

May 20, 2019

Animal Researcher Spotlight

Glenn Dorsam, Microbiological Sciences

Glenn Dorsam researches a small protein, called vasoactive intestinal peptide (VIP) that works to maintain normal food absorption by the intestines. Mice that lack the VIP protein (called a knockout), weigh less, store less fat and have a substantial dysbiosis of commensal gut bacteria. Dr. Dorsam's research group is investigating how to block VIP's normal mode of action in healthy mice that would result in weight loss in a safe and controlled manner. Without improved intervention protocols, as well as preventive strategies to mitigate human obesity, more than half of our population will remain at risk from premature death.



Obesity afflicts more than 1.4 billion people worldwide and is associated with comorbidities such as diabetes, cancer and cardiovascular disease. By 2030, more than half of Americans will be classified as obese, which is fast becoming a 21 century epidemic with treatment costs in the hundreds of billions of dollars annually. It is imperative for the medical community to

find more effective treatments for obesity in addition to diet and exercise, and bariatric surgery; the latter having poor weight loss outcomes and long-term risks in up to 20% of patients.

Glenn Dorsam is an associate professor in the Microbiological Sciences department at NDSU.

State Assistant Veterinarian Visits NDSU



Dr. Sarah Bailey is the Assistant State Veterinarian for the North Dakota Board of Animal Health and North Dakota Department of Agriculture. She recently visited NDSU to meet with faculty and staff and tour the facilities.

“It was my pleasure to host Dr. Bailey at NDSU,” said Neil Dyer, NDSU Attending Veterinarian. “Her presentation on tuberculosis was timely and informative. The State Veterinarian’s office provides a very helpful resource for anyone involved in animal use at NDSU.”

Bailey joined the North Dakota office in the fall of 2018. She has 14 years of practice experience in Minnesota, Pennsylvania and Wisconsin including five years with a mixed animal practice where she worked with farmers who participated in Pennsylvania’s Johne’s and Scrapie programs. She is also familiar with quality assurance programs and food animal emergency response plans. Bailey also has an extensive educational background in emergency response planning.

Rodent Round Table Discussion

The Rodent Round Table is an open discussion meeting where individuals utilizing rodents for research, teaching, or testing can share ideas, frustrations, and best practices. The NDSU Attending Veterinarian, Neil Dyer, posts a couple of articles for discussion each month.

The meeting is open to all and individuals can request to be added to the list so they receive the Outlook appointments by contacting the IACUC Office [josie.hayden@ndsu.edu].

The May discussion group is scheduled for Thursday, May 23, from 2-3 p.m. in Sudro 21. Dr. Dyer will facilitate a discussion on two articles related to animal research:

- Immunomodulatory Effects of Stress and Environmental Enrichment in Long–Evans Rats (*Rattus norvegicus*); and
- Comparison of Serial Blood Collection by Facial Vein and Retrobulbar Methods in C57BL/6 Mice.

[Download the documents >>](#)

May Discussion Group

Thursday, May 23, 2019

2:00 pm – 3:00 pm

Sudro Hall, Room 21

NDSU Guiding Principles

Guidance for the care and use of animals at NDSU can be found on the [NDSU IACUC Guidelines](#) website. Recently updated guidelines include: [Blood Collection](#), [Humane Endpoints](#), [Pharmaceutical Management](#), and

Post-Approval Monitoring. Any updates or revisions to the NDSU Guidelines will be announced in the weekly RCA Updates. If you have questions regarding the IACUC Guidelines, please contact Dr. Neil Dyer [neil.dyer@ndsu.edu] or Josie Hayden [josie.hayden@ndsu.edu].

Grant Proposals Involving Animals

When submitting a grant which involves the use of animals, you should consider including:

- Per diem fees (including the cost to house, feed and care for the animals each day)
- Diagnostic fees (laboratory or necropsy) and data analysis charges (histology, chemistry, microbiology)
- Occupational Health and Safety (OHS) Program fees. As all personnel working with animals at NDSU are required to participate in this program, the OHS Program fees may be included in the proposal budget.

For questions on proposal budgets please contact

ndsu.research@ndsu.edu.

CONTENTS

FUNDING OPPORTUNITIES

- [DOD ONR: Minerva Research Initiative - Multidisciplinary Projects in the Social Sciences](#)
- [Howard Hughes Medical Institute](#)
- [NEH: Summer Stipends](#)
- [National Institute for Health Care Management Foundation](#)
- [NSF: Law & Social Sciences](#)
- [NSF: Opportunities for Promoting Understanding through Synthesis](#)
- [USDA-AFRI: Foundational and Applied Science Program](#)

NOTICES

- [May Issue of Research Development & Grant Writing News](#)
- [SBIR Road Tour Coming to Fargo May 24, 2019](#)



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

DOD ONR: Minerva Research Initiative - Multidisciplinary Projects in the Social Sciences

The Department of Defense (DOD) Office of Naval Research (ONR) [Minerva Research Initiative \(Minerva\)](#) emphasizes questions of strategic importance to U.S. national security policy. It seeks to increase the Department's intellectual capital in the social sciences and improve its ability to address future

challenges and build bridges between the Department and the social science community. Minerva brings together universities and other research institutions around the world and supports multidisciplinary and cross-institutional projects addressing specific interest areas determined by the Department of Defense. The Minerva program aims to promote research in specific areas of social science and to promote a candid and constructive relationship between DoD and the social science academic community. Proposals will be considered both for single-investigator awards as well as larger teams. The Minerva Research Initiative competition is for research related to nine (9) topics listed below. Innovative white papers and proposals related to these research areas are highly encouraged. Detailed descriptions of the interest areas—which are intended to provide a frame of reference and are not meant to be restrictive—can be found in Section IX, “Minerva Topics.”

- **Topic 1:** Peer/Near-peer Statecraft, Influence, and Regional Balance of Power
- **Topic 2:** Power, Deterrence, and Escalation Management
- **Topic 3:** Alliances and Burden Sharing
- **Topic 4:** Economic Interdependence and Security
- **Topic 5:** Economic Viability, Resilience, and Sustainability of Logistics Infrastructure
- **Topic 6:** Multi-Domain Behavioral Complexity and Computational Social Modeling
- **Topic 7:** Autonomy, Artificial Intelligence, Machine Ethics, and Social Interactions
- **Topic 8:** Models and Methods for Understanding Covert Online Influence
- **Topic 9:** Automated Cyber Vulnerability Analysis

White paper deadline: June 20, 2019;

Full proposal deadline: September 26, 2019

Howard Hughes Medical Institute: Inclusive Excellence IE3 - 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.

HHMI IE3: [Notify RCA](#) by 5/31/2019, 4:00 p.m. if you intend to apply.

The Howard Hughes Medical Institute ([HHMI](#)) supports talented scientists and educators to advance biomedical research and train the next generation of scientific leaders. The HHMI [Inclusive Excellence](#) (IE) initiative challenges U.S. colleges and universities to substantially and sustainably increase their capacity for inclusion of all students, especially those students who belong to groups underrepresented in science. HHMI aims to create a learning community of college and university faculty and administrators who are engaged in the continuing process of increasing their institution's capacity for inclusion of all students. Each school in the community will commit to learning through reflection, sharing what is being learned, listening to feedback, and supporting other members of the community. A total of 57 colleges and universities are now part of the IE learning community. Faculty and staff at these schools provide national leadership in science education, and are engaged in exploring strategies that will lead to inclusive science education. A third competition, IE3, which begins in the spring 2019, will add up to 30 new members to the IE community.

Letter of Intent due: July 31, 2019;

Pre-proposals due: January 14, 2020;

Invited Final Proposals due: December 1, 2020

Awards announced in September 2021

NEH: Summer Stipends - 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.

NEH Summer Stipends: The internal NDSU deadline for pre-proposals is 4pm on July 26, 2019. [Contact Christina Weber](#) for the pre-proposal requirements.

[NEH Summer Stipends](#) support individuals pursuing advanced research that is of value to humanities scholars, general audiences, or both. Eligible projects usually result in articles, monographs, books, digital materials and publications, archaeological site reports, translations, or editions. Projects must not result solely in the collection of data; instead they must also incorporate analysis and interpretation. Summer Stipends support continuous full-time work on a humanities project for a period of two consecutive months. Summer Stipends support projects at any stage of development. Up to two applicants may be nominated by their institution.

Application deadline: September 25, 2019 (for projects beginning May 2020)

[^^](#)

National Institute for Healthcare Management Foundation: Research Grants

The [National Institute for Health Care Management \(NIHCM\) Foundation](#) is a nonprofit, nonpartisan organization dedicated to transforming health care through evidence and collaboration. To further its mission, the foundation supports innovative [investigator-initiated research](#) with the potential to inform improvements to the U.S. healthcare system. Projects must advance the existing knowledge base in the areas of healthcare financing, delivery,

management, and/or policy. In the first seven years of the program, the foundation awarded nearly \$2.1 million in support of thirty-seven studies. In 2019-2020, the foundation is making approximately \$500,000 available and expects to fund eight to nine studies.

Letter of inquiry deadline: July 9, 2019;
Invited full proposal deadline: September 2019

^^

NSF: Law and Social Sciences

The National Science Foundation (NSF) Law & Social Sciences Program [[NSF 19-519](#)] considers proposals that address social scientific studies of law and law-like systems of rules. The Program is inherently interdisciplinary and multi-methodological. Successful proposals describe research that advances scientific theory and understanding of the connections between human behavior and law, legal institutions, or legal processes. Social scientific studies of law often approach law as dynamic, made in multiple arenas, and with the participation of multiple actors. Fields of study include many disciplines, and often address problems including though not limited to:

- Crime, Violence, and Policing;
- Economic Issues;
- Governance and Courts;
- Human Rights and Comparative Law;
- Legal Decision Making;
- Legal Mobilization and Conceptions of Justice;
- Litigation and the Legal Profession; and
- Punishment and Corrections.

Deadline: August 1, 2019

^^

NSF: Opportunities for Promoting Understanding through Synthesis

The National Science Foundation (NSF) Opportunities for Promoting Understanding through Synthesis (OPUS) program [[NSF 18-582](#)] seeks to provide opportunities for mid- to later-career investigators to develop new understanding of science in the fields supported by the Division of Environmental Biology (DEB) through two tracks of synthesis activities.

OPUS: Mid-Career Synthesis. This track provides an opportunity for a mid-career researcher, defined as a candidate at the associate professor rank (or equivalent) to enable a new synthesis of their ongoing research. Synthesis is achieved by developing new research capabilities through collaboration with a mentor to enable new understanding of their research system and questions of interest. This track aims to provide mid-career scientists with new capabilities to enhance their productivity, improve their retention as scientists, and ensure a diverse scientific workforce that remains engaged in active research (including more women and minorities at high academic ranks).

OPUS: Core Research Synthesis. This track provides an opportunity for an individual or a group of investigators to revisit and synthesize a significant body of their prior research in a way that will enable new understanding of their research system and questions of interest. This track would also be appropriate early enough in a career to produce unique, integrated insight useful both to the scientific community and to the development of the investigator's future career.

All four clusters within the Division of Environmental Biology (Ecosystem Science, Evolutionary Processes, Population and Community Ecology, and Systematics and Biodiversity Science) encourage the submission of these proposals enabling researchers to expand understanding and develop new insights in their research.

Deadline: August 5, 2019

USDA AFRI: FY2019-2020 Foundational and Applied Science Program

The USDA Agriculture and Food Research Initiative (AFRI) [Foundational and Applied Science Program](#) supports grants in six AFRI priority areas to advance knowledge in both fundamental and applied sciences important to agriculture. The six priority areas are:

1. Plant Health and Production and Plant Products;
2. Animal Health and Production and Animal Products;
3. Food Safety, Nutrition, and Health;
4. Bioenergy, Natural Resources, and Environment;
5. Agriculture Systems and Technology; and
6. Agriculture Economics and Rural Communities.

Research-only, extension-only, and integrated research, education and/or extension projects are solicited in this [Request for Applications \(RFA\)](#).

Significant changes described in this RFA include:

1. The inclusion of two fiscal years with separate sets of deadlines for each year;
2. Acceptance of year-round conference grant applications;
3. The addition of new program area priorities within the Plant health and production and plant products; Animal health and production and animal products; Food safety, nutrition, and health; Bioenergy, natural resources, and environment; and Crosscutting program areas; and
4. The addition of 5 specific priorities for co-funding with the American Egg Board, Colorado Potato Administrative Committee, Kansas Wheat Commission, National Peanut Board, and National Potato Promotion Board.

The closing date is December 18, 2019. Some programs require Letters of Intent as follows:

- Agricultural Innovation through Gene Editing - Letter of Intent required
Letter of Intent Deadline - June 19, 2019
- Agricultural Microbiomes - Letter of Intent required
Letter of Intent Deadline - July 9, 2019
- Tactical Sciences for Agricultural Biosecurity - Letter of Intent required
Letter of Intent Deadline - July 9, 2019
- Inter-Disciplinary Engagement in Animal Systems (IDEAS) - Letter of Intent required
Letter of Intent Deadline - June 20, 2019
- All Conference Grants - Letter of Intent required
Letter of Intent Deadline - Minimum of 135 days before the conference begins

See [Program Area Priorities for additional information](#) (See Part I, C.).



May Issue of Research Development & Grant Writing News

The May 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:

- Planning for New Funding Directions in Food and Agricultural Related Research
- Do You Know Where Your Research Fits in Your Discipline's State of the Art?
- Is Your Research Relevant to Alzheimer's? NIH Wants You!
- The Future of STEM Education in the Federal Budget
- How the Department of Energy Reviews Your Proposal
- Communications on Interdisciplinary Team Grants.



SBIR Road Tour Coming to Fargo

Every year, the Department of Defense, National Institutes of Health, NASA, Department of Energy, National Science Foundation, and other government agencies fund **small technology-based businesses** with more than \$3B through the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. The SBIR and STTR programs provide non-dilutive funding to support research, product development, and commercialization of new technologies. **SBIR and STTR funding is not a loan and never needs to be repaid.**

The SBIR Road Tour is a national outreach effort to connect small businesses with representatives from each of these government agencies to engage small tech companies, including women and minority-owned research and development businesses. Attendees will have the opportunity to meet directly with Federal Program Managers who fund a wide spectrum of innovative ideas.

The SBIR Road Tour will be in Fargo, ND, on Friday, May 24, 2019.

If you are interested in meeting one-on-one with agency representatives about your company or technology research, register for the SBIR Road Tour.

[Learn more and Register >>](#)



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.