easy home charging; innovative solutions to improve mobility options for underserved communities; community engagement to accelerate clean transportation options in underserved communities; batteries and electrification; materials technologies; energy-efficient commercial off-road vehicle technologies; medium / heavy duty vehicle corridor charging and advanced engine and fuel technologies to improve fuel economy and reduce GHG emissions.

*Concept paper deadline: August 25, 2022; 4pm*

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### **Johnson & Johnson: Women in STEM<sup>2</sup>D – 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.

**WiSTEM2D : [Notify RCA](#) by 08/02/2022, 4pm, if you are interested in submitting to this**

**program.**

The [Johnson & Johnson Scholars Award Program](#) aims to fuel development of female STEM<sup>2</sup>D leaders and feed the STEM<sup>2</sup>D talent pipeline by awarding and sponsoring women at critical points in their careers, in each of the STEM<sup>2</sup>D disciplines: Science, Technology, Engineering, Math, Manufacturing and Design.

The awards will fund early to mid-career women working within a STEM<sup>2</sup>D university department. The goal is to fuel the research passion of the awarded women and inspire career paths in their respective STEM<sup>2</sup>D fields. Johnson & Johnson is looking to identify global women leading in both their research fields and leading as mentors, to be a vision for girls and other women in STEM<sup>2</sup>D.

**LIMITED SUBMISSION:** Each university can support one applicant per STEM<sup>2</sup>D discipline.

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## ND EPSCoR: Seed Grants

ND EPSCoR seeks to provide emerging areas seed awards of up to \$25,000 in direct costs to researchers from the National Science Foundation (NSF) Established Program to Stimulate Competitive Research (EPSCoR) RII Track-1 New Discoveries in the Advanced Interface of Computation, Engineering, and Science (ND-ACES) participating institutions in areas of emerging high impact and transformative research related to the Center for Cellular Biointerfaces in Science and Engineering (CCBSE). More information can be found on the [CCBSE webpage](#) on the ND EPSCoR website.

Applications must be made by a researcher from Cankdeska Cikana Community College (CCCC), Dickinson State University (DSU), Mayville State University (MaSU), Minot State University (MiSU), Nueta Hidatsa Sahnish College (NHSC), **North Dakota State University (NDSU)**, Sitting Bull College (SBC), Turtle Mountain Community College (TMCC), University of North Dakota (UND), and Valley City State University (VCSU) **who is not currently associated with the 2020-2025 ND-ACES cooperative agreement or who did not receive a 2021 or 2022 ND-ACES emerging seed award.** Members of traditionally underrepresented populations in STEM disciplines are especially encouraged to apply. See the [Request For Applications](#) for details.

*Deadline: Noon on September 1, 2022*

## **NEH: Archaeological and Ethnographic Field Research**

The [Archaeological and Ethnographic Field Research program](#) makes awards to institutions and organizations conducting empirical field research to answer significant questions in the humanities. Archaeology and ethnography are important methodologies utilized by many disciplines across the humanities and social sciences that provide observational and experiential data on human history and culture.

Archaeological methods may include field survey and field-based remote sensing, documentation or visualization, and / or excavations in support of answering research questions in all aspects of the human past, including but not limited to ancient studies, anthropology, art history, classical studies, regional studies, epigraphy, and other related disciplines. Ethnographic methods may include participant observation, surveys and interviews, and documentation or recording in pursuit of research questions in anthropology, sociology, ethnolinguistics, oral history, ethnomusicology, performance studies, folklore studies, and related disciplines.

*Deadline: October 4, 2022*

## **NEH: Collaborative Research**

The [Collaborative Research program](#) aims to advance humanistic knowledge by supporting sustained collaboration between two or more scholars. Collaborators may be drawn from one or more institutions. International collaboration is encouraged, but the project director must be based at a U.S. institution, and project teams must include an equitable balance of scholars based at U.S. institutions and scholars based at non-U.S. institutions. The program encourages projects that propose diverse approaches to topics, incorporate multiple points of view, and explore new avenues of inquiry in the humanities.

The program allows projects that propose research in a single field of study, as well as interdisciplinary work. Projects that include partnerships with researchers from the natural and social sciences are encouraged but must employ a humanistic research agenda. Collaboration among different types of institutions is welcome.



Proposed projects must aim to result in tangible and sustainable outcomes, such as co-authored or multi-authored books; born-digital publications; themed issues of peer-reviewed journals; a series of peer-reviewed articles; or open-access scholarly digital resources. All project outcomes must incorporate collaboration and interpretation to address significant humanities research questions.

The program includes four project categories: Planning International Collaboration, Conference, Manuscript Preparation, and Scholarly Digital Projects. The categories support different project types or stages and have different performance periods and award ceilings. Applicants must specify only one project category for support.

*The 2022 application guidelines will be available September 30 for a November 30 deadline. The 2021 application guidelines are available to help prepare.*

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## **NIH: Bioengineering Research Grants**

The purpose of this program is to encourage collaborations between the life and physical sciences that: 1) apply a multidisciplinary bioengineering approach to the solution of a biomedical problem; and 2) integrate, optimize, validate, translate or otherwise accelerate the adoption of promising tools, methods and techniques for a specific research or clinical problem in basic, translational, or clinical science and practice. An application may propose design-directed, developmental, discovery-driven, or hypothesis-driven research and is appropriate for small teams applying an integrative approach to increase our understanding of and solve problems in biological, clinical or translational science.

While the current Funding Opportunity Announcements (FOAs) for this program [[PAR-19-158](#); [PAR-19-159](#)] expired May 8, 2022, NIH intends to issue new FOAs for this program [see [NOT-CA-22-110](#); [NOT-CA-22-111](#)]. The next anticipated deadline for this program would be October 5, 2022.

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## **NIH: Research to Action: Assessing and Addressing Community Exposures to Environmental Contaminants (R01 Clinical Trial Optional)**

This Funding Opportunity Announcement (FOA) [[PAR-22-210](#)] encourages multidisciplinary projects to investigate the potential health risks of environmental exposures of concern to a community and to develop and implement an environmental public health action plan based on research findings. Projects supported under this program will employ community-engaged research methods to conduct research and to translate research findings into public health action. This announcement reflects the National Institute of Environmental Health Sciences (NIEHS) and the National Institute on Minority Health and Health Disparities (NIMHD) commitment to environmental health disparities and environmental justice research. This FOA also advances efforts to nurture and sustain trust and bi-directional communication between academic researchers and affected communities. The Research to Action program is part of the National Institute of Environmental Health Sciences (NIEHS) “Partnerships for Environmental Public Health” ([PEPH](#)) network.

*Upcoming Deadlines: October 5, 2022; February 5, 2023*

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## **NIH: Galvanizing Health Equity Through Novel and Diverse Educational Resources (GENDER) Research Education R25 (R25 Clinical Trial Not Allowed)**

The NIH Research Education Program (R25) supports research educational activities that complement other formal training programs in the mission areas of the NIH Institutes and Centers.

The over-arching goal of this Office of Research on Women’s Health (ORWH) R25 program [[RFA-OD-22-015](#)] is to support educational activities that complement and / or enhance the training of a diverse workforce to meet the nation’s biomedical, behavioral and clinical research. To accomplish the stated over-arching goal, this Funding Opportunity Announcement (FOA) will support creative educational activities with a primary focus on:

***Courses for Skills Development:*** For example, advanced undergraduate courses in a specific discipline or research area, courses on clinical procedures or specialized research

techniques, or community-based courses on topics of relevance to sex and / or gender and health. Specifically, this FOA aims to support courses that develop skills in multidimensional and intersectional health-related research and healthcare delivery. The format of the courses may involve a traditional in-person approach, online activities, a hybrid of both approaches, or other methods.

***Curriculum or Methods Development:*** For example, undergraduate STEMM curricula focused on sex and gender in medicine, advanced curricula to improve biomedical, social and behavioral or clinical science education, or development of novel methods or instructional approaches such as graphic medicine. Proposed curricula or methods should have high potential to improve biomedical, social and behavioral, or clinical research education. Specifically, this FOA aims to support innovative curricula or methods at the undergraduate level or higher that integrate knowledge of sex and gender influences into health-related training or enhance understanding of sex and gender influences on health.

*Upcoming Deadlines: October 27, 2022 and June 27, 2023*

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## **NIH: NCI Clinical and Translational Exploratory / Developmental Studies (R21 Clinical Trial Optional)**

This Funding Opportunity Announcement (FOA) [[PAR-22-216](#)] supports preclinical and early phase clinical research, as well as correlative studies, directly related to advancements in cancer treatment, diagnosis, prevention, comparative oncology, symptom management, or reduction of cancer disparities. This includes (but is not limited to) development and testing of the following: new molecular agents or biologics for cancer treatment; management strategies for cancer-related symptoms or treatment-related toxicity; cancer screening or diagnostic tools, such as imaging techniques; cancer preventive agents or approaches; predictive and prognostic biomarkers for patient selection or stratification; clinically relevant *in vivo* or *in vitro* tumor models (including genetically engineered mouse models, patient-derived xenograft models, organoids, and cell lines); and strategies to address therapeutic outcome disparities among underserved populations. In addition to novel agents, new treatment strategies may involve repurposed agents or novel combinations of interventions (including radiation), based on established mechanisms of action. Comparative correlative studies in cancer patients with age, gender, racial / ethnic, or health disparities are encouraged to explore mechanisms underlying their differential responses (efficacy and toxicity) and resistance to therapeutic

interventions.

*Upcoming deadlines: October 10, 2022; February 13, 2023*

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## **NSF Dynamic Language Infrastructure / NEH 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 22-615](#)] 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](#).

*Upcoming deadlines: October 14, 2022; February 15, 2023*

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## **NSF: Mid-Career Advancement**

The Mid-Career Advancement (MCA) program [[NSF 22-603](#)] offers an opportunity for scientists and engineers at the mid-career stage to substantively enhance and advance their research program and career trajectory. Mid-career scientists are at a critical career transition stage where they need to advance their research programs to ensure long-term productivity and creativity but are often constrained by service, teaching, or other activities that limit the amount of time devoted to research. MCA support is expected to help lift these constraints to reduce workload inequities and enable a more diverse scientific workforce (more women, persons with disabilities, and individuals from groups that have been underrepresented) at high academic ranks.

The MCA program provides protected time, resources, and the means to gain new skills through synergistic and mutually beneficial partnerships, typically at an institution other than the candidate's home institution. Partners from outside the Principal Investigator's (PI) own subdiscipline or discipline are encouraged, but not required, to enhance interdisciplinary networking and convergence across science and engineering fields. Research projects that envision new insights on existing problems or identify new problems made accessible with cutting-edge methodology or expertise from other fields are encouraged.

*Deadline: March 1, 2023*

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## **NSF: Plant Genome Research Program**

The Plant Genome Research Program (PGRP) [[NSF 21-507](#)] supports genome-scale research that addresses challenging questions of biological, societal and economic importance. PGRP encourages the development of innovative tools, technologies and resources that empower a broad plant research community to answer scientific questions on a genome-wide scale. Emphasis is placed on the scale and depth of the question being addressed and the creativity of the approach. Data produced by plant genomics should be usable, accessible, integrated across scales and of high impact across biology. Training, broadening participation, and career development are essential to scientific progress and should be integrated in all PGRP-funded projects.

Two funding tracks are currently available:

1. **RESEARCH-PGR TRACK:** Genome-scale plant research to address fundamental questions in biology, including processes of economic and/or societal importance.
2. **TRTech-PGR TRACK:** Tools, resources and technology breakthroughs that further enable functional plant genomics.

*Full proposals accepted anytime.*

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## **NSF: Research Experiences for Teachers in Engineering and Computer Science**

The Research Experiences for Teachers (RET) in Engineering and Computer Science program [[NSF 21-606](#)] supports authentic summer research experiences for K-14 educators to foster long-term collaborations between universities, community colleges, school districts, and industry partners. With this solicitation, the Directorates for Engineering (ENG) and Computer and Information Science and Engineering (CISE) focus on a reciprocal exchange of expertise between K-14 educators and research faculty and (when applicable) industry mentors. K-14 educators will enhance their scientific disciplinary knowledge in engineering or computer science and translate their research experiences into classroom activities and curricula to broaden their students' awareness of and participation in computing and engineering pathways. At the same time, the hosting research faculty will deepen their understanding of classroom practices, current curricula, pedagogy, and K-14 educational environments.

*Deadline: October 12, 2022*

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## **NSF: Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science (SCH)**

The purpose of this interagency program solicitation [[NSF 21-530](#)] is to support the development of transformative high-risk, high-reward advances in computer and information science, engineering, mathematics, statistics, behavioral and / or cognitive research to address pressing questions in the biomedical and public health communities. Transformations hinge on scientific and engineering innovations by interdisciplinary teams that develop novel methods to intuitively and intelligently collect, sense, connect, analyze and interpret data from individuals, devices and systems to enable discovery and optimize health. Solutions to these complex biomedical or public health problems demand the formation of interdisciplinary teams that are ready to address these issues, while advancing fundamental science and engineering.

*Deadline: November 10, 2022*

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## **Spencer Foundation: Large Research Grants on Education**

The [Large Research Grants on Education Program](#) supports education research projects that will contribute to the improvement of education, broadly conceived, with budgets

ranging from \$125,000 to \$500,000 for projects ranging from one to five years. 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.

*Intent to apply deadline: January 12, 2023; Noon*



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

[Contact Us](#)



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*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.*