Undergraduate Research Mentor

Yao Yu, Ph.D.

Construction Management & Engineering

Describe your research interests/program:
Building Energy Conservation Technology
Building Energy Management
Computational Airflow Modeling

How have undergraduates been involved in your research?
Through an EPA project (EPA P3) that encourages the engagement of undergraduates in a research project.

Why do you think it’s important to engage undergraduates in research?
It will help them to better understand the knowledge learned in class and be prepared for future graduate study if they plan to.

Did you have an undergraduate research experience that inspired your
own education and/or career?
No, but I wish I had. That is why I encourage the engagement of undergraduates in my research and would like to see their success in their careers.

What advice would you give to a colleague who is interested in engaging undergraduates in research?
Be patient! Be patient! Be patient!

What is the best thing about being an undergraduate research mentor?
Creativity is a big thing. They are full of energy and creative ideas, even though some of them are not realistic.

Read more about Undergraduate Research Mentors at NDSU >>

REGISTRATION OPEN:
NDSU EXPLORE Showcase of Undergraduate Research & Creative Activity

The NDSU EXPLORE Showcase of Undergraduate Research & Creative Activity is a campus-wide event 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.

**RCA Travel Funding Opportunities**

Vice President Schuh has allocated additional funding to help defray travel expenses for faculty planning spring and summer trips to present at national conferences or visit archives or special collections. International opportunities will also be considered if required for discipline-specific research. As this pool of funding is limited, please consider allowing individuals who have limited sources of travel funding to apply for this opportunity. Application instructions are posted on the RCA website.
EXPORT CONTROLS FAQs

Q: How can export controls affect research at NDSU?

A: There are several scenarios that may require an export license including, but not limited to:

- A physical transfer/disclosure of an item outside the U.S.;
- Any transfer/disclosure of a controlled item or information within the U.S. to a foreign national;
- Participation of foreign national faculty, staff, or students in affected research;
- Presentation/discussion of previously unpublished research at conferences or meetings where foreign national scholars may be in attendance;
- Research collaborations with foreign nationals and technical exchange programs;
- Transfers of research equipment abroad;
- Visits to your lab by foreign national scholars.

To learn more, contact the Export Controls Office (ndsu.exportcontrols@ndsu.edu), and we will work with you to determine if an export license is needed. If so, we will help you establish a Technology Control Plan.

MARCH 1: 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. You will need to make needed changes before the deadline.


Be sure to...

- Change the cos.com portion of any Pivot URL you have saved to proquest.com. No need to recreate searches or lists if you have saved searches, curated lists, or pivot search widgets on any webpages.

Update links on your internal websites, and alert other faculty and researchers of the new URL before the current URL discontinues in March.

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Looking for Collaborators? Visit the NDSU Scholars Database

In Search of Equipment? Check the NDSU Equipment Database

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

Bill & Melinda Gates Foundation: Grand Challenge Initiatives
The Bill & Melinda Gates Foundation is inviting grant proposals for the following Grand Challenges initiatives:

**Grand Challenges Explorations:**

- Emerging Technologies for New Solutions in Global Health Priority Areas
- Environmental niches of *Salmonella Typhi*
- Increasing Demand for Vaccination Services

Grand Challenges Explorations (GCE) grants have already been awarded to over 1420 researchers in more than 65 countries. Initial grants are for USD $100,000 and successful projects are eligible to receive follow-on funding of up to USD $1 million. Proposals are solicited twice a year for an expanding set of global health and development challenges. Applications are only two pages, and no preliminary data is required. Applicants can be at any experience level, in any discipline, and from any type of organization, including colleges and universities, government laboratories, research institutions, non-profit organizations and for-profit companies.

*Application deadline: April 10, 2019*

**Grand Challenges:**

The *Neglected Tropical Diseases Data Innovation Incubator* seeks innovative ideas for how to improve the quality, completeness, and timeliness of routine neglected tropical disease data to help target interventions to all at-risk populations and achieve high intervention coverage and maximal impact on infection and morbidity.

*Application deadline: March 25, 2019*

For more information about the types of programs the Grand Challenges Explorations initiatives fund, read **summaries** of the GCE grants funded to date and explore an **interactive world map** of projects across the global Grand Challenges funding partner network.

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DoD: Defense University Research Instrumentation Program

The Department of Defense (DoD) Defense University Research Instrumentation Program (DURIP) announcement (N00014-19-S-F007) seeks proposals from universities to purchase equipment and instrumentation in support of research in areas of interest to the DoD. This competition is open to accredited U.S. institutions of higher education with degree granting programs in science, mathematics, and/or engineering. DoD interests include the areas of research supported by the Army Research Office (ARO), the Office of Naval Research (ONR), and the Air Force Office of Scientific Research (AFOSR). A central purpose of the DURIP is to provide equipment and instrumentation to enhance research-related education in areas of interest and priority to the DoD. Therefore, your proposal must address the impact of the equipment or instrumentation on your institution’s ability to educate students through research in disciplines important to DoD missions. You are encouraged to contact the Program Managers listed in the cited announcements before submitting proposals to explore research areas of mutual interest. Research equipment costing between $50,000 and $1,500,000 is eligible. There is no cost sharing or matching for proposals under this announcement.


DoD: Congressionally Directed Medical Research Programs (CDMRP)

The Department of Defense (DoD) Office of Congressionally Directed Medical Research Programs (CDMRP) recently released pre-announcements for anticipated research opportunities to allow investigators time to plan and develop proposals. This pre-announcement is intended to allow investigators time to plan and develop applications. FY19 Program Announcements and General Application
Instructions for the award mechanisms listed below are anticipated to be posted on the Grants.gov website soon. Pre-application and application deadlines will be available when the Program Announcements are released. The following programs are anticipated to be funded for FY19:

- Tick-Borne Disease Research Program
- Lung Cancer Research Program
- Tuberous Sclerosis Complex Research Program
- Autism Research Program
- Breast Cancer Research Program
- Military Burn Research Program
- Ovarian Cancer Research Program

CDMRP also presents webinars on types of funding opportunities offered and strategies to increase the success of applications submitted to different CDMRP programs. See the complete list of webinars >>

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**DoD: U.S. Army Engineer Research and Development Center**

The U.S. Army Engineer Research and Development Center (ERDC) has issued a Broad Agency Announcement (BAA) (solicitation # W912HZ-19-BAA-01) for various research and development topic areas.

The ERDC is responsible for conducting research in the broad fields of hydraulics, dredging, coastal engineering, instrumentation, oceanography, remote sensing, geotechnical engineering, earthquake engineering, soil effects, vehicle mobility, self-contained munitions, military engineering, geophysics, pavements, protective structures, aquatic plants, water quality, dredged material, treatment of hazardous waste, wetlands, physical/mechanical/chemical properties of snow and other frozen precipitation, infrastructure and environmental issues for installations, computer science, telecommunications management, energy, facilities maintenance, materials and structures, engineering processes, environmental
processes, land and heritage conservation, and ecological processes.

For all topics, white papers or pre-proposals must be submitted for initial review. White papers must clearly outline the work to be conducted, public benefit of the work, appropriate technology transfer, personnel qualifications, and all associated costs.

*Application deadline: January 31, 2020*

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**NEH Fellowships**

[National Endowment for the Humanities (NEH) Fellowships](https://www.neh.gov/grants/individual-fellowships) are competitive awards granted to individual scholars pursuing projects that embody exceptional research, rigorous analysis, and clear writing. Applications must clearly articulate a project’s value to humanities scholars, general audiences, or both. Fellowships provide recipients time to conduct research or to produce books, monographs, peer-reviewed articles, e-books, digital materials, translations with annotations or a critical apparatus, or critical editions resulting from previous research. Projects may be at any stage of development. NEH invites research applications from scholars in all disciplines of the humanities, and encourages submissions from independent scholars and junior scholars. Maximum award amount is $5,000 per month for six to twelve months. Project start date would be February 1, 2020.

Applicants interested in research projects that are either born digital or require mainly digital expression and digital publication are encouraged to apply instead for [NEH-Mellon Fellowships for Digital Publication](https://www.neh.gov/grants/individual-fellowships-mellon-fellowships-digital-publication).

*Application deadline: April 10, 2019*
**NSF: Research Experiences for Undergraduates 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 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:

- **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.

- **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.

*Application deadlines for Sites proposals: May 24, 2019 (Antarctica proposals) and Aug. 28, 2019 (for all other disciplines)*

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**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).

NDSU IACUC Rodent Training Series
Session 2: Blood Collection and Injection training will be offered on Thursday, February 28 from 3:00-4:30 p.m. in Van Es, Room 107. The session will cover blood collection via saphenous and submandibular veins and intraperitoneal, subcutaneous, and intravenous injections. Participants must be able to competently restrain a mouse. The training is open to faculty, staff, and students. Register for the event today! Space is limited.

Mark your calendars for upcoming Rodent training sessions: March 21 and April 25 from 3:00-4:30 p.m.

Unmanned Aircraft User Group Meetings
Monthly brown bag meetings are scheduled to provide an informal opportunity to share information and ask questions about using unmanned aircraft. At the March meeting Dr. Ben Laabs from the Department of Geosciences will present on their experience using UAS for data collection over a rock glacier in Great Basin National Park. David Dvorak, CEO of Field of View LLC, will provide an overview of a UAS camera add-on system they’ve developed for geotagging and triggering image capture. He’ll also discuss photogrammetry software. Field of View is located in our NDSU Technology Incubator. Please join us:
Unmanned Aircraft User Group Meeting
Friday, March 1, 2019 | 12-1 p.m.
Memorial Union Room of Nations

For more information about unmanned aircraft (drones), visit the NDSU Unmanned Aerial Vehicles webpage.

Webinars: DoD Congressionally Directed Medical Research Programs
The Congressionally Directed Medical Research Programs (CDMRP) presents a webinar series on types of funding opportunities offered and strategies to increase the success of applications submitted to different CDMRP programs.

- 2/11 (Recording Available) : Funding Opportunities and Strategies for Success
- 2/28 : High Risk/High Gain Funding Opportunities
- 3/11 : Team Science Funding Opportunities
- 3/25 : Clinical Research and Clinical Trial Funding Opportunities
- 4/8 : Funding Opportunities for the Development of Technology and/or Resources
- 4/24 : Funding Opportunities for Early Career Investigators
- 5/6 : Consortium-Type Funding Opportunities
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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