

RCA UPDATE

April 8, 2019

UNDERGRADUATE RESEARCH WEEK IS APRIL 8-11

Celebrate by attending the NDSU EXPLORE Showcase

Thursday, April 11 | 9:30-11:30am; 1-3pm | Memorial Union 2nd Floor

Undergraduate Research Mentor

Timothy Greives, Ph.D.

Biological Sciences

Describe your research interests/program:

My research is interested in understanding how animals anticipate and respond to predictable changes in their environment on a daily (e.g. night to day) and seasonal time scale (e.g. winter to spring). We are exploring the mechanisms (neural and hormonal) that are capable of responding to both environmental and internal cues to influence changes in physiology and behavior that promote reproductive success.

**How have undergraduates been involved in your research?**

Primarily we have had undergraduates participate in field work over the summer. This work often entails catching songbirds using various techniques, marking the birds with a unique combination of color bands on their legs (like bracelets), obtaining blood samples for DNA and measurements of hormones, finding nests and following the fate of these nests. We have also had undergraduates help with smaller projects during the winter with a small group of birds that we bring into captivity. These students assist with caring for the birds and also help with behavioral monitoring, blood sampling for measuring hormones and sometimes injections of drugs or hormones to ask how these substances influence physiological or behavioral responses.

What is the best thing about being an undergraduate research mentor?

Seeing how much your students can accomplish! It is exciting to work with students that are involved from project conception to completion and see them analyze data, prepare figures and most especially it is exciting to see them present their research!

[Read more about Dr. Greives and other Undergraduate Research Mentors at NDSU](#)

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NDSU EXPLORE

Celebrates Undergraduate Students

You are invited to attend NDSU EXPLORE 2019. This annual event brings together undergraduate students from all disciplines to present their research and creative work in posters, oral presentations, or in other formats.



NDSU EXPLORE will take place on **Thursday, April 11, 2019** in the **Memorial Union** and features an oral and poster presentation session from **9:30am – 11:30am** followed by a second session from **1:00pm – 3:00pm**. The projects are different for each session. **You are invited to attend both of these sessions and provide the students an opportunity to share their work with you.**

Whether majoring in the sciences, engineering, business, arts or humanities, all NDSU undergraduate students are encouraged to participate in research and creative activity to enrich their academic experience. Studies show that students that participate in experiential learning opportunities during their undergraduate years have increased grade point averages, greater student retention, and greater satisfaction of their college experience.

The logo features the text "NDSU" in white, bold, sans-serif font, followed by "EXPLORE" in a large, yellow, outlined, sans-serif font. Below "EXPLORE" is the tagline "UNDERGRADUATE EXCELLENCE IN RESEARCH AND CREATIVE ACTIVITY" in a smaller, white, sans-serif font. The entire logo is set against a dark green rectangular background.

NDSU EXPLORE

UNDERGRADUATE EXCELLENCE IN RESEARCH AND CREATIVE ACTIVITY

April 11, 2019 | 9:30am-11:30am; 1pm-3pm | Memorial Union 2nd Floor

[Learn more about NDSU EXPLORE >>](#) | [Download the schedule >>](#)



Looking for help to develop your NIH Biosketch?

The biosketch provides an opportunity for each senior/key person listed in an National Institutes of Health (NIH) grant application to describe why they are well-suited for their role(s) in the project, and is an important component of the proposal review process.

The NIH Office of Extramural Research (OER) recently published some information and resources for writing successful NIH Biosketches on the OER Blog, *Extramural Nexus*.

You can read the full entry and subscribe to future posts [here](#).

The [Research Integrity Administrators](#) (IACUC, IBC & IRB) will be out of the office Monday, April 29-Thursday, May 1, 2019 while attending the Three I'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: Exemption Category 4 – Secondary research for which consent is not required

Find the regulatory criteria [here](#).

“Secondary Research” refers to re-using identifiable information and identifiable biospecimens that are collected for some other ‘primary’ or ‘initial’ activity. The information or biospecimens that are covered by this exemption would generally be found in some type of records (in the case of information) or some type of tissue repository (such as a hospital’s department for storing clinical pathology specimens).

Key Features –

- Covers only secondary research
- Data/specimens can be both retrospective and prospective as long as they are being collected for some other primary purpose
- There are four stand-alone qualifications (must meet only one):
 - Data/specimens are publicly available, or

- Data is recorded such that subject identities cannot be readily ascertained **and** the investigator does not contact or re-identify subjects; or
- Data includes only identifiable health information protected under HIPAA (HIPAA protections must apply), or
- The research is conducted by or on behalf of a Federal department or agency using government data obtained for nonresearch reasons and, if identifiable, adheres to specified privacy standards.

For questions, please contact Kristy Shirley [kristy.shirley@ndsu.edu; 231-8995].

Updates from the Institutional Animal Care and Use Committee (IACUC)

Post-Approval Monitoring: The NDSU IACUC and Attending Veterinarian (AV) Offices have implemented a post-approval monitoring (PAM) program. The [Post-Approval Monitoring Guiding Principle](#) outlines the program benefits and procedures.

For questions about the PAM program, please contact Josie Hayden [josie.hayden@ndsu.edu; 231-8114] or Neil Dyer [neil.dyer@ndsu.edu; 231-7830].

Reminder: The NDSU IACUC has adverse event and protocol deviation reporting requirements. The requirements are outlined in the [Adverse Event and Protocol Deviation Guiding Principle](#). Adverse events and protocol deviations are to be [reported](#) within 48 hours of learning of the event or deviation. Animals that die unexpectedly or are unexpectedly euthanized must be submitted to the Veterinary Diagnostic Laboratory for necropsy.

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 [231-8908, j.sherwood@ndsu.edu] with any questions.



EXPORT CONTROL FAQs

Q: What license exclusions are available?

A: There are three principal exclusions from the export regulations:

1. Public Domain / Publicly Available Information (i.e., materials available in newspapers, libraries, or presented at publicly available conferences and trade shows, publicly available technology or software, websites accessible to the public for free and without the host's knowledge or control of who visits the site, and published patents);
2. Educational Information, i.e., "information concerning general scientific, mathematical, or engineering principles commonly taught in schools, colleges, and universities" (see ITAR [§120.10\(b\)](#)), and information by "instruction of a catalog course or associated teaching laboratory of an academic institution" (see EAR [§734.3\(b\)\(3\)\(iii\)](#)); and
3. Fundamental Research (i.e., basic or applied research in science, mathematics and engineering where the resulting information is

ordinarily published and shared broadly within the scientific community, and for which the researchers have not accepted restrictions for proprietary or national security reasons).

Please contact the export control administrator
ndsuh.exportcontrols@ndsuh.edu / 231-6455] with any questions, or visit the
[NDSU export control website](#).

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FUNDING OPPORTUNITIES

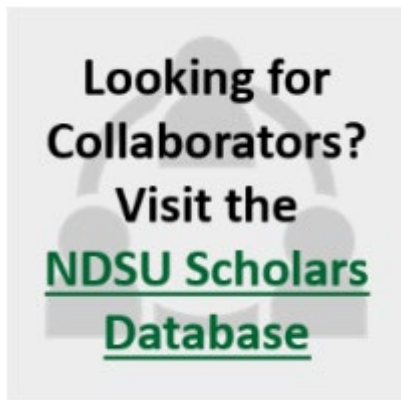
In honor of Undergraduate Research Week, this edition's grant listing is focused on a sample of undergraduate student opportunities.

- [ASHRAE: Undergraduate Program Equipment Grants](#)
- [Evolving Earth Foundation: Student Grant Program](#)
- [Microscopy Society of America: Undergraduate Research](#)
- [NSF: Research Experiences for Undergraduates \(REU\)](#)
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EVENTS

- [NDSU EXPLORE Showcase of Undergraduate Research & Creative Activity](#)
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- [NIH Grant Writing Workshops](#)



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

In honor of Undergraduate Research Week, this edition's grant listing is focused on a sample of undergraduate student opportunities.

American Society of Heating, Refrigeration & Air-

Conditioning Engineers: Undergraduate Equipment Grants

The American Society of Heating, Refrigeration, & Air Conditioning Engineers (ASHRAE) [Undergraduate Program Equipment Grants Program](#) provides grants to engineering, technical and architectural schools worldwide with the goal of increasing student knowledge, learning and awareness of the heating, ventilation, and air conditioning (HVAC) industry. Grants shall be used to fund equipment and supplies for undergraduate projects and 2-year technical school projects that focus on ASHRAE-related topics. Grants may cover projects lasting from one academic term up to one year. The grant is made to the university/college solely for the support of the materials required for the project in an amount not to exceed \$5,000 (U.S.). University overhead, faculty or student salaries, travel expenses, and other non-equipment items will not be funded. Funding from other sources, including in-kind contributions, is encouraged and will receive a higher ranking. Applications that create hands-on teaching / demonstrations in undergraduate courses will receive higher ranking than projects that are one year undergraduate research-based or research-like projects. Projects involving the building of working models, testing equipment, experimental teaching aids, and laboratory experiments are encouraged. Projects only involving data collection, computer modeling or computer programming will receive lower funding priority. Computer hardware will not be funded, such as: Mouse, Printers / 3D Printers, Computers / Laptops, Tablets, Notepads, Hard Disk, Memory stick. However, specialized computer software (Data Acquisition Software) only utilized with the above listed project is acceptable. The grant application must be submitted by the faculty member(s) responsible for the project. The application may be made from any engineering, architecture, or engineering technology department; however, the project must involve an ASHRAE-related topic. The faculty member(s) and student(s) responsible for the project are NOT required to be members of ASHRAE.

Application deadline: December 15, 2019

Evolving Earth Foundation: Student Grant Program

The Evolving Earth Foundation is dedicated to an increased understanding and awareness of the geologic and biologic processes that shape our earth. To achieve our mission, we will provide resources to enhance education, maintain an information Internet community, and support research in the earth sciences and related fields. The [Evolving Earth grant program](#) provides grants to support student research in the earth sciences. A grant award from the Evolving Earth Foundation is a contribution to the scientific and academic program of the institution receiving the grant. Grant funds are to be used solely for the support of the work described in the grant application approved by the authorized agent of the institution.

Undergraduate students, graduate students, and postdoctoral researchers at accredited U.S. colleges and universities or research institutions are eligible to apply for grant funding.

Evolving Earth offers amounts of up to \$3,000 per grant. A total of 10 grants are available each year.

Application deadline: March 1, 2020

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Microscopy Society of America: Undergraduate Research

[Microscopy Society of America \(MSA\) scholarships for undergraduate research](#) are intended to foster the educational and research potential of full-time undergraduate students interested in pursuing microscopy as a career or major research tool. Applications for research involving any area of microscopy are suitable for the program. The program is currently soliciting applications from students interested in conducting a research project which involves the use of any microscopy technique. Students are required to be sponsored by a member of MSA. The maximal award is \$3,000. These awards help to provide student stipends, supply costs, and limited travel expenses associated with research. Additional support in

the form of instrument use time, equipment purchases, etc. is generally provided by the student's supervisor and/or through the sponsoring institution. Applicants must be full-time undergraduate students. Applicants must have junior or senior standing by the time the work is initiated. Applicants do not have to be a member of MSA, however, they must be sponsored by an MSA member. Applicants may receive only one scholarship. Research must be completed prior to graduation. In special cases and by prior agreement funds may be used, in part, to support ongoing work which extends one additional summer semester past graduation. Applications for research to be performed at an institution other than the one in which the applicant is enrolled are acceptable.

Application deadline: December 31, 2019



NSF: Research Experiences for Undergraduates (REU) Sites and Supplements

The National Science Foundation (NSF) [Research Experiences for Undergraduates \(REU\) program](#) supports active research participation by undergraduate students in any of the areas of research funded by the NSF. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program.

This solicitation features two mechanisms for support of student research:

1. *REU Sites* are based on independent proposals to initiate and conduct projects that engage a number of students in research. REU Sites may be based in a single discipline or academic department or may offer interdisciplinary or multi-department research opportunities with a coherent intellectual theme. Proposals with an international dimension are welcome.
2. *REU Supplements* may be included as a component of proposals for new or renewal NSF grants or cooperative agreements or may be requested for ongoing NSF-funded research projects.

Undergraduate student participants in either REU Sites or REU Supplements must be U.S. citizens, U.S. nationals, or permanent residents of the United States. Students do not apply to NSF to participate in REU activities. Students apply directly to REU Sites or to NSF-funded investigators who receive REU Supplements. To identify appropriate REU Sites, students should consult the [directory of active REU Sites](#).

REU Sites proposal deadline: August 28, 2019



Psi Chi: Undergraduate Research in Psychology

Psi Chi is the International Honor Society in Psychology. The purpose of the [Undergraduate Research Grants program](#) is to provide funds for individuals enrolled in a psychology or a psychology-related field to conduct an original research project. The first author of the proposal must be a Psi Chi member; be an enrolled undergraduate student or not be more than 6 months past graduation from an undergraduate program at the time of application; not have received an Undergraduate Research Grant within the current fiscal year; and have at least one faculty member serve as a Faculty Sponsor and oversee the project. Each round has \$25,000 available for research grants and 11 faculty stipends. An annual total of \$75,000 in funding is available for student research projects. Additionally, 33 faculty stipends are available each year, \$1,500 each. Research funding and faculty stipends come together for an annual total of \$124,500. Individual grants are up to \$1,500 or \$3,500 for research requiring the applicant to travel significant distances. Faculty stipends are awarded to the 11 highest scoring applications in each round.

Application deadlines: May 1, October 15, and January 15, annually



Sigma Xi: Student Grants-in-Aid of Research

The [Sigma Xi Grants-in-Aid of Research \(GIAR\) program](#) has provided students with valuable educational experiences since 1922. By encouraging close working relationships between students and mentors, the program promotes scientific excellence and achievement through hands-on learning. U.S. citizenship and residence not required. International applications are welcome. The program awards grants of up to \$1,000 to students from all areas of the sciences and engineering. Designated funds from the National Academy of Sciences allow for grants of up to \$5,000 for astronomy research and \$2,500 for vision related research. Students use the funding to pay for travel expenses to and from a research site, or for purchase of non-standard laboratory equipment necessary to complete a specific research project. Only undergraduate and graduate students currently enrolled in degree seeking programs may apply. Undergraduates who are graduating seniors must plan to complete their research prior to graduation. While membership in Sigma Xi is not a requirement for application, designated funds are available to members or whose primary advisors are members.

Application deadline: October 1, 2019

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NDSU EXPLORE Showcase



NDSU EXPLORE encourages and celebrates the research and creative accomplishments of NDSU undergraduates. Plan to attend to support the students and learn about their exciting research activities!

Morning Student Presentation Session

Thursday, April 11, 2019 | 9:30 a.m. -11:30 a.m. | Memorial Union, 2nd Floor

Afternoon Student Presentation Session

Thursday, April 11, 2019 | 1:00 p.m. -3:00 p.m. | Memorial Union, 2nd Floor



Veterinary & Public Health Implications of Tuberculosis

Sarah Bailey, DVM, MPH, CPH(p), the North Dakota Assistant State Veterinarian, will be on campus on Wednesday, April 17, 2019, to present a seminar on the

veterinary and public health implications of tuberculosis. Mark your calendars and plan to attend:

Wednesday, April 17, 2019

2-4pm

Van Es 101



NDSU IACUC Rodent Training Series

Session 4: Breeding and Genotyping

NDSU's Institutional Animal Care and Use Committee ([IACUC](#)) is offering a series of rodent training sessions. The next session's topic will be "**Breeding and Genotyping**." This session will take place **Thursday, April 25, 2019**, from **3-4:30pm**.

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.



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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