Meet NDSU's New Faculty Members

Throughout the year, RCA will be highlighting new faculty in the weekly newsletter. Full profiles are available on the RCA website.

Roberto Gomes, Ph.D.
Pharmaceutical Sciences

What are your primary research and scholarly interests?
My work focuses on the development of novel small molecules, nucleotides, and/or antibodies tumor-targeting strategy using enediones engineered with cytotoxic moiety/NIR probes to be used in cancer therapy. Currently, my work focuses on three separate main projects:
1) The development of new synthetic methodologies;
2) The establishment of a new NIR fluorescent probe-therapeutic agent conjugate triggered by the acidic pH of the TME for the early diagnosis of pancreatic cancer; and
3) Molecular drug discovery of Proteolysis Targeting Chimeric (PROTAC) based prototypes.
Where are you from and where did you pursue your education?
I earned my BS in Chemistry from Ibirapuera University in Brazil, my PhD in Science / Organic Chemistry at the University of São Paulo in Brazil, and had two postdoctoral positions: one at the Federal University of Mato Grosso do Sul in Brazil, and one at Harvard University.

What excites you about NDSU?
NDSU has an environment that is extremely diverse, warm, and friendly. The staff is kind, and the students are excellent. NDSU respects and treats all its community as a family.

What motivates you?
The passion to create and transform things to make people's lives better.

Learn more about Roberto >>

Darrell Ross, Ph.D.
Entomology

What are your primary research and scholarly interests?
Ecology and management of forest insects, Biological control, Pheromone-based management of forest insects, Ecological restoration.

Where are you from and where did you pursue your education?
I was born in Chester, PA. I earned my BS at Penn State University, my MS at Oregon State University, and my PhD at University of Georgia. I was previously a Professor at Oregon State University.

What excites you about NDSU?
The opportunity to learn about the ecosystems and culture of the northern
Great Plains and Lake States, and to share my past experiences with students at NDSU.

**What motivates you?**
To learn about natural systems and share that knowledge with students, managers, and others to use our natural resources wisely and sustainably.

*Learn more about Darrell >*

---

When a proposal is routed in Novelution does a Co-PI / Chair / Director / Dean get notified that they should sign-in to the system to provide approval?

Yes, Novelution will send an email to each individual when a proposal is ready for their approval, additionally, each individual will see a task in Novelution that provides a link to the specific proposal that is ready for their review and approval.

For questions about Novelution, contact ndsu.novhelp@ndsu.edu.

---

**Novelution Training - IRB (Human Subjects) Module**

A training session about the Novelution Institutional Review Board (IRB) protocol submission modules is scheduled for faculty and students who are submitting protocols for review. Join us live using the below link. The session will be recorded and archived for later viewing.

**September 2, 2020 | 1:30-3:00 p.m.**

Join Microsoft Teams Meeting | Conference ID: 372 716 651#
+1 701-409-8507 United States, Fargo (Toll)
Office of Industry Engagement and Intellectual Property Virtual Office Hours

Do you think that your research has resulted in something that is patentable or has commercial potential? Interested in learning more about disclosing an invention or the patenting process? Starting September 3rd and every Thursday for the rest of fall semester, the Office of Industry Engagement and Intellectual Property is hosting a Zoom meeting between 2:00 PM and 4:00 PM to discuss research discoveries and answer general questions about intellectual property. If you can’t join us on Thursday afternoons, reach out and we’ll be happy to schedule a time to meet that works with your schedule.

Upcoming SBIR / STTR Virtual Opportunities

There are several upcoming opportunities to learn more about the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs through these free virtual opportunities:

- **How to Prepare a Budget for SBIR / STTR Proposals**
  October 1, 2020 | 12-1pm

- **Developing Competitive SBIR / STTR Applications for NIH National Institute on Aging**
  October 6, 2020 | 12-1pm

- **SBIR Road Tour Week in the Midwest**
  October 19, 2020 - 9am through October 23, 2020 - 11am

NIH - New Annotated Form Sets

As you prepare your NIH grant application, keep these annotated form sets handy for key tips on filling out each section. These documents are a great visual resource for understanding many of the business rule checks NIH will run against your submitted application. Of course, you must follow the instructions in your funding opportunity announcement and application guide, but these documents are helpful for those times when you need a
quick reference. Check out the annotated forms sets using FORMS-F (for use with grant application due dates on / after May 25, 2020):

- Annotated Form Set for NIH Grant Applications - FORMS-F Series
- Multi-project Annotated Form Set - FORMS-F Series
- Small Business Annotated Form Set – FORMS-F Series

For more, see the NIH Annotated Form Sets page.

COVID-19 Guidance for researchers is available on the RCA Website, including NDSU guidance for PIs, Federal Agency guidance, and Funding Opportunities. As this situation is rapidly changing, please refer to the NDSU COVID-19 Preparedness and Response page for additional information.

CONTENTS

FUNDING OPPORTUNITIES

- Facebook: People’s Expectations and Experiences with Digital Privacy
- NAEd / Spencer: Postdoctoral Fellowship Program in Education Research
- ND EPSCoR Request for Proposals
- NEH: Public Humanities Projects
- NIH: Collaborative Program Grant for Multidisciplinary Teams (RM1)
- NIH: NCI Clinical and Translational Exploratory / Developmental Studies
- NIH: Visualization Methods and Tools Development for Enhancing Cancer Moonshot Data
- NSF: Improving Undergraduate STEM Ed: GEOPAths
- NSF: Major Research Instrumentation
- NSF: Research Traineeship Program
- USDA: New Investigator Grants
- USDA-NIFA: Women and Minorities in STEM Fields Program

EVENTS
Facebook: People’s Expectations and Experiences with Digital Privacy

Facebook is seeking applications from across the social sciences and technical disciplines, including but not limited to disciplines such as anthropology, communications, computer science, economics, engineering, human-computer interaction, human factors, political science, social psychology, and sociology. Most notably, applications that are interdisciplinary and seek collaboration across fields are particularly welcome. Applicants from diverse backgrounds and those with expertise in specific countries, cultures, or vulnerable populations, including those that have not previously been examined in relation to privacy, are especially encouraged to apply. Research methodologies that use qualitative, quantitative, ethnographic, and/or mixed method approaches are all welcome.

Topics of interest include, but are not limited to, the following:

- Improving understanding of users’ privacy attitudes, concerns, preferences, needs, behaviors, and outcomes;
• Novel interventions for digital transparency and control that are meaningful for diverse populations, context, and data types.

*Deadline: September 16, 2020*

**NAEd / Spencer: Postdoctoral Fellowship Program in Education Research**

The [National Academy of Education (NAEd) / Spencer Postdoctoral Fellowship](https://www.spencer.org/fellowship-programs/education-research) supports early-career scholars working in critical areas of education research. This nonresidential postdoctoral fellowship funds proposals that make significant scholarly contributions to the field of education. The program also develops the careers of its recipients through professional development activities.

Applicants must have received their PhD, EdD, or equivalent research degree between January 1, 2015, and December 31, 2019. Fellows may elect to take the fellowship full-time over one year or half-time over two years. This is a nonresidential fellowship. Scholars may conduct their research at their home institution or at another research site that they have arranged.

*Deadline: November 18, 2020*

**ND EPSCoR Request for Proposals (RFP)**

The ND EPSCoR State Office has a mission to support the efforts of EPSCoR-participating institutions across the state that result in increased STEM faculty capacity and competitiveness and a stronger STEM pathway that produces our next generation workforce, educators, and researchers.

To help support the efforts of faculty and students engaged in STEM research and education, ND EPSCoR is requesting proposals for activities in the following categories:

1. equipment,
2. equipment repair,
3. undergraduate research,
4. faculty seed awards,
5. awards to fund external peer review of large collaborative / interdisciplinary proposals prior to submission to a federal agency,
6. faculty / student awards to support K-12 outreach activities, and
7. development of online / virtual modules for STEM laboratory courses.

**State-wide RFP**: Deadline September 21, 2020 - Noon  
**NDSU-Specific RFP**: Deadline: September 25, 2020 - Noon

---

**NEH: Public Humanities Projects**

The National Endowment for the Humanities (NEH) Division of Public Programs is accepting applications for the [Public Humanities Projects program](https://www.neh.gov/grants/public-humanities-projects). The purpose of this program is to support projects that bring the ideas and insights of the humanities to life for general audiences through in-person programming. Projects must engage humanities scholarship to analyze significant themes in disciplines such as history, literature, ethics, and art history.

Public Humanities Projects supports projects in three program categories (Exhibitions, Historic Places, and Humanities Discussions), and at two funding levels (Planning and Implementation). Regardless of proposed activity, NEH encourages applicants to explore humanities ideas through multiple formats. Proposed projects may include complementary components: for example, a museum exhibition might be accompanied by a website or mobile app.

*Deadline: September 8, 2020; January 6, 2021*

---

**NIH: Collaborative Program Grant for Multidisciplinary Teams (RM1)**

[Limited submission grant programs](https://garvani.org/) 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 RM1**: Notify RCA by 9/22/2020, 5:00 p.m. if you are interested in submitting to this program.

This National Institutes of Health (NIH) funding opportunity announcement (FOA / [PAR-20-103](https://garvani.org/)) is designed to support highly integrated research teams of three to six PD/Pis to address ambitious and challenging research questions that are important for the mission of the [National Institute of General Medical Sciences (NIGMS)](https://garvani.org/) and are beyond the scope of one or two investigators. [Collaborative]
Program teams are expected to accomplish goals that require considerable synergy and managed team interactions. Project goals should not be achievable with a collection of individual efforts or projects. Teams are encouraged to consider far-reaching objectives that will produce major advances in their fields. Applications that are mainly focused on the creation, expansion, and/or maintenance of community resources, creation of new technologies or infrastructure development are not appropriate for this FOA.

LIMITED SUBMISSION: Only one application per institution is allowed per review round.

NIH: NCI Clinical and Translational Exploratory / Developmental Studies (R21 Clinical Trial Optional)

This Funding Opportunity Announcement (FOA) (PAR-20-292) supports preclinical and early phase clinical research, as well as correlative studies, directly related to advancements in cancer treatment, diagnosis, prevention, symptom management, or reduction of cancer health disparities. This includes (but is not limited to) development and testing of the following: new molecular agents or biologics for cancer treatment; management strategies for cancer-related symptoms or treatment-related toxicity; cancer screening or diagnostic tools, such as imaging techniques; cancer preventive agents or approaches; predictive and prognostic biomarkers for patient selection or stratification; clinically relevant in vivo or in vitro tumor models (including genetically engineered mouse models, patient-derived xenograft models, organoids, and cell lines); and strategies to address therapeutic outcome disparities among diverse racial/ethnic populations. In addition to novel agents, new treatment strategies may involve repurposed agents or novel combinations of interventions (including radiation), based on established mechanisms of action. Comparative oncology studies in dogs and investigating strategies for treatment and diagnosis of human disease are supported as well.

This FOA does not support research that focuses on basic cancer biology (such as studies of cancer-related pathways or molecular mechanisms), late-stage clinical trials, risk assessment studies, epidemiological studies, or studies of behavioral interventions. The R21 mechanism is intended to encourage exploratory and developmental research projects by providing support for the early and conceptual stages of these projects. These studies may involve considerable risk but may lead to breakthroughs in particular areas, or to the development of novel techniques,
agents, methodologies, models, or applications that could have a major impact on cancer research (preclinical or clinical).

*Deadline: October 20, 2020; February 19, 2021; June 21, 2021*

---

**NIH: Visualization Methods and Tools Development for Enhancing Cancer Moonshot Data (R33 Clinical Trial Not Allowed)**

Through this Funding Opportunity Announcement (FOA) ([RFA-CA-20-044](https://doi.org/10.1038/s41556-019-0674-0)), the National Cancer Institute (NCI), as a part of its Beau Biden Cancer Moonshot Initiative, invites submission of applications requesting support for projects that will accelerate cancer research. Specifically, this FOA falls under a scientific priority designated by the Blue Ribbon Panel (BRP) as Recommendation J, the development of [New Enabling Cancer Technologies](https://doi.org/10.1038/s41556-019-0674-0).

The purpose of this FOA is to stimulate the development of new cancer data visualization methods and tools that have the potential to make data aligned with the Cancer Moonshot more explorable and interpretable by the broader cancer research community. This FOA supports the development of new, full-featured data visualization tools for investigator-specified, Moonshot-aligned use cases that enable a broader community of users to explore and gain insights from data emerging from or aligned with one or more of the Cancer Moonshot areas.

*Deadline: October 30, 2020*

---

**NSF: Improving Undergraduate STEM Education: Pathways into the Earth, Ocean, Polar and Atmospheric & Geospace Sciences (IUSE: GEOPAths)**

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 IUSE:GEOPAths: Notify RCA by 9/2/2020, 5:00 p.m. if you are interested.
IUSE:GEOPAths invites proposals that specifically address the current needs and opportunities related to education within the geosciences community through the formation of STEM Learning Ecosystems that engage students in the study of the Earth, its oceans, polar regions and atmosphere. The primary goal of the IUSE:GEOPAths funding opportunity is to increase the number of students pursuing undergraduate and/or postgraduate degrees through the design and testing of novel approaches that engage students in authentic, career-relevant experiences in geoscience. In order to broaden participation in the geosciences, engaging students from historically excluded groups or from non-geoscience degree programs is a priority. This solicitation features three funding tracks that focus on Geoscience Learning Ecosystems (GLEs):

1. GEOPAths: *Informal Networks (IN).* Collaborative projects in this track will support geoscience learning and experiences in informal settings for teachers, pre-college (e.g., upper level high school) students, and early undergraduates in the geosciences.

2. GEOPAths: *Undergraduate Preparation (UP).* Projects in this track will engage pre-college and undergraduate students in extra-curricular experiences and training in the geosciences with a focus on service learning and workplace skill building.

3. GEOPAths: *Graduate Opportunities (GO).* Projects in this track will improve research and career-related pathways into the geosciences for undergraduate and graduate students through institutional collaborations with a focus on service learning and workplace skill building.

**LIMITED SUBMISSION:** An organization may serve as sole submitting organization or as lead organization of a collaborative project on only one submission per competition, regardless of track, but may serve as the non-lead organization of a collaborative project more than once per competition. A Principal Investigator may serve in the role of PI or Co-PI on only one proposal per competition if they are at the sole-submitting organization or the lead organization of a collaborative project, but may serve as the Co-PI for a non-lead organization of a collaborative project more than once per competition.

**NSF: Major Research Instrumentation (MRI)**
**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 MRI**: Notify RCA by 9/15/2020, 5:00 p.m. if you are interested in submitting to this program.

The National Science Foundation Major Research Instrumentation (MRI) Program [NSF 18-513] serves to increase access to multi-user scientific and engineering instrumentation for research and research training in our Nation's institutions of higher education and not-for-profit scientific / engineering research organizations. An MRI award supports the acquisition or development of a multi-user research instrument that is, in general, too costly and/or not appropriate for support through other NSF programs. **Cost sharing of precisely 30% of the total project cost is required.**

Based on the NSF 18-513 solicitation, an MRI proposal may request support for either the acquisition or development of a research instrument.

- **Track 1**: Track 1 MRI proposals are those that request funds from NSF greater than or equal to $100,000 and less than $1,000,000. Two proposal submissions are allowed per organization.
- **Track 2**: Track 2 MRI proposals are those that request funds from NSF greater than or equal to $1,000,000 up to and including $4,000,000. One proposal submission is allowed per organization.

**LIMITED SUBMISSION**: The MRI program requires that an MRI-eligible organization may, as a performing organization, submit or be included as a significantly funded subawardee in *no more than three MRI proposals*. Each performing organization is limited to a maximum of three proposals in the “Tracks” as defined above, with no more than two submissions in Track 1 and no more than one submission in Track 2.

**NSF: Research Traineeship (NRT)**

**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 NRT:** Notify RCA by 9/15/2020, 5:00 p.m. if you are interested in submitting to this program.

The National Science Foundation (NSF) Research Traineeship (NRT) program [NSF 19-522](https://www.nsf.gov/) is designed to encourage the development and implementation of bold, new, and potentially transformative models for STEM graduate education training. The NRT program seeks proposals that explore ways for graduate students in research-based masters and doctoral degree programs to develop the skills, knowledge, and competencies needed to pursue a range of STEM careers. The program is dedicated to effective training of STEM graduate students in high priority interdisciplinary research areas, through the use of a comprehensive traineeship model that is innovative, evidence-based, and aligned with changing workforce and research needs. The NRT program addresses workforce development, emphasizing broad participation, and institutional capacity building needs in graduate education. Strategic collaborations with the private sector, non-governmental organizations (NGOs), government agencies, national laboratories, field stations, teaching and learning centers, informal science centers, and academic partners are encouraged.

**LIMITED SUBMISSION:** Based on the NSF 19-522 solicitation, an eligible organization may participate in two proposals per competition. Participation includes serving as a lead organization, non-lead organization, or subawardee on any proposal. Organizations participating solely as evaluators on projects are excluded from this limitation.

**USDA-NIFA: New Investigator Grants**

Through the USDA-NIFA Agriculture and Food Research Initiative (AFRI), applicants who meet eligibility requirements as a New Investigator can apply for a seed grant or a New Investigator standard grant.

An individual who is beginning their career, does not have an extensive scientific publication record, and has fewer than five years postgraduate career-track experience (i.e., positions in which the individual’s institution allows them to submit competitive grant applications as Project Director beyond a fellowship) can apply for a New Investigator Grant for research, education, and/or extension
activities. The new investigator may not have received competitively awarded federal research funds as Project Director (PD), with the exception of pre- or postdoctoral grants or AFRI Seed Grants. However, if the applicant received Federal funding as Co-PD of previously awarded competitive grants, it will not count against their eligibility as a New Investigator. Eligibility requirements for a New Investigator Grant apply only to the PD and not to Co-PDs or collaborators.

Starting in FY 2021, two types of New Investigator Grants are available:

- **New Investigator Standard Grant**, which is an AFRI Standard Grant in all respects except that the Project Director meets the eligibility criteria for New Investigators.
- **New Investigator Seed Grant**, which is available under each program area priority within NIFA. Applications from New Investigators will be reviewed with other Seed Grant applications, with special consideration given to funding New Investigator Seed Grant applications.

AFRI Seed Grants provide funds to help investigators collect preliminary data through either domestic or international collaborations or to complete other preliminary activities to prepare for applying for future AFRI grants. They are not intended to fund stand-alone projects, but rather projects that will lead to further research in one of the AFRI-funded priority areas. Seed Grants are limited to a total of $300,000 (including indirect costs) for up to two years and are not renewable. An individual applicant may submit only one Seed Grant as PD during the current fiscal year. New Investigators also may only receive one New Investigator Seed Grant as PD during their career.

Find out more about AFRI funding opportunities and program area priorities [here](#).

**USDA-NIFA: Women and Minorities in STEM Fields Program (WAMS)**

*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.

**USDA WAMS:** [Notify RCA](#) by 9/15/2020, 5:00 p.m. if you are interested in submitting to this program.
The National Institute of Food and Agriculture (NIFA) requests applications for WAMS to support research and extension activities that increase the number of women and underrepresented minorities from rural areas who will pursue and complete a postsecondary degree in science, technology, engineering or mathematics (STEM) disciplines. WAMS-funded project activities must support the creation, adaptation, and adoption of learning materials and teaching strategies to operationalize what we know about how students learn. WAMS-funded projects shall also focus on imparting both technical knowledge as well as 'soft' skills such as communication, team work, and problem solving, as these are abilities expected by employers.

For this program, NIFA will support projects with a target audience of K-14 students (kindergarten through twelfth grade plus two years of post-secondary school (e.g., vocational technical institutions or community or junior colleges). Four-year undergraduate, graduate, and post-doctoral focused projects will not be awarded under this grant announcement.

**LIMITED SUBMISSION:** Each eligible, individual institution, independent branch campus, and branch institution of a State system may submit one application as an individual institution.

---

**Department of Energy Summer Webinar Series**

This free webinar series will connect early- and growth-stage companies, accelerators and incubators, and university entrepreneurial scientists and engineers to the latest program initiatives and partnering opportunities from the Department of Energy (DOE). It will provide attendees with an opportunity to hear from DOE senior leaders and program managers, those who are the administrators and decision-makers for current and upcoming funding and partnering opportunities. All webinars are scheduled for 12pm (Noon) CT. [Learn more and register >>](#)

- **September 4:** DOE's Prize Competitions and Challenges
- **September 11:** The Laboratory Partnership Service
- **September 18:** Wells Fargo Innovation Incubator (IN2) and the NREL Industry Growth Forum
Past webinars are available to watch on-demand.

**Date Change: Export Controls Roundtable on Foreign Influence**

Roundtables are designed to be discussions regarding specific topics and are less formal than webinars. There will be a 1-2 slide formal presentation providing background on the subject, and two discussion leaders will lend their experience to the group. Participants will be encouraged to share their own knowledge as well as ask questions, hopefully leading to a successful group discussion. The direction of the conversation is entirely dependent on the group.

**Foreign Influence**

DATE CHANGE: **Wednesday, September 23, 2020 - 11:00 AM**

Facilitators: Sharon May and Julie Sherwood

Safeguarding research on campus against threats from some foreign governments seeking to influence, interfere and, in some cases, steal scientific research and intellectual property has been the subject of warnings by national security and law enforcement officials over the past several years. To date, cases have been brought against professors, scholars and students from universities and research institutions across the US. This roundtable will open the discussion on the issue of foreign influence on American university campuses and how we can protect federally funded research projects from cyberattacks, theft, and other foreign threats while still maintaining openness and international academic collaboration.

Spots are limited. Please email sharon.may@ndsu.edu to reserve your space. **Sessions will be limited to around 20 participants to maximize discussion.**

Have questions, ideas, or suggestions for the RCA Update?
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.