

RCA UPDATE

June 15, 2020



NDSU Research Community:

The Office of Research and Creative Activity stands with our colleagues and students in a commitment to social justice, human equality, respect, and freedom from persecution. We ask that our community work with us to promote diverse voices in scientific research and to hold us accountable when we fall short. We recognize that science has marginalized many groups—both in the way that research is done and in the researchers who do the work—and we pledge to help reimagine a future where science and society are truly diverse, inclusive, and equitable.

Kind regards,

Jane Schuh

Vice President

Research and Creative Activity

Growing a Forest

A brand new forest is growing just west of the North Dakota State University campus in Fargo. Comprised of 1,600 poplar trees, the new arboretum is part of an NSF-funded project led by NDSU assistant professor of biology Jill Hamilton. Hamilton studies plant evolutionary genomics.

The project will examine and understand how hybrid combinations of widely dispersed poplar species--black cottonwood and balsam poplar--could be effective for climate-adapted biofuel programs across the United States. Poplar trees were selected for the research study given their rapid growth and heartiness, and hybrids comprise the vast majority of trees found in operational plantations today due to their superior growth. However, predicting the performance of hybrids is challenging given the vast variety of genetic combinations that may exist for these long-lived trees. By collecting, cloning, genotyping, and planting specific hybrids across a range of environments, this study aims to more quickly determine which trees have traits that could significantly benefit poplar breeding programs.



The four-year \$2.5 million poplar hybrid project is a collaboration among researchers at Virginia Polytechnic Institute, University of Vermont, University of Maryland, and NDSU. The poplar hybrids were collected during the winter of 2019/2020. Hamilton's research team targeted areas in British Columbia and Alberta, while other teams covered different areas from Oregon to Alaska. They harvested dormant cuttings from trees which were then sent to Virginia Tech to be propagated and genotyped. Hamilton's group drove to Virginia in May to bring home the trees and they were planted later in the month. Additional hybrids will be planted in nearly 20 arboreta and universities from coast to coast.

[Learn more about this project >>](#)

Novelution: No More Proposal Transmittal Forms after July 1

NDSU's process for preparing and routing proposals will be completely online starting July 1, 2020 with the rollout of the Novelution System. With the Novelution System, you will no longer need to prepare Proposal Transmittal Forms or manually route paper forms and you will be able to request no-cost extensions, changes to budgets, and PI changes online.

The Novelution Research Management System is a major upgrade to our processes and we are glad to offer it to our faculty and staff. Thank you to those who have been piloting the system and to all who have participated in training over the last month. If you have not yet had the opportunity to learn about or utilize Novelution, we are happy to help you. Please contact us at ndsu.novhelp@ndsu.edu.

Information on Novelution, including log-in and a brief User Guide, can be found on the [RCA website](#).

Changes to Human Subjects Training Requirements

Beginning July 1, 2020, human subjects training must be completed through the Collaborative Institutional Training Initiative (CITI) online training program. Training will be verified upon submission of new and requests for continuing review (or recertification of exemption). In-person training will no longer be accepted. More information on the CITI training program can be found on the IRB [website](#). In-person sessions to supplement the online training are still available upon request.

SBIR / STTR Proposal Preparation Webinars

SBIR / STTR Proposal Preparation for NIH

Monday, June 22, 2020 - 8:30am-1:00pm

Discover the differences between SBIR and STTR, and review how to navigate the NIH's SBIR website to research awarded projects, how to prepare an SBIR proposal, and how to avoid common pitfalls.

[Learn more and register >>](#)

Commercialization Planning for SBIR / STTR Proposals

Tuesday, July 28, 2020 - 8:30am-1:00pm

Learn the essential components of an effective plan, how to find and use cost-effective market research to direct your efforts, which supporting documents you will need, and other tips for writing a winning plan.

[Learn more and register >>](#)

COVID-19 Guidance for researchers is available on the [RCA Website](#), including NDSU guidance for PIs, Federal Agency guidance, and Funding Opportunities. As this situation is rapidly changing, please refer to the [NDSU COVID-19 Preparedness and Response page](#) for additional information.

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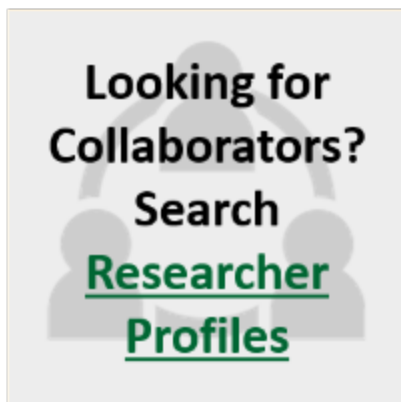
FUNDING OPPORTUNITIES

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- [American Association for Cancer Research: Science of the Patient Grants](#)
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EVENTS

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- [DEPSCoR DoD Day at the University of South Dakota](#)



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

AHRQ: Using Innovative Digital Healthcare Solutions to Improve Quality at the Point of Care (R21/R33 - Clinical Trial Optional) - Forecasted Opportunity

The overarching objective for this [Forecasted Funding Opportunity Announcement](#) (FOA) is to improve the quality of healthcare services delivery at the point of care. This FOA aims to support phased exploratory and developmental research

projects that test promising digital healthcare interventions intended to improve quality at the point of care.

Research should be designed to test promising digital healthcare solutions that enable or facilitate technology-driven, point of care process solutions that use advanced analytics, patient-centered clinician and patient facing digital healthcare technologies, or clinical decision support systems to improve quality and health outcomes at the point of care. A theoretical framework should inform the research study and incorporate the use of care models when appropriate.



American Association for Cancer Research: Science of the Patient Grants

The American Association for Cancer Research (AACR)-The Mark Foundation for Cancer Research [“Science of the Patient” \(SOP\) Grants Program](#) represents a joint effort to stimulate novel research aimed at understanding the influence of the biology of the host (i.e., patient) on the genesis, development, treatment, and survivorship of cancer. Successful projects should emphasize the interplay of host physiological systems with the tumor and/or tumor microenvironment. Harnessing the powerful approach of examining cancer not as an isolated phenomenon but as a systemic disease that affects and is affected by both the normal and pathological functions of the patient’s body, these grants are expected to yield important advancements in the understanding of cancer development, progression, and treatment. Individuals with innovative ideas that have the potential to affect future clinical practice are particularly encouraged to apply.

Each grant will provide \$750,000 over three years for expenses related to the research project, which may include salary and benefits of the grant recipient and any collaborators, postdoctoral or clinical research fellows, graduate students (including tuition costs), and research assistants; research/laboratory supplies; equipment; travel applicable to the research project; publication charges for manuscripts that pertain directly to the funded project; other research expenses; and indirect costs.

Letter of Intent deadline: 7/13/2020



DoD: C4ISR, Information Operations, Cyberspace Operations and Information Technology Research

The Naval Information Warfare Center, Pacific (NIWC Pacific) is [soliciting white papers and proposals](#) of basic research, applied research, advanced technology development, and advanced component development and prototype. Submissions in response to this announcement shall be for areas relating to the advancement of Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) capabilities, enabling technologies for Information Operations and Cyberspace Operations, and Information Technology systems. Proposed research should investigate unique and innovative approaches for defining and developing next generation integratable C4ISR capabilities and command suites.

This opportunity is open through June 3, 2021

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NDSU Foundation: Impact Grants

The NDSU Foundation Grants Committee is now accepting applications for the Impact Fund Grant Program for the 2020 academic year. The NDSU Impact Fund Grant Program provides funding for projects that make a significant impact on excellence and the educational experience for students at North Dakota State University. This program is supported by annual contributions from alumni and friends of the university.

Applications are accepted from faculty, staff, and recognized student groups. The Impact Grant Fund Program offers grants of \$20,000 to \$75,000.

The application form and additional information about the NDSU Impact Grant Program can be found at the NDSU Foundation website: <https://www.ndsufoundation.com/impact-fund>.

For any further questions, please email Jennifer Reinhold, Grants Committee Liaison, at jennifer.reinhold@ndsufoundation.com.

Application deadline: July 27, 2020

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NEH: Humanities Initiatives at Colleges and Universities

[Humanities Initiatives at Colleges and Universities](#) strengthen the teaching and study of the humanities at institutions of higher education by developing new humanities programs, resources (including those in digital format), or courses, or by enhancing existing ones.

Projects must be organized around a core topic or set of themes drawn from such areas of study in the humanities as history, philosophy, religion, literature, and composition and writing skills.

The National Endowment for the Humanities (NEH) welcomes applications for projects that are modest in scope, duration, and budget, as well as applications for expansive, long-term projects.

Application Deadline: July 16, 2020



NEH: Summer Stipends

[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 Summer Stipends: Pre-application due by 7/17/2020.

[Pre-application instructions >>](#)

[NEH Summer Stipends](#) support individuals pursuing advanced research that is of value to humanities scholars, general audiences, or both. Recipients produce articles, monographs, books, digital materials, archaeological site reports, translations, editions, or other scholarly resources. Summer stipends:

- are awarded to individual scholars;
- support continuous full-time work on a humanities project for two months; and
- support projects at any stage of development.



NIH: Bridges to the Baccalaureate Research Training Program (T34) - Limited Submission Program

Limited submission grant programs are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

NIH Bridges to the Baccalaureate : Notify RCA by 7/15/2020, 4:00 p.m. if you are interested in submitting to this program.

The goal of the Bridges to the Baccalaureate Research Training Program [PAR-19-299] is to provide structured activities to prepare a diverse cohort of community college students to transfer to and complete a bachelor's degree in biomedical research fields. This funding opportunity announcement (FOA) provides support to eligible, domestic institutions to develop and implement effective, evidence-based approaches to biomedical training and mentoring that will keep pace with the rapid evolution of the research enterprise. NIGMS expects that the proposed research training programs will incorporate didactic, research, mentoring, and career development elements to prepare trainees to bridge from the community college and complete the bachelor's degree in biomedical fields.

The Bridges to Baccalaureate Research Training Program requires strong partnerships between community colleges (or two-year colleges) and four-year baccalaureate degree granting institutions. One partner must be an institution that offers the associate degree as the highest science degree. The other institution must be a college or university granting baccalaureate degrees in disciplines relevant to the biomedical sciences. Two different scenarios are anticipated for these partnerships: (1) one baccalaureate degree granting institution as the lead applicant institution partnering with one or more associate degree granting institutions, or (2) one associate degree granting institution as the lead applicant institution partnering with one or more baccalaureate degree granting institutions. An eligible applicant or partner institution may participate in more than one Bridges to the Baccalaureate Research Training Program partnership if the multiple partnerships are strongly justified by the potential to magnify the programs' and institutions' outcomes. However, an institution may be the lead in only one Bridges to Baccalaureate Research Training Program at one time. To reinforce the strong partnerships, the Bridges to Baccalaureate Research Training Program requires the participation of at least one Program Director/Principal Investigator (PD/PI) from each partner institution. The program does not support single institutions offering

both associate and baccalaureate degrees where graduates or transfers from the associate degree programs enter the baccalaureate programs, even if the students are moving to another department, school, or college.

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NSF DCL: Encouraging Mid-scale Research Infrastructure in Computer and Information Science and Engineering

With this [Dear Colleague Letter \(DCL\)](#), the National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) encourages the community to contemplate and pursue critical needs for unique mid-scale research infrastructure (RI) that can serve one or more research communities at a national level, and have the potential to significantly advance NSF-supported research disciplines.

The NSF Mid-scale RI programs constitute one of NSF's ten Big Ideas and support capabilities in the mid-scale cost range, that is, above that supported by the MRI program and below that supported by the Major Research Equipment and Facility Construction (MREFC) program for major facilities. In FY 2019, the NSF released two mid-scale solicitations: Mid-scale RI-1 ([NSF 19-537](#)), for design and implementation projects requesting up to \$20 million; and Mid-scale RI-2 ([NSF 19-542](#)), for implementation projects between \$20 million and \$70 million. An NSF mid-scale RI-1 design project can be a steppingstone to a future potential implementation project.

CISE encourages the community to prepare for potential future opportunities like the NSF Mid-scale RI programs noted above. CISE emphasizes interest in innovative and integrative mid-scale RI projects in areas not already well-supported by existing programs and guided by the following principles:

- science-driven;
- holistic and integrative;
- service, performance, and sustainability oriented.

Please contact the following CISE cognizant program staff with any questions regarding this DCL and mid-scale RI more generally:

- Deep Medhi, dmedhi@nsf.gov;
- William Miller, wlmiller@nsf.gov.

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NSF: Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (INCLUDES) – Limited Submission Program

Limited submission grant programs are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

NSF INCLUDES : Notify RCA by 6/22/2020, 4:00 p.m. if you are interested in submitting to this program.

The NSF INCLUDES Big Idea is a comprehensive national initiative to enhance U.S. leadership in science, technology, engineering, and mathematics (STEM) discoveries and innovations focused on NSF's commitment to diversity, inclusion, and broadening participation in these fields. The vision of NSF INCLUDES is to catalyze the STEM enterprise to work collaboratively for inclusive change, resulting in a STEM workforce that reflects the population of the Nation. More specifically, NSF INCLUDES seeks to improve collaborative efforts aimed at enhancing the preparation, increasing the participation, and ensuring the contributions of individuals from groups that have been historically underrepresented and underserved in the STEM enterprise.

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NSF: Research Experiences for Teachers (RET) in Engineering and Computer Science – Limited Submission Program – Limited Submission Program

Limited submission grant programs are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

NSF RET: Notify RCA by 7/1/2020, 4:00 p.m. if you are interested in submitting to this program.

The National Science Foundation (NSF) Research Experiences for Teachers (RET) in Engineering and Computer Science program [\[NSF 17-575\]](#) supports active long-term collaborative partnerships between K-12 Science, Technology, Engineering, Computer and Information Science, and Mathematics (STEM) in-service and pre-service teachers, full-time community college faculty, and university faculty and students to enhance the scientific disciplinary knowledge and capacity of the STEM teachers and/or community college faculty through participation in authentic summer research experiences with engineering and computer science faculty researchers. The research projects and experiences all revolve around a focused research area related to engineering and/or computer science that will provide a common cohort experience to the participating educators. The K-12 STEM teachers and/or full-time community college faculty also translate their research experiences and new scientific knowledge into their classroom activities and curricula.

This announcement features two mechanisms for support of in-service and pre-service K-12 STEM teachers and full-time community college faculty:

1. **RET supplements:** RET supplements may be included outside this solicitation in proposals for new or renewed ENG and CISE grants or as supplements to ongoing ENG- and CISE-funded projects.
2. **RET Site awards:** New RET in Engineering and Computer Science Sites, through this solicitation, are based on independent proposals from engineering and/or computer and/or information science departments, schools or colleges to initiate and conduct research participation projects for K-12 STEM teachers and/or full-time community college faculty.

RET Sites proposal deadline: September 16, 2020



Sloan Research Fellowships - 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.

Sloan Research Fellowship: [Notify RCA](#) by 7/1/2020, 4:00 p.m. if you intend to

apply. Interested faculty must include the name of the proposed nominator at time of notification.

The [Sloan Research Fellowships](#) seek to stimulate fundamental research by early-career scientists and scholars of outstanding promise. These fellowships are awarded yearly to researchers in recognition of distinguished performance and a unique potential to make substantial contributions to their field.

Candidates must hold a Ph.D. or equivalent degree in chemistry, computer science, economics, mathematics, molecular biology, neuroscience, ocean sciences, physics, or a related field.

In order to be considered for a Sloan Research Fellowship, a candidate must have a letter of nomination from a department head or other senior researcher. Submissions unaccompanied by a nomination letter from a senior researcher are not accepted. More than one candidate from a department may be nominated, but no more than three.

For more information, see the program [FAQs](#).



Department of Energy Summer Webinar Series

This free webinar series will connect early- and growth-stage companies, accelerators and incubators, and university entrepreneurial scientists and engineers to the Department of Energy's latest program initiatives and partnering opportunities. It will provide attendees with an opportunity to hear from DOE senior leaders and program managers, those who are the administrators and decision-makers for current and upcoming funding and partnering opportunities. All webinars are scheduled for 12pm (Noon) CT. [Learn more and register >>](#)

- **June 25:** The Lab Innovation Networking Center
- **July 9:** America's Seed Fund Powered by DOE's SBIR / STTR Programs
- **July 23:** See the Light - The National Synchrotron Light Source and Other Tools of Discovery
- **August 6:** Energy I-Corp for DOE's SBIR / STTR Programs
- **August 13:** The DOE Technology Commercialization Fund
- **August 20:** DOE and the Federal Lab Consortium - What's in it for you?
- **September 4:** DOE's Prize Competitions and Challenges

- **September 11:** The Laboratory Partnership Service
- **September 18:** Wells Fargo Innovation Incubator (IN2) and the NREL Industry Growth Forum

Past webinars are available to watch on-demand.

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Discover DSO Day

The Defense Advanced Research Projects Agency (DARPA) Defense Sciences Office (DSO) is sponsoring the Discover DSO Day (D3) event to provide information to potential proposers on the objectives of the DSO Office-wide Broad Agency Announcement (BAA). The event will be held on **Tuesday and Wednesday, June 24-25, 2020**, via webinar. Advance registration is required for all individuals intending to view the webinar alone or as part of a group. There is no registration fee to attend. Note, all times listed on the [registration website](#) are Eastern Time.

The goals of this event are to:

1. familiarize participants with DSO's mission;
2. promote understanding of the anticipated Office-wide BAA; and
3. facilitate discussions with potential performers.

[More information about Webinar and BAA >>](#)

Please send any questions to:

- Administrative Questions: Email to DiscoverDSODay@sainc.com
- Technical Questions: Email to DiscoverDSODay2020@darpa.mil

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DEPSCoR DoD Day at the University of South Dakota

On September 10, 2020, the University of South Dakota will host [DEPSCoR DoD Day](#), presented by the Department of Defense. Breakfast, lunch and refreshments will be provided. Program officers from the Army, Navy, Air Force and other DoD representatives will participate in the meeting, which will cover the following topics:

- How to work with the DoD, especially ARO, ONR, AFOSR;
- How to make connections with DoD program officers;
- How to pursue funding opportunities specific to DEPSCoR;

- How to pursue other programs within the Basic Research Office.

There is also a Speed Networking Opportunity with DoD Program Officers.



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.