Making Space for Pollinators

NDSU post doctoral research fellow Mia Park is studying our local bees. While 90% of the 250 species of North Dakota native bees are solitary without colonies and thus have to build their own shelters, researchers have traditionally studied and considered them within rural settings. Mia is interested how urban settings can become beneficial refuges for pollinators.

Mia works in the USDA / NDSU lab of biological sciences faculty members Julia Bowsher and Kendra Greenlee. While she notes that she’s liked insects since she was young and always has wanted to save the world, her interest in rural vs. urban settings for pollinators began when she was doing her graduate studies at Cornell. After graduation, she took a position at the University of North Dakota. The position involved more teaching than research so she was glad to join the lab at NDSU given her position is completely dedicated to research.
Mia’s research concentrates on how environment and nutrition impact stress levels of pollinators. Mia asks questions about the way in which our land management practices affect pollinators at different taxonomic resolutions/scales such as how the entire community of wild pollinators – their abundance and diversity – respond to stressful and beneficial human activities and how reproduction and nutritional health of a single indicator species respond to the same factors.

Considering herself a field ecologist, Mia likes to think about how changes to our ecology affect species. “I’m interested how outreach to various groups from agricultural producers to students and researchers to the public can have an impact,” she says. “It’s been wonderful [at NDSU] as my interests fit the needs of team and I have the intellectual freedom to pursue my research.”

Learn more about Mia’s research >>

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ND Department of Commerce
Final Application Date

The ND Department of Commerce has one remaining submission date for the Research ND program: November 8, 2019. This will be the last application deadline for Research ND and Venture Grant Phase II applications. All applications must clearly demonstrate that the proposed projects will be completed on or before June 30, 2021, which marks the end of the Research ND Program. The North Dakota Legislative Assembly, in passing SB 2224, set the end of the Research ND program,
which includes Venture Grants, as June 30, 2021. All projects must be completed and the final reports submitted to Commerce by this date. Please review the revised Program manual. Questions can be directed to ndsu.research@ndsu.edu.

October Issue of Research Development & Grant Writing News

The October issue of Research Development and Grant Writing News is now available to view. Use your NDSU login information to access this resource. Various topics are covered, including:

- A Close Reading of the National Endowment for the Humanities Strategic Plan FY 2018 –2022
- Humanities and Arts Funding Opportunities and News
- Writing the Workforce Component of STEM Proposals
- Changes in NSF’s Social, Behavioral and Economic Sciences Programs
- What To Do When Reviewers Disagree
- Beware of an Off-the-Shelf Contribution to a Team Proposal

Proposal Development Program

The purpose of the Proposal Development Program is to provide a professional development opportunity for those new to proposal writing or those seeking a refresher to hone proposal writing skills and increase knowledge about funding agency opportunities. There are still seats available – join us for the remaining fall sessions! Register to reserve your
Fall 2019 Sessions
Memorial Union Hidatsa Room | 12:30pm-1:30pm

- October 22 - Proposal Structure and Organization
- November 5 - Writing a Good First Page and Project Summary
- November 19 - Proposal Budgeting
- December 3 - Developing Evaluation Plans
- December 17 - Peer Review

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ACLs: Digital Extension Grants

The American Council of Learned Societies (ACLS) invites applications for ACLS Digital Extension Grants, which are made possible by The Andrew W. Mellon Foundation. This program supports digitally based research projects in all disciplines of the humanities and related social sciences. It is hoped that these grants will help advance humanistic scholarship by enhancing established digital projects, extending their reach to new communities of users, and supporting teams of scholars at all career stages as they participate in digital research projects.

This program aims to extend the opportunity to participate in the digital transformation of humanistic inquiry to a greater number of humanities...
scholars. ACLS Digital Extension Grants support projects that have advanced beyond the start-up phase of development as they pursue one or more of the following activities:

- Developing new systems of making established digital resources available to broader audiences and/or scholars from diverse institutions;
- Extending established digital projects and resources with content that adds diversity or interdisciplinary reach;
- Fostering new team-based collaborations between scholars at all career stages [projects that convene, train, and empower communities of humanities faculty and/or graduate students around established digital research projects, as well as projects that allow scholars from institutions with limited digital infrastructure to exploit digital resources or to participate in existing labs or working groups, are especially welcome];
- Creating new forms and sites for scholarly engagement with the digital humanities. Projects that document and recognize participant engagement are strongly encouraged.

**Deadline: January 8, 2020**

[Track this opportunity >>]

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**2020 Red River Valley ACS Young Investigator Award**

The RED RIVER VALLEY SECTION of the American Chemical Society (ACS) is very pleased to announce a Young Investigator Award (YIA) competition for graduate students and post-doctoral fellows attending the Spring 2020 American Chemical Society National Meeting.

*Only graduate students and postdoctoral fellows that have submitted abstracts for the Spring 2019 ACS National Meeting are eligible to compete. Deadlines are coming up fast so act now!*

$500 will be awarded for the 1st and 2nd place presentations and $250 awarded for the 3rd and 4th place presentations. Awards will be provided
following attendance of the national meeting.

Graduate students and post-doctoral fellows must be ACS members by the time of the competition. Entrants must be the presenting author at the YIA competition and at the ACS National Meeting. The YIA awards competition will be held in early February at Mayville State University in Mayville, ND (conveniently located between Fargo and Grand Forks). Contestants will present their work as a 15 minute oral presentation with five additional minutes allowed for questions.

**YIA applications must be submitted before January 18, 2020.**

To apply for the YIA competition, entrants will e-mail the following information to Dr. Thomas Gonnella at Mayville State University via tom.gonnella@mayvillestate.edu before January 18, 2020.

1. Contact information of graduate student/post-doctoral fellow: name, phone number, institution, department, and email address.
2. Graduate/post-doctoral advisor’s name.
3. A copy of the abstract (title, authors, affiliations, text) and proof of submission with your assigned document ID number.
4. ACS membership number.

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**Bill & Melinda Gates Foundation: Grand Challenges - Innovations for Improving the Impact of Health Campaigns**

Under this request for proposals (RFP), the Bill & Melinda Gates Foundation seeks innovative solutions that will accelerate the coverage, reach, efficiency, and effectiveness of health campaigns. Specifically, the Foundation is looking for innovations in approaches, practices, or tools that dramatically improve the planning and microplanning, implementation/operations, and monitoring and evaluation of campaigns, resulting in their improved effectiveness. In order to
contribute to the development and spread of campaign “best practices,” proposed solutions should be applicable to campaigns beyond the context in which they are originally tested (e.g., applicable in multiple lower- to middle-income countries and/or applicable across multiple types of health campaigns such as immunization, NTDs, malaria, or nutrition). The Foundation is especially interested in novel approaches that draw on innovation from large-scale delivery models outside the health sector, which may include interventions used in the private sector.

Awards of up to $100,000 over eighteen months will be awarded in Phase I of this call. Phase I awardees may then have an opportunity to apply for a follow-on Phase II award of up to $1,000,000.

*Proposal deadline: November 13, 2019 - 1:30pm CT*

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**ND NASA EPSCoR: FY20 Cooperative Agreement Notice R3 Solicitation**

The North Dakota NASA Established Program to Stimulate Competitive Research (EPSCoR) is soliciting pre-proposals from North Dakota faculty in STEM fields to fulfill the following solicitation. Eligible proposers include faculty members at a [ND NASA EPSCoR affiliate institutions](#).

The NASA EPSCoR (Established Program to Simulate Competitive Research) FY20 Cooperative Agreement Notice (CAN) R3 Solicitation limits each jurisdiction to the submission of one proposal per each of the technical areas specified. This down-select process is to identify which proposal(s) will go forward for North Dakota.

More details on the down-select process can be found [here](#). The R3 Solicitation and amendments can be found [here](#). A PDF of the North Dakota NASA EPSCoR Pre-proposal Down-select with guidelines for proposers can be found [here](#).
Pre-proposal Submission:
Email pre-proposal as a PDF attachment by Noon on November 12, 2019 to:
casler@space.edu and cnolby@space.edu

NIH: Human-Animal Interaction Research (R01 Clinical Trial Optional)

The objective of this program of research is to encourage interdisciplinary studies to determine the impact of Human-Animal Interaction (HAI) in and outside the home environment on child and adolescent health and development, as well as therapeutically across the lifespan, through observational studies, experiments and clinical trials. For the adult population, the objective of this funding opportunity announcement (FOA) is to build the empirical evidence base around animal-assisted interventions for those with intellectual, developmental or physical disabilities and for those in need of therapeutic and/or rehabilitative services.

This FOA (PAR-20-031) calls for research to examine

1. the impact of HAI on typical and atypical child development and health;
2. the evaluation of animal-assisted intervention for children and adults with disabilities or in need of rehabilitative services;
3. the effects of animals on public health, including cost effectiveness of involving animals in therapeutic interventions to treat or prevent disease.

Projects should be theoretically based and seek to answer questions that address key developmental, health and safety issues regarding the interactions with animals in home, institutional or therapeutic settings. Research to identify human and animal temperamental, biobehavioral, or genetic markers of suitable behavioral traits for HAI, including markers that are predictive of future success as service, therapy or companion animals, as well as markers that are amenable to change via HAI and how these markers are associated with positive impacts on child health and development, and therapeutic and rehabilitation intervention outcomes, as also encouraged. Physiologic
measures (e.g. neuroendocrine, genetic, heart rate, neuroimaging), as well as direct or observational measures of behavioral, cognitive, psychosocial, and/or psychoeducational outcomes are encouraged.

Letter of Intent Deadline: November 20, 2019
Application Deadline: December 20, 2019

Companion Funding Opportunities:
PAR-20-032, R03 Small Grant Program
PAR-20-033, R21 Exploratory/Developmental Grant

NSF: Division of Environmental Biology Core Programs
The Division of Environmental Biology (DEB) Core Track [NSF 20-502] supports research and training on evolutionary and ecological processes acting at the level of populations, species, communities, and ecosystems. DEB encourages research that elucidates fundamental principles that identify and explain the unity and diversity of life and its interactions with the environment over space and time. Research may incorporate field, laboratory, or collection-based approaches; observational or manipulative studies; synthesis activities; phylogenetic discovery projects; or theoretical approaches involving analytical, statistical, or computational modeling. Proposals should be submitted to the core clusters (Ecosystem Sciences, Evolutionary Processes, Population and Community Ecology, and Systematics and Biodiversity Sciences). DEB also encourages interdisciplinary proposals that cross conceptual boundaries and integrate over levels of biological organization or across multiple spatial and temporal scales. All DEB programs also encourage proposals that leverage NSF-supported data networks, databases, centers, and other forms of scientific infrastructure, including but not limited to the National Ecological Observatory Network (NEON), Environmental Data Initiative (EDI), and Integrated Digitized Biocollections (iDigBio). The Rules of Life Track supports integrative proposals that span population, species, community and ecosystem scales normally funded by DEB, to organismal, cellular and molecular scales typically funded by
other divisions in the Biological Sciences. Discovery of fundamental principles and enabling infrastructure will advance understanding and further predict how key properties of living systems emerge from the interaction of genomes, phenotypes, and environment acting over space and time. This track provides opportunities to advance understanding of the Rules of Life by new mechanisms for review and funding of proposals that span two or more divisions in the Biological Sciences Directorate.

Proposals are accepted anytime

Track this opportunity >>

NSF: Track 2 Focused EPSCoR Collaborations (RII Track-2 FEC) - 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 EPSCoR Track 2: Notify RCA by 11/01/2019, 5:00 p.m. if you intend to apply.

RII Track-2 FEC [NSF 20-504] builds interjurisdictional collaborative teams of EPSCoR investigators in scientific focus areas consistent with NSF priorities. Projects are investigator-driven and must include researchers from at least two RII-eligible jurisdictions with complementary expertise and resources necessary to tackle those projects, which neither party could address as well or rapidly alone. The Science, Technology, Engineering, and Mathematics (STEM) research and education activities should seek to broaden participation through the strategic inclusion and integration of different types of individuals, institutions, and sectors throughout the project. Proposals must describe a comprehensive and integrated vision to drive discovery and build sustainable STEM capacity that exemplifies diversity of all types (individual, institutional,
geographic, and disciplinary). The development of diverse early-career faculty is a critical component of this sustainable STEM capacity. A single proposal is submitted for a project. Support for non-lead collaborating institutions should be requested as subawards. Separately submitted collaborative proposals are not allowed. Each participating EPSCoR jurisdiction must have at least one co-PI on the project.

In FY 2020, RII Track-2 FEC proposals must be aligned with the following focus area: "Harnessing Big Data to solve problems of national importance." Solutions to many of the pressing problems facing society may require the integration of teams of scientists and engineers and the analysis of large and complex data sets arising from multi-disciplinary projects. Proposals submitted for the FY20 RII Track-2 FEC competition should be firmly placed in the context of NSF’s "Harnessing the Data Revolution," one of NSF’s Ten Big Ideas, and must address a specific and compelling problem related to a scientific topic area of national importance. The proposals should clearly identify and motivate the importance and relevance of the chosen topic area in the context of complex data sets and the current status of ongoing work in the area. Projects should demonstrate a multi-disciplinary nature, with the analysis of complex, quantitative and/or qualitative data sets as the central activity. Development of algorithms and software frameworks for the integration of the diverse data sets may be included in the proposal. Successful proposals will emphasize how new information can be obtained from better connections among data sources, utilization of data (including data from multiple facilities, techniques, and/or instruments), and how this will be used to address the specific problem of national importance. Proposers are encouraged to take advantage of existing data sets, where available. The creation of large-scale databases per se is not the focus of this solicitation, although the development and enhancement of such databases may be proposed as one element towards producing the final provisioning of data cyberinfrastructure that significantly increases the value of these data as well as their insights, predictions, and ultimate applicability.

For FY 2020, RII Track-2 FEC proposals are invited on a single topic: "Harnessing the Data Revolution to solve problems of national importance.”
LIMITED SUBMISSION: Only one RII Track-2 FEC proposal may be submitted in response to this solicitation by an organization in an RII-eligible jurisdiction.

Track this opportunity >>

RCA Halloween Gathering
Research and Creative Activity invites you to our Halloween Gathering on Thursday, October 31, at 3:00 p.m. in the Research 1 building, room 148. Please join us! You're welcome to wear a Halloween costume. Ballots will be available to vote on the best costumes and prizes will be awarded. We hope to see you there!

NDSU Rodent Training Series
The NDSU Rodent training series is a 4 course training series which covers basic mouse handling and techniques. The series is designed to provide foundational training and experience for faculty, staff, and students. Participation in all sessions is encouraged. Space is limited so register early.

Fall Course Schedule:

- **Breeding, Genotyping, Injections**
  Wednesday, October 30 | 3-4:30 PM | Van Es 107
  *Class is Full - Registration Closed*

- **Venipuncture**
  Wednesday, November 20 | 3-4:30 PM | Van Es 107
  [Register for this session >>]

The Rodent Training Series is sponsored by the Vice President for Research and Creative Activity. If you have questions about these sessions, please
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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