

January 28, 2019

Undergraduate Research Mentor **Amanda Brooks, Ph.D.** Pharmaceutical Sciences

Describe your research interests / programs:

My research program is at the interface of pharmaceutical sciences, bioengineering, and material sciences.

Essentially, we genetically and chemically engineer spider silk to endow it with new biological and material properties that makes it suitable as a "smart" drug delivery system. "Smart" drug delivery systems are able to be triggered by a biological condition to release their drug payload. Currently, we are developing systems to release an antibiotic only in the presence of an infection; the release of an opioid only in response to a biological signal for pain; and a glue silk that directs integration with bone.



How have undergraduates been involved in your research?

Undergraduates are involved in all aspects of this research from support

staff that washes dishes and refill supplies to hands-on research that is included in publications, presentations, and grants. Undergraduates have been particularly important in my animal program.

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

Seeing them get excited about learning and watching them achieve their goals. It's great to think that maybe I played a small part in it.

[Learn more about Dr. Brooks' experiences and mentoring advice >>.](#)



NDSU EXPLORE
UNDERGRADUATE EXCELLENCE IN RESEARCH AND CREATIVE ACTIVITY

SAVE THE DATE
APRIL 11, 2019

Registration will open in Spring semester

Resumption of Operations at the NSF

The National Science Foundation (NSF) is emerging from a 35-day funding lapse in appropriations and shutdown of the agency, and has developed a webpage titled "[Resumption of Operations at NSF](#)" to

provide guidance regarding the initial resumption of operations. The webpage includes Important Notice No. 145, *Resumption of Operations at the National Science Foundation*, dated January 28, 2019, as well as supplemental guidance that addresses grant and cooperative agreement-related policy and systems issues. This page will continue to be updated as new information becomes available.

Policy-related questions regarding resumption of operations at NSF may be addressed to policy@nsf.gov.



EXPORT CONTROLS FAQs

Q: What should I do if I am contacted by a foreign national looking to come here as a visiting scholar or researcher?

A: Visiting scholars and researchers provide valuable opportunities for collaborative research and cross-cultural interactions. However, they also provide an opportunity for others to access research or technology of interest to their home institution or government which may violate US Export Control laws. If you receive an unsolicited request from someone overseas requesting to conduct research in your laboratory, please forward the email to the export control office [ndsuh.exportcontrols@ndsuh.edu]. The export controls office can quickly screen the individual, their home institution and proposed research area for export control and other risk factors. We look for things like academic match with the department and you (NDSU faculty); funding (how the visitor will be funded); the specific area of research the visitor is interested in; screening them through government watch lists; and any export controls in place, among other things.

Have more questions? Contact the export control administrator

[ndsuh.exportcontrols@ndsuh.edu / 231-6455] or visit the [NDSU export control website](#).

NDSU IACUC Rodent Training Series

Session 1: Mouse Handling and Husbandry Basics will be offered on Thursday, January 31, from 3-4 PM in Van Es Room 107. This session will cover mouse handling, restraint, and various procedures (e.g. ear punching) as well as welfare and documentation requirements. The training is open to faculty, staff, and students. [Register](#) for the event today! Space is limited!



Pivot is Moving to a New URL

On March 1, 2019, Pivot is moving to <https://pivot.proquest.com> and the current Pivot URL, <https://pivot.cos.com> will be discontinued. Traffic to cos.com **will not** automatically redirect to the new URL, including any links you have saved.

This is a change in address only: all data remains, and the user experience and functionality are unchanged.

Pivot users should update saved links to reflect the new address.

Collaboration Requests Due January 29, 2019:

Sanford Health - NDSU Collaborative Research Seed Grants

To better facilitate collaboration between NDSU and Sanford Health collaborators, proposers are requested to submit a short description of a possible proposal to ndsu.businessdev@ndsu.edu by January 29, 2019. Additional information about the seed grant program and the collaboration request can be found on the [program's webpage](#).

CONTENTS

FUNDING OPPORTUNITIES

- [ACS: Cancer Health Care and Insurance Research](#)
- [Craig H. Neilsen Foundation: Psychosocial Research](#)
- [ND Beef Commission: Research RFP](#)
- [NIH: Bioengineering Research Grants](#)
- [Northarvest Bean Growers Association: Research Pre-Proposals](#)
- [RWJF: Culture of Health Leaders](#)
- [Sanford Health - NDSU Collaborative Research Seed Grants](#)
- [Whitehall Foundation: Bioscience Research](#)

NOTICES

- [Human Subjects Research Regulatory Changes](#)



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

American Cancer Society: Cancer Health Care and Insurance Research

The [American Cancer Society](#) (ACS) is accepting proposals for [research projects](#) designed to generate new knowledge of the effects of the United States healthcare system structure and the role of insurance on both access to and outcomes of cancer screening, early detection, and treatment services. ACS is keenly interested in supporting rapid learning research on the effects of health policy changes on patients, providers, and health systems. This includes

but is not limited to facilitators and barriers to care; unintended consequences; differential experiences and outcomes of patients seeking or receiving care; best practice models for quality care; and economic Impact. Awards will not exceed \$200,000 per year (direct costs) for more than four years. Independent investigators at all stages of their career are encouraged to apply.

Application deadline: April 1, 2019

^^

Craig H. Neilsen Foundation: Psychosocial Research

Established in 2002, the [Craig H. Neilsen Foundation](#) has evolved into the largest private funder of spinal cord injury (SCI) research, rehabilitation, and clinical training in the United States. The foundation funds scientific research (preclinical, translational, clinical, and psychosocial); opportunity and independence programs; scholarships for students with SCI; postdoctoral and SCI medicine fellowships; and other projects designed to support the SCI community in the United States and Canada. To advance this mission, the foundation has issued a Request for Proposals for its [Psychosocial Research grants program](#). A goal of the program is to identify and prioritize critical gaps in the psychosocial field and help develop interventions that improve the health and quality of life for individuals with SCI across the lifespan. Funding categories range from postdoctoral fellowships to pilot grants and demonstration projects. Award amounts will range between \$150,000 and \$400,000. To be eligible, applicants must be a nonprofit organization which conducts research that addresses psychological and social factors affecting health, functioning, and quality of life for people living with spinal cord injuries.

Letters of Intent due March 25. Upon review, selected applicants will be invited to submit a full proposal by July 1, 2019.

ND Beef Commission: Request For Research Proposals

With funding available from North Dakota beef producers through state and national beef checkoff assessments, the [ND Beef Commission](#) directors are committed to investing funds in high quality beef and beef product research on behalf of the beef producers of the state. Priority areas for research for 2019 have been established and there is currently \$300,000 available to fund projects provided that high level, cutting edge proposals fitting industry priorities are received. [Priority areas for research](#) include Product Quality, Human Nutrition Research, Pre-Harvest Beef Safety, and Beef Sustainability. Proposal instructions are provided in the [Request for Proposals](#).

Application deadline: February 15, 2019

NIH: Bioengineering Research Grants (R01, R21, U01)

The purpose of this National Institutes of Health funding opportunity announcement (FOA) is to encourage collaborations between the life and physical sciences that:

1. apply a multidisciplinary bioengineering approach to the solution of a biomedical problem; and
2. integrate, optimize, validate, translate or otherwise accelerate the adoption of promising tools, methods and techniques for a specific

research or clinical problem in basic, translational, or clinical science and practice.

An R01 application ([PAR-19-158](#)) may propose design-directed, developmental, discovery-driven, or hypothesis-driven research and is appropriate for small teams applying an integrative approach to increase our understanding of and solve problems in biological, clinical or translational science. A project must clearly serve the mission of one or more of the NIH Institutes or Centers participating in this FOA. Investigators are encouraged to contact the designated [Scientific/Research contacts](#) for individual institute focus areas that will be supported.

Large team projects with a specific goal that can be addressed in 5-10 years are encouraged to respond to the Bioengineering Research Partnership (BRP) (U01 / [PAR-19-156](#)).

The R21 opportunity ([PAR-19-150](#)) is to encourage submissions of Exploratory/Developmental Bioengineering Research Grant (EBRG) applications to demonstrate feasibility and potential utility of new capabilities or improvements in quality, speed, efficacy, operability, costs, and/or accessibility of solutions to problems in basic biomedical, pre-clinical, or clinical research, clinical care delivery, or accessibility.

Standard deadlines apply.

R01: February 5, June 5, October 5; R21: February 16, June 16, October 16

[^^](#)

Northarvest Bean Growers Association: Research Pre-Proposals

In 2019, [Northarvest Bean Growers Association](#) has once again revised its research grant application process to stimulate new research projects. Northarvest 2019 Research Priorities specifies "areas of interest" ([see page 18 of linked document](#)) assembled by growers, extension personnel and crop consultants, but this is not an exclusive list. All production areas of research will be considered by the committee. Two page pre-proposals in **WORD** format (not PDF) are required that include scope of work, objectives, and best estimate of project cost. The Northarvest research committee will review each pre-proposal and vote whether or not to invite a full proposal from the researcher. Questions should be directed to nhbean@loretel.net.

Application deadline: February 20, 2019

^^

Robert Wood Johnson Foundation (RWJF): Culture of Health Leaders

The [Culture of Health Leaders program](#) offers leadership development for leaders from all sectors and is based on evidence, informed by experience, and grounded in principles of equity and social justice. These principles are the basis of everything participants experience throughout the program. This structured three-year program is for any individual--from any walk of life (for-profit, nonprofit, government, or social enterprise)--who is highly motivated, ready, and open to learn, lead, and collaborate with organizations, communities, systems, and policymakers to build a Culture of Health in our nation. Our leaders come from the technology, education, housing, transportation, social sector, business, the arts, and countless other disciplines. The Culture of Health Leaders curriculum and experience is designed to equip and support leaders through a process that helps them achieve mastery of self, relationships, environment, and change. By the end of the three years, leaders

will apply the principles of equity, diversity, and inclusion to create sustainable change in their communities, organizations, or systems. There will be up to 40 leaders in the 2019 cohort. Grant funds from RWJF will include a stipend of up to \$20,000 per year for three years (total of up to \$60,000) and project funds of up to \$35,000 for activities related to the implementation and evaluation of a community-based strategic initiative that promotes a Culture of Health. This strategic initiative must be approved by the national program center and the Foundation in year 2 of the program (not at time of initial application).

Application deadline: February 20, 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, 2018. The full RFA and Application form can be downloaded from the [program's webpage](#).

To better facilitate collaboration between NDSU and Sanford Health collaborators, proposers are requested to submit a short description of a possible proposal by January 29th to ndsu.businessdev@ndsu.edu. Additional information about the Collaboration Request can be found in the RFA or at the link above.

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).



Whitehall Foundation: Bioscience Research

The [Whitehall Foundation](#) assists scholarly research in the life sciences through its research grants and grants-in-aid programs. It is the foundation's policy to support those dynamic areas of basic biological research that are not heavily supported by federal agencies or other foundations with specialized missions. The foundation emphasizes the support of young scientists at the beginning of their careers and productive senior scientists who wish to move into new fields of interest. Research grants of up to \$225,000 over three years will be awarded to established scientists of all ages working at accredited institutions in the United States. Grants will not be awarded to investigators who have already received, or expect to receive, substantial support from other sources, even if it is for an unrelated purpose. Grants-in-Aid: One-year grants of up to \$30,000 will be awarded to researchers at the assistant professor level who experience difficulty in competing for research funds because they have not yet become firmly established. Grants-in-Aid can also be made to senior scientists. To be eligible, applicants must hold the position of assistant professor or higher, have principal investigator status, and be considered an "independent investigator" with his/her own dedicated lab space or with lab space independent of another investigator.

Letter of Intent deadline: April 15, 2019. Upon review, selected applicants will be invited to submit a full application by September 1, 2019.



Do You Conduct Human Subjects Research? Regulatory Changes took effect January 21, 2019

Changes to the human subjects regulatory framework known as the Common Rule have now taken effect after a yearlong delay. The revised rule includes new and expanded exemption categories, additional required elements of consent for non-exempt research, and changes to the continuing review requirements for research qualifying for expedited review under the Common Rule.

To comply with the revised requirements, Protocol Applications have been updated and are available on the IRB [Forms page](#). Current protocol application materials must be utilized for any new protocol submissions.

More information on the revised rule can be found on the IRB website:

- [Approval Criteria](#)
- [Consent Resources](#)
- [Exemption Categories](#)

Please contact Kristy Shirley at 701.231.8995 with any questions.

^^

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.