Experiencing the Research Environment

Research Experiences for Undergraduates (REUs) offer undergraduates the opportunity to work within an established research program. The students work closely with the faculty and graduate students within an established research program and typically receive stipends and assistance with housing and travel. Two examples at NDSU are Growing Up Stem and Pollination Nation.

Associate professors Jenni Momsen (biology) and Warren Christensen (physics) lead Growing Up Stem, an NSF-funded program that engages undergraduate students from across the nation in cutting-edge, collaborative,
interdisciplinary research investigating education and learning in STEM disciplines. Pollination Nation is a 10 week REU funded by NSF led by biology associate professors Kendra Greenlee and Julia Bowsher. The program is conducted by NDSU and USDA scientists through the Insect Cryobiology and Ecophysiology Network (ICE) and allows participants to conduct research focused on understanding overwintering and pollinator health using molecular biology, field ecology, and genomics techniques.

Read more about REUs at NDSU >>

Do you mentor undergraduate researchers?

Encourage your undergraduate students to present at the NDSU EXPLORE Showcase of Undergraduate Research & Creative Activity.

REGISTRATION CLOSES MARCH 22, 2019

This campus-wide event is an opportunity to showcase students' research and creativity. Students present their projects in whatever format is appropriate for their work, whether in a poster, oral presentation, video, table display, or other format. Projects need not be finished; they can be in-progress.

The 2019 NDSU EXPLORE Showcase will take place Thursday, April 11, 2019.

For more information, including eligibility, guidelines, award information, and registration, visit the NDSU EXPLORE webpage.
Updates from the Research Integrity Team

The Research Integrity Administrators (IACUC, IBC & IRB) will be out of the office Monday, April 29-Thursday, May 1, 2019 while attending the Three l’s and Biosecurity professional development conference. Please plan accordingly.

For questions during this time, contact Neil Dyer [1-7830, neil.dyer@ndsu.edu]
Revised Human Subjects Regulations: 
Educational Research under Exemption 1

The Regulatory Definition of Exemption 1 – Research, conducted in established or commonly accepted educational settings, *that specifically involves normal educational practices that are not likely to adversely impact students’ opportunity to learn required educational content or the assessment of educators who provide instruction*. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

The key change to this exemption category is that there may be no adverse impact on students’ learning or assessment of educators. **Based on this revision, some research that qualified for Exemption 1 prior to 1/21/2019 may not today.** For example:

- Research conducted by department or program chairs who also hold responsibility for evaluation of faculty, or
- research involving the assignment of students to either a proven educational technique or a novel educational technique.

Please contact Kristy Shirley with questions [1-8995, kristy.shirley@ndsu.edu].

Animal Care and Use Updates

The Institutional Animal Care and Use Committee (IACUC) has updated the following Guiding Principles:

- [Field Studies]
If you are an individual that utilizes animals at NDSU, please take time to review these documents. If you have any questions regarding the NDSU IACUC Guiding Principles, please contact the IACUC Office [1-8114].

Significant Financial Interest (SFI) Disclosures for Grant Submissions

If you are planning to submit a grant proposal April 29-May 2, please ensure that your Significant Financial Interest (SFI) disclosure is current. This will avoid delays in the process while the Research Integrity Administrators are out of the office. SFI disclosures are valid for 12 months. Please contact Julie Sherwood [1-8908, j.sherwood@ndsu.edu] with any questions.

A "no cost extension" adds time to an award, but does not relieve the awardee of compliance or reporting requirements.

During a no cost extension period, compliance requirements such as Financial Conflict of Interest (FCOI), Institutional Review Board (IRB), and Institutional Animal Care and Use Committee (IACUC) must still be met.

In addition, some sponsors, such as the National Institutes of Health (NIH) and the National Science Foundation (NSF), still require technical reports
prior to when the final report is prepared. Annual reports are still due every 12 months. When the award finally does expire, the final report and project outcomes report are both due generally within 120 days.

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**Looking for Collaborators?**
Visit the **NDSU Scholars Database**

**In Search of Equipment?**
Check the **NDSU Equipment Database**

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**DoD Army Broad Agency Announcements (BAA)**

The U.S. Army Research Laboratory (ARL) is the Department of the Army's corporate laboratory and sole fundamental research laboratory. It is dedicated to scientific discovery, technological innovation, and the transition of knowledge products. ARL is situated within the U.S. Army Research, Development, and Engineering Command (RDECOM) - a U.S. Army Materiel Command (AMC) Major Subordinate Command (MSC). To accomplish its mission, ARL executes fundamental research to address enduring Science & Technology challenges. In
addition, the laboratory conducts research and analysis in emerging fields that may realize novel or vastly improved Army capabilities into the deep future (2030 and beyond). For ease of reference and clarity, the ARL research funding opportunities are organized into two separate funding opportunity announcements: the ARL Broad Agency Announcement (BAA) and the Army Research Office (ARO) BAA.

The ARL BAA identifies topics of interest to the ARL Directorates (Computational and Information Sciences Directorate, Human Research and Engineering Directorate, Sensors and Electron Devices Directorate, Survivability/Lethality Analysis Directorate, Vehicle and Technology Directorate, and Weapons and Materials Research Directorate). The Directorates focus on executing in-house research programs, with a significant emphasis on collaborative research with other organizations.

ARO is focused exclusively on extramural basic research, and is responsible for the vast majority of ARL's extramural research programs and funding.

The type of research solicited under these Broad Agency Announcements (BAA) attempt to increase knowledge in science and/or to advance the state of the art as compared to practical application of knowledge.

_BAA Closing Date: March 31, 2022_  

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**DOJ-NIJ: Artificial Intelligence Research and Development to Support Community Supervision**

The Department of Justice (DOJ) National Institute of Justice (NIJ) seeks proposals for innovative, investigator-initiated technology research and development (R&D) projects to apply advances in Artificial Intelligence (AI) to promote the successful reentry of offenders under community supervision. Ideally, the R&D funded through this solicitation will result in fielded AI solutions that remain in use with community supervision agencies at the completion of the project. The research resulting from this solicitation supports the DOJ’s priorities to reduce crime and to protect police, other public safety personnel, and the public.
NIJ’s interests include, but are not limited to, solutions that may be applicable to offenders under supervision across various jurisdictions. Applications that examine AI solutions for offenders under supervision in rural communities are encouraged.

(Application deadline: May 13, 2019)

DOJ-NIJ: Research and Evaluation on White-Collar Crime - Health Care Fraud, Cyber Crime, and Elder Fraud

The Department of Justice (DOJ) National Institute of Justice (NIJ) is seeking applications for funding research and evaluation projects that will improve our knowledge on how to identify, prevent, and reduce white collar crime in the United States. There are many types of offenses that may be classified as white collar crime. This solicitation focuses on three types of white collar crime:

- health care fraud,
- cyber-crime against individuals, and
- elder fraud.

NIJ will support scientifically rigorous research and evaluation projects that will advance our understanding of white collar crime and effective approaches for identifying, preventing, investigating and prosecuting white collar crime related to health care fraud, cyber crime against individuals, and elder fraud and financial exploitation. This solicitation supports the DOJ’s strategic goals associated with enhancing national security and promoting the rule of law, integrity and good government.

(Application deadline: May 2, 2019)
DOJ-NIJ: Research into Immigration and Crime

The Department of Justice (DOJ) National Institute of Justice (NIJ) has issued a new solicitation, Research into Immigration and Crime, to address the administration’s interest in better understanding the nexus of crime and immigration, both legal and illegal. This will involve research on the contributions of illegal immigrants to violent crime and other forms of crime as compared to legal immigrants and native populations, to include subcategories of illegal immigrants and crimes. It will also include research on how illegal immigrants are processed through the criminal justice system relative to other population; as well as research on enforcement activities and crime in jurisdictions that have entered into agreements with ICE to delegate immigration authorities to local law enforcement.

Application deadline: May 20, 2019

Foundation for Food & Agriculture Research: Seeding Solutions Grants

The Foundation for Food and Agriculture Research (FFAR) is a 501(c)(3) nonprofit organization originally established by bipartisan Congressional support in the 2014 Farm Bill which builds unique partnerships to support innovative and actionable science addressing today’s food and agriculture challenges. For the third consecutive year, FFAR is excited to open applications for Seeding Solutions, its flagship competitive grant program. Seeding Solutions Grants are an open call for innovative research projects that support one of FFAR’s six Challenge Areas:

- Next Generation Crops,
- Advanced Animal Systems,
- Urban Food Systems,
- Soil Health,
- Sustainable Water Management, and
- Health-Agriculture Nexus.
The Seeding Solutions Grant program emphasizes the importance of fostering unique partnerships, requiring applicants to secure matching funds from non-federal sources, including but not limited to, private sector, non-profits, commodity and trade groups, state governments and/or other groups not traditionally affiliated with the agriculture industry.

Pre-proposal Application window: March 1 - April 19, 2019

NEH: Digital Projects for the Public
The National Endowment for the Humanities (NEH) Digital Projects for the Public program supports projects that interpret and analyze humanities content in primarily digital platforms and formats, such as websites, mobile applications and tours, interactive touch screens and kiosks, games, and virtual environments. The projects must be designed to attract broad public audiences. All Digital Projects for the Public projects should:

- present analysis that deepens public understanding of significant humanities ideas;
- incorporate sound humanities scholarship;
- involve humanities scholars in all phases of development and production;
- include appropriate digital media professionals;
- reach a broad public through a realistic plan for development, marketing, and distribution;
- create appealing digital formats for the general public; and
- demonstrate the capacity to sustain themselves.

All projects should demonstrate the potential to attract a broad, general, nonspecialist audience, either online or in person at venues such as museums, libraries, or other cultural institutions. Applicants may also choose to identify particular communities and groups, including students, to whom a project may have particular appeal. NEH also welcomes applications for non-promotional digital components of a larger project. For these projects, you should explain how the
digital platform will enrich the users’ learning experience and engagement.

Applications due: June 12, 2019

NCR SARE: Grants and Education to Advance Innovations in Sustainable Agriculture

The North Central Region (NCR) Sustainable Agriculture Research & Education (SARE) Research and Education (R&E) Grant Program is a competitive grant program for researchers and educators involved in projects that explore and promote environmentally sound, profitable, and socially responsible food and/or fiber systems. Research and Education projects include a strong outreach component and significant farmer/rancher or other end user involvement from inception of the idea through implementation of the project. Generally, Research and Education grant awards range from $10,000 to $200,000. Projects may last up to 36 months. NCR-SARE anticipates funding 10-14 Research and Education projects per year.

Graduate Student Grant Program Proposals deadline: April 11, 2019

NIH: Team-Based Design in Biomedical Engineering Education (R25) - 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 Biomedical Engineering Education: Notify RCA by 3/25/2019, 5:00 p.m. if you intend to apply.

This funding opportunity [PAR-19-215] seeks to support programs that include innovative approaches to enhance biomedical engineering design education to ensure a future workforce that can meet the nation’s needs in biomedical research and healthcare technologies. Applications are encouraged from institutions that propose to establish new or enhance existing team-based design courses or programs in undergraduate biomedical engineering departments or other degree-granting programs with biomedical engineering tracks/minors. This announcement targets the education of undergraduate biomedical engineering/bioengineering students in a team-based environment. While current best practices such as multidisciplinary/interdisciplinary education, introduction to the regulatory pathway and other issues related to the commercialization of medical devices, and clinical immersion remain encouraged components of a strong biomedical engineering program, this announcement also challenges institutions to propose other novel, innovative and/or ground-breaking activities that can form the basis of the next generation of biomedical engineering design education. Direct costs of up to $20,000 per year may be requested, with project durations of up to five years. Programs that include a clinical immersion program outside the academic year and lasting 6 to 10 weeks may request an additional $20,000 to cover participant costs, yielding a total of $40,000 in direct costs. Total salary costs requested may not exceed $10,000 annually.

Letter of Intent deadline: April 29, 2019; Full proposal deadline: May 31, 2019

Sanford Health - NDSU Collaborative Research Seed Grant Program

The fifth Sanford Health - NDSU Collaborative Research Seed Grant program’s Request for Applications (RFA) has been released. Proposals are to be submitted electronically to NDSU.BusinessDev@ndsu.edu by 5:00 PM on March 19, 2019. The full RFA and Application form can be downloaded from the program's
webpage.

Questions regarding suitability of topic areas, collaborating with Sanford, or other program-related questions can be addressed by Business Development (231-6660 or NDSU.businessdev@ndsu.edu).

USDA: Federal-State Marketing Improvement Program

The Federal-State Marketing Improvement Program offers grants with a one-to-one dollar match, aims to explore new market opportunities for U.S. food and agricultural products, and encourages research and innovation aimed at improving the efficiency and performance of the U.S. agricultural marketing system. FSMIP funds a wide range of applied research projects that address barriers, challenges, and opportunities in marketing, transportation, and distribution of U.S. food and agricultural products domestically and internationally. Applicants must align their proposal to one of the four project types:

- Agricultural Product Distribution (handling, storage, processing, transportation, and distribution);
- Cooperative Development (cooperation among Federal and State agencies, producers, industry organizations, and others in the development and effectuation of research and marketing programs to improve the distribution processes);
- Economic Research to Clarify Marketing Barriers and Opportunities, including regulatory compliance costs; or
- Agricultural Product Development.

Application deadline: April 5, 2019
Broader Impacts: Collaborating with Institutions in North Dakota

Are you interested in collaborating with the five tribal colleges, three primarily undergraduate institutions, or one master’s college/university in North Dakota, but are unsure of how to start? Would you be interested in learning more about research interests, outreach programs, and successful collaborations?

Register to attend "Broader Impacts: Collaborating with Institutions in North Dakota" on Monday, March 25, at 11:15am in the Memorial Union Room of Nations. This session will provide details about ND EPSCoR’s Broader Impacts initiative followed by an experienced faculty panel who have developed successful education and research collaboration projects with colleagues at these institutions. This will be an interactive discussion, so please bring your questions.

Panelists:
Scott Hanson, Ph.D.
ND EPSCoR Tribal Colleges Liaison Manager
Director, ND EPSCoR NATURE program

Dilpreet Bajwa, Ph.D.
Professor, Mechanical Engineering

Julia Bowsher, Ph.D.
Associate Professor, Biological Sciences
ND EPSCoR NATURE Sunday Academy Co-Coordinator

Britt Heidinger, Ph.D.
Assistant Professor, Biological Sciences
ND EPSCoR NATURE Sunday Academy Co-Coordinator

Register to attend >>
NDSU IACUC Rodent Training Series
Session 3: Anesthesia and Euthanasia

NDSU's Institutional Animal Care and Use Committee (IACUC) is offering a training session on rodent anesthesia and euthanasia. The session will take place Tuesday, March 26, 2019, from 8:00-9:30am in Sudro Hall 207.

This training is open to faculty, staff, and students. Participants must be able to competently restrain a mouse.

Register for the event today! Space is limited.

Mark your calendars for the next rodent training session: April 25, 2019, from 3-4:30pm.

Agricultural Utilization Research Institute - Reverse Pitch Event

On March 27, some of the world’s largest food and agricultural companies will gather to present “reverse pitches” to an audience of researchers, entrepreneurs, innovators and subject-matter experts. The businesses will talk about distinctive industry challenges and invite the audience to propose solutions.

The Reverse Pitch Showcase and networking event will be at the Marriott West in Minneapolis and is free and open to the public. A registration link and additional information is available at auri.org. Those who cannot attend will be able to watch on a live web stream broadcast.

Challenge areas to be covered include:

- Sustainability Solutions for the Food Sector
- Farm Management Software Data Incentives
• Traceability of Food Safety and Quality Issues
• Alternative Ingredients and Functional Benefits
• Virtual Reality Financial Benchmarking
• Improvements in Animal Production Incentives
• Regenerative Agricultural Practices for Animal Production
• Ag Processing Efficiencies
• Pesticide Application Innovations
• Improved Pest Detection in Stored Food Products
• Packaging Innovations
• New uses for Dairy Byproducts
• New Food Product Development
• Improved Food Sensory Attributes
• Practical Food Applications to Improve Human Nutrition and Health

Introducing CoSearch NDSU: April 12 & 13
On April 12 and 13th, NDSU researchers will have 30 hours to share a research idea, hone the idea with an interdisciplinary team they meet at the event and pitch the idea to a panel of judges.

The broad theme of this inaugural NDSU CoSearch event is The Farm of the Future. This is an exciting opportunity for researchers from a variety of disciplines to bring their perspectives on how our communities and state look and function as farms transform in the coming decades.

CoSearch is open to all faculty members who are interested in collaboration, research, and solving real world problems. In just 30 hours, you will create, hone and launch a research project that could be funded. The event begins at the Research Park Friday afternoon with the final showcase at Elevate on Broadway in downtown Fargo.
CoSearch is free for the first 30 participants. No team or existing idea is needed to participate. Join and you will find a team and create an idea. The event is being hosted through a partnership between the College of Business, Emerging Prairie, and the Office of Research and Creative Activity.

More information >>
Register to Participate >>

NIH Grant Writing Workshops
On April 25, Dr. Meg Bouvier [Meg Bouvier Medical Writing] will present three workshops:

**How to Write an NIH R-Series Application**
Thursday, April 25, 2019 | 8am-1pm | Memorial Union Hidatsa Room
The target audience for this session is NIH R01 and R15 grant program applicants. This workshop will cover the following topic areas:

- **Preparation**: Key steps to take before you write a successful NIH submission
- **Specific Aims**: How to write the most important page of an NIH submission
- **Significance and Innovation**: How to “sell” your project to NIH reviewers
- **Approach**: How to write the section that correlates most closely with your overall score

**Mistakes Commonly Made on NIH Submissions**
Thursday, April 25, 2019 | 1pm-2pm | Memorial Union Arikara Room
This lunch-time session covers mistakes commonly made on NIH submissions, and will include a question and answer period with Dr. Bouvier.

**Building Your Biomedical Research Funding Portfolio**
Thursday, April 25, 2019 | 2pm-3pm | Memorial Union Hidatsa Room
This session will discuss funding options including those outside NIH that could help build and diversify your funding portfolio.

Seating is limited, and priority will be given to faculty. Registration is required.

Register for a workshop >>

These workshops are co-sponsored by the Research and Creative Activity Office and the Center for Diagnostic and Therapeutic Strategies in Pancreatic Cancer.

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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