

RCA UPDATE

August 2, 2021

NDSU Research Symposium on Mental Health

The NDSU President's Council for Campus Well-being ([PCCW](#)) and the Office of Research and Creative Activity (RCA) will be sponsoring a mental health research symposium on Friday, September 24, 2021. The symposium is designed to support scholars in developing collaborations and seeking avenues of funding for research development.

The PCCW was formed to support the academic mission of the university by taking a holistic approach of increasing and sustaining all aspects of campus well-being. The PCCW is a multi-disciplinary group of NDSU faculty, staff, students, and community partners brought together to address a range of social and environmental factors with the goal of strengthening the health and well-being of our campus community.

NDSU human development and family science professor Christi McGeorge is one of the organizers for the symposium. She commented, "As we were thinking about a theme for the research symposium and discussing the different aspects of campus well-being, we kept coming back to the idea of mental health and how important it is to facilitate conversation about various aspects of it. We were aware that researchers from across campus were already



exploring different facets of mental health from both academic and clinical perspectives and set out to bring them together to spark new collaborations and connections.”

The symposium will include a lunch time presentation by three different researchers followed by a poster session. Faculty members and graduate students are invited to share their research on mental health during the poster session. To participate in the poster session, submit a one paragraph abstract by August 31, 2021.

[Register to attend symposium >>](#)

[Submit poster abstract >>](#)

If you have any questions please contact, Dr. Christina Weber (christina.d.weber@ndsu.edu) or Dr. Christi McGeorge (Christine.mcgeorge@ndsu.edu).

HERD Rankings Report Update

The Higher Education Research and Development (HERD) survey rankings report on the RCA website has been re-designed to make it more user friendly.

[View the updated report >>](#)

A single NSF research field may be examined instead of having all research fields and subfields combined. Each year may be viewed using the slicer at the top of the report instead of having to click through to separate pages. A new direct comparison between the most recent data and the previous year is shown in the bottom right. The Federal agency rankings have been added on the top right.

Fiscal Year 2019 is the most recent data. The next data release is due out in December 2021 for Fiscal Year 2020 data.

[Learn more about the HERD survey >>](#)



Congratulations to all award recipients from May and June!

View the complete list online:

- May 2021: [PDF](#) | [Excel](#)
- June 2021: [PDF](#) | [Excel](#)

The awards listed are externally funded projects. Each month one of the RCA Updates will include prior month

awards.

[See Award Reports from previous months >>](#)

eRA Commons will be transitioning to the use of Login.gov to access eRA Commons, ASSIST, IAR and Commons Mobile by September 15, 2021.

After this time, users will not be able to access eRA models unless a **Login.gov** account is created and used with the required two-step verification process. All eRA users should plan to create the Login.gov account before 09/15/2021. Resources are available to assist in the process in the form of a [video](#) or a [tutorial](#).

Undergraduate Research Poster Sessions

Undergraduate students who are participating in summer research experiences at NDSU will be presenting their research results during public poster sessions. You are invited to attend and learn more about their exciting work while providing them a positive experience in sharing their unique stories.

RCA SUMMER UNDERGRADUATE RESEARCH PROGRAM POSTER SESSION

Tuesday, August 3 / 9-11:30 a.m.

Alumni Center, Diederich Atrium

- 9-10 a.m. / Remarks and certificate presentation

- **10-11:30 a.m. / Poster session**

[Add this event to your calendar >>](#)

POLLINATION NATION REU POSTER SESSION

Friday, August 6 / 1-3 p.m.

NDSU A. Glenn Hill Center Atrium

[Add this event to your calendar >>](#)

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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.

- [NSF: Major Research Instrumentation \(MRI\)](#)

Notification Deadline: 9/29/2021

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.

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 ndsu.researchdev@ndsu.edu.

American Foundation for Suicide Prevention

The American Foundation for Suicide Prevention research grants support studies that will increase understanding of suicide or test treatments and other interventions that save lives.

The Foundation is currently accepting applications for their [Innovation Grants](#) in the following categories:

- Standard Research Innovation Grants;
- Young Investigator Innovation Grants;
- Distinguished Investigator Innovation Grants;
- Pilot Innovation Grants;
- Postdoctoral Research Fellowship Innovation Grants; and
- Linked Standard Research Grants (*Requires letter of intent by September 15*)

Deadline: November 15, 2021

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American Philosophical Society: Franklin Research Grants

[Franklin Research Grants](#) are designed to help meet the costs of travel to libraries and archives for research purposes; the purchase of microfilm, photocopies, or equivalent research materials; costs associated with fieldwork; or laboratory research expenses. PhD candidates are not eligible to apply, but the society is interested in supporting the work of young scholars who have recently received their doctorate.

These awards are not intended to meet the expenses of attending conferences or the costs of publication. Applications require two letters of support.

For complete program guidelines, FAQs, and application instructions, see the [American Philosophical Society website](#).

Upcoming Deadlines: October 1, 2021 and December 1, 2021

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Caplan Foundation for Early Childhood

The [Caplan Foundation for Early Childhood](#) supports development projects and promising research with the potential to significantly enhance the physical and mental health, safety, nutrition, play, social integration, and / or quality of life of children, from birth through seven years of age.

The Foundation currently is inviting Letters of Intent in the following categories:

Early Childhood Welfare — Children can only reach their full potential when all aspects of their development — intellectual, emotional, and physical — are optimally supported. Providing a safe and nurturing environment is essential, as is imparting the skills of social living in a culturally diverse world. To that end, the Foundation supports projects that seek to perfect child-rearing practices and to identify models that can provide creative, caring environments in which all young children thrive.

Early Childhood Education and Play — Research shows that children need to be stimulated as well as nurtured early in life if they are to succeed in school, work, and life. That preparation relates to every aspect of a child’s development and everywhere a child learns — at home, in childcare settings, and in preschool. The Foundation seeks to improve the quality of both early childhood teaching and learning, through the development of innovative curricula and research based pedagogical standards, as well as the design of imaginative play materials and learning environments.

Parenting Education — To help parents create nurturing environments for their children, the Foundation supports programs that teach parents about developmental psychology, cultural child-rearing differences, pedagogy, issues of health, and prenatal care and diet, as well programs that provide both cognitive and emotional support to parents.

Letter of Intent deadline: September 30, 2021



DOE: Advanced Manufacturing Office Multi-Topic Funding Opportunity

To drive manufacturing innovation, spur job creation, and enhance manufacturing competitiveness, the Department of Energy (DOE) Advanced Manufacturing Office (AMO) supports applied research, development, and demonstration in crosscutting, platform technologies to decarbonize the industrial sector and promote the development and growth of a resilient manufacturing sector for multiple emerging clean energy fields.

The research and development (R&D) activities to be funded under this Funding

Opportunity Announcement (FOA) [[DE-FOA-0002553](#)] will support the government-wide approach to the climate crisis by driving the innovation that can lead to the deployment of clean energy technologies, which are critical for climate protection. This FOA will support activities to advance efficiency improvements and enhance manufacturing competitiveness through technological innovation by focusing on three main areas, as described below, with subtopics in each area:

Topic Area 1: Manufacturing Process Innovation

Topic Area 1a: Efficiency Improvements to Drying Processes

Topic Area 1b: Advanced Tooling for Lightweight Automotive Components

Topic Area 1c: Sustainable Chemistry Practices in Manufacturing

Topic Area 2: Advanced Materials Manufacturing

Topic Area 2a: Materials for Harsh Service Conditions

Topic Area 2b: Development of Aluminum-Cerium (Al-Ce) Alloys and Processing to Enable Increased Energy Efficiency in Aerospace Applications

Topic Area 3: Energy Systems

Topic Area 3a: Structured Electrode Manufacturing for Lithium-ion Batteries

Concept paper deadline: September 10, 2021

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FAA: Aviation Research Grants Program

The [FAA Aviation Research Grants Program](#) encourages and supports innovative, advanced research of potential benefit to the long-term growth of civil aviation and commercial space transportation. The pursuit of basic and applied research in scientific and engineering disciplines that have the potential to further knowledge and understanding on a broad front of emerging technologies is crucial to the realization of this goal. The intent is to encourage applied research and development to enhance technology assimilation, transfer, and development in the FAA. The FAA encourages the submission of proposals that embrace the entire spectrum of physical, chemical, biological, medical, psychological, mathematical, and engineering sciences.

Topics of interest include:

1. Capacity and Air Traffic Control Technology;
2. Communications, Navigation, and Surveillance;
3. Aviation Weather;
4. Airports;
5. Aircraft Safety Technology;
6. Human Factors and Aviation Medicine;
7. Systems Science / Operations Research; and
8. Unmanned Aircraft System (UAS) Unmanned Traffic Management (UTM), Class E Upper Airspace Traffic Management (ETM), and Urban Air Mobility (UAM).

Upcoming deadlines: September 3, 2021; November 1, 2021; December 1, 2021

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The National Academies of Sciences, Engineering, and Medicine: Fellowship Opportunities

The National Academies of Sciences, Engineering, and Medicine (NASEM) offer several [fellowships](#) for both early career faculty and middle-to-late career faculty. These opportunities include:

- National Research Council (NRC) Research Associateship Programs;
- Air Force Science & Technology Fellowship Program; and
- Ford Foundation Fellowship Programs.

[*View the list of currently open opportunities >>*](#)

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ND EPSCoR Seed Awards

Emerging Areas Seed Awards: The North Dakota Established Program to Stimulate Competitive Research (ND EPSCoR) seeks to provide emerging areas seed awards of up to \$25,000 to researchers from the NSF 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](#)). Eligible applicants are those that are not currently associated with the 2020-2025 ND-ACES cooperative agreement and did not receive a 2021 ND-ACES emerging seed award. Please see the [Request For](#)

[Applications](#) for details.

Application Deadline: Noon, September 1, 2021

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NIH: Transformative Artificial Intelligence and Machine Learning Based Strategies to Identify Determinants of Exceptional Health and Life Span (R21 / R33 Clinical Trial Not Allowed)

This Funding Opportunity Announcement (FOA) [[RFA-AG-22-022](#)] will use the NIH Phased Innovation Award mechanism (R21 / R33) to develop novel transformative artificial intelligence / machine learning (AI / ML) strategies and computer automation to integrate, extract, and interpret multi-omic (i.e., genome, epigenome, transcriptome, proteome, metabolome, microbiome, phenome) data sets from human exceptional longevity (EL) cohorts and multiple non-human species that display wide variation in life span and decipher the relationships between DNA, RNA, proteins, metabolites, and other cell variables, as well as links to disease risks and exceptionally healthy aging. The investigative team(s) for this FOA is / are expected to be multi-disciplinary, encompassing expertise in AI / ML, aging biology, comparative biology, and bio / chemo informatics. Investigative teams will design / develop intelligent and innovative algorithms and novel AI / ML based computational strategies during the R21 phase, then apply the developed AI / ML tools to complex, heterogenous multi-omic data sets from exceptional healthy aging human cohorts and non-human species in the R33 phase to discover novel protective molecular factors, biological process(es) and interlayer regulatory mechanism(s) that govern the exceptional aging process and develop translational strategies on omic-based therapeutic target(s) to prevent or delay age-related diseases including Alzheimer's disease and Alzheimer's disease-related dementias (AD / ADRD) and enhance the human health span. This FOA strongly encourages collaboration (including public-private partnerships), coordination, data and resource exchange among researchers studying exceptional longevity and with related NIH-supported omics activities being pursued in different cohorts such as the Trans-Omics for Precision Medicine (TOPMED), the Accelerating Medicines Partnership-Alzheimer's Disease (AMP-AD), and the Alzheimer's Disease Sequencing Project (ADSP). Prospective applicants are strongly encouraged to contact NIA staff to discuss their proposed projects to ensure their responsiveness to this FOA. Applications using only the R21 mechanism or the R33

mechanism will not be accepted under this FOA.

Deadline: October 28, 2021

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NSF: Major Research Instrumentation (MRI) – 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 MRI : Notify RCA by 9/29/2021, 5:00 p.m. if you are interested in submitting to this program.

The National Science Foundation Major Research Instrumentation (MRI) Program [[NSF 18-513](#)] serves to increase access to multi-user scientific and engineering instrumentation for research and research training in our Nation's institutions of higher education and not-for-profit scientific / engineering research organizations. An MRI award supports the acquisition or development of a multi-user research instrument that is, in general, too costly and / or not appropriate for support through other NSF programs. **Cost sharing of precisely 30% of the total project cost is required.**

Based on the NSF 18-513 solicitation, an MRI proposal may request support for either the acquisition or development of a research instrument.

- Track 1: Track 1 MRI proposals are those that request funds from NSF greater than or equal to \$100,000 and less than \$1,000,000. Two proposal submissions are allowed per organization.
- Track 2: Track 2 MRI proposals are those that request funds from NSF greater than or equal to \$1,000,000 up to and including \$4,000,000. One proposal submission is allowed per organization.

LIMITED SUBMISSION: The MRI program requires that an MRI-eligible organization may, as a performing organization, submit or be included as a significantly funded subawardee in *no more than three MRI proposals*. Each performing organization is limited to a maximum of three proposals in the “Tracks” as defined above, with no more than two submissions in Track 1 and no more than one submission in Track 2.

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NSF: Opportunities in the Division of Mathematical Sciences

The National Science Foundation Division of Mathematical Sciences has a number of funding programs with upcoming deadlines.

Probability [[PD 18-1263](#)]

The Probability Program supports research on the theory and applications of probability. Subfields include discrete probability, stochastic processes, limit theory, interacting particle systems, stochastic differential and partial differential equations, and Markov processes. Research in probability which involves applications to other areas of science and engineering is especially encouraged.

Deadline: September 27, 2021

Combinatorics [[PD 18-7970](#)]

The Combinatorics program supports research on discrete structures and includes algebraic, enumerative, existential, extremal, geometric, and probabilistic combinatorics, including graph theory.

Deadline: September 28, 2021

Foundations [[PD 18-1268](#)]

The program in Foundations supports research in mathematical logic and the foundations of mathematics, including proof theory, recursion theory, model theory, set theory, and infinitary combinatorics.

Deadline: September 28, 2021

Analysis [[PD 20-1281](#)]

The Analysis Program supports research in analysis. Areas of current activity include complex, harmonic, and real analysis; dynamical systems and ergodic theory; functional analysis; mathematical physics; operator theory and operator algebras; partial differential equations and calculus of variations.

Deadline: September 30, 2021



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

[Contact Us](#)



The Office of Research and Creative Activity (RCA) sends weekly emails to NDSU faculty and staff to provide current information on various topics including funding opportunities, grant program changes, research resources, deadlines, notices, and training.

You are receiving this notification through the NDSU official employee listserv or sub-list. The official listserv refreshes after each pay period.

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