

## Proposal Writing Series Part V

Hosted by:

The Division of Research and Economic Development

## Housekeeping

- Slides from this series will be made available to all.
- The sessions are being recorded and will be posted on the web page of TTaDA and the Office of Research and Economic Development.
- For those joining us online please put questions in the Q and A we will be monitoring them.
- Office of Research and Economic Development is assisting in sponsoring this training:
  - John Mihelich John.Mihelich@und.edu
  - Mike Mann Michael.mann@und.edu
  - Justin Berg <u>Justin.allen.berg@und.edu</u>
  - Thomasine Heitkamp <u>thomasine.heitkamp@und.edu</u>
  - Michael Sadler michael.p.sadler@und.edu
  - Michael Haman Michael.haman@und.edu





## **Proposal Writing Series Overview**

**April 5, 2023, UND Supports for Proposal Writing.** Presenters: *President Andy Armacost,* Provost and Vice-President for Academic Affairs, *Eric Link*, Vice-President for Research & Economic Development, John Mihelich, and *Associate Deans for Research*.

**April 12, 2023, Proposal Writing is a Team Sport**. Role of the Grand Challenges in collaborative research efforts. Presenters: *UND Grand Challenge Champions* 

**April 19, 2023, Proof of Concept Development.** What problem are you solving? What is your hypothesis? What is your capacity? What is the relevance? Presenters: *Successful Proposal Writers at UND* 

**April 26, 2023, Budget Development and Using Novelution.** Budget Templates will be provided and how to submit in Novelution will be reviewed. Presenters: Staff in the Division of Research & Economic Development Pre-Award Office (Research & Sponsored Program Development).

May 3, 2023, Aligning Funding Sources with Interests. Moderator: *John Mihelich*, Vice President for Research and Economic Development. Participants will have the opportunity to visit with proposal writers with expertise in topic areas including NIH/HHS/Justice/Energy/Humanities/Defense/NSF/Foundations and to engage in a Q and A with Dr. Mihelich and Michael Sadler, Office of Research and Economic Development

## **Presenters Today:**

- John Mihelich moderator and co-host Q and A
- Michael Sadler co-host Q and A
- Colin Combs Panelist
- Daphne Pedersen Panelist
- Alena Kubatova Panelist
- Naima Kaabouch Panelist
- Mike Mann Panelist
- Thomasine Heitkamp Panelist



## Breakout Sessions Following Panel Discussion and Q and A

Participants will have the opportunity to visit with proposal writers with expertise in topic areas in breakout sessions.

Online attendees will be given the opportunity to select breakout rooms:

#### **Content Areas:**

- National Institutes of Health and Liberal Arts Opportunities (Colin Combs)
- National Science Foundation and Foundations (Daphne Pederson and Alena Kubatova)
- Department of Defense, Federal Aviation Administration, and National Aeronautics and Space Administration (Naima Kaabouch)
  - Department of Energy, Small Business Innovation Research, and Small Business Technology Transfer (Mike Mann)
- Health and Human Services (Thomasine Heitkamp)





# Colin Combs Department of Biomedical Sciences

**Professor and Chair** 

Chester Fritz Distinguished Professor

# Annual funding from the National Institutes of Health (NIH) is around 38 billion for extramural support

#### **Find Grant Funding**

https://grants.nih.gov/funding/searchguide/index.html#/

NIH Guide for Grants and Contracts

The NIH Guide for Grants and Contracts is NIH's official publication of notices of grant policies, guidelines, and funding opportunities.

We publish daily and issue a table of contents weekly. Learn more about the NIH Guide and subscribe to receive updates today!



Active Funding Opportunities and Notices∨

Search Terms

Search

**Advanced Search** 

#### NIH uses many different grant mechanisms:

R15 up to 3 years, <\$500K)

R03 up to 2 years, <\$500K)

R21 up to 2 years, <\$500K)

R01 (up to 5 years, >\$1million)

P01 (up to 5 years, >\$1 million)

P20 (up to 5 years, >\$1 million)

U01 (up to 5 years, >\$1 million)

- You can wait for special grant announcements with specific topics/dates or
- Simply apply for parent announcements which are every year, 3 times a year (e.g. October, February, June), on any topic of NIH relevance

Many, many more......



## Social Sciences: Anthropology (2022-2023)

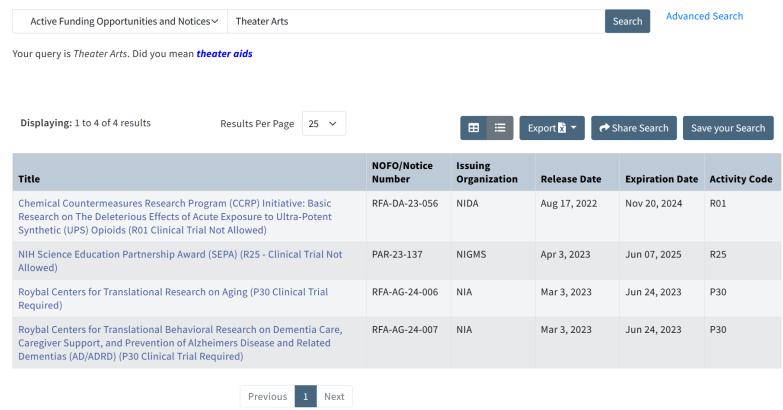
Active Funding Opportunities and Notices Anthropology Search

Displaying: 1 to 16 of 16 results Results Per Page 25 V		<b>⊞ ≡ €</b>	Export 🖈 🔻 🔥 S	Share Search Sa	ve your Search
Title	NOFO/Notice Number	Issuing Organization	Release Date	Expiration Date	Activity Code
Networking/Infrastructure Project for Research on Determinants of Differences Among Human and Nonhuman Primate Species in Life Spans, Life Histories, and Other Aging Related Outcomes, and Prospects for Translation (R61/R33 Clinical Trial Not Allowed)	RFA-AG-24-020	NIA	Feb 10, 2023	Sep 28, 2023	R61/R33
Research on Bioethical Issues Related to Bionic and Robotic Device Development and Translation (R21 Clinical Trial Optional)	RFA-EB-23-001	NIBIB	Feb 1, 2023	Oct 03, 2023	R21
Comparative Research on Determinants of Differences Among Human and Nonhuman Primate Species in Life Spans, Life Histories, and Other Aging-Related Outcomes, and Prospects for Translation (R01 Clinical Trial Not Allowed)	RFA-AG-24-019	NIA	Feb 10, 2023	Sep 28, 2023	R01
NIDA REI: Research on Neurocognitive Mechanisms Underlying the Impact of Structural Racism on the Substance Use Trajectory (R61/R33 Clinical Trial Optional)	RFA-DA-23-028	NIDA	Aug 9, 2022	Nov 15, 2024	R61/R33
Dissemination and Implementation Research in Health (R03 Clinical Trial Not Allowed) $$	PAR-22-106	NCI	May 9, 2022	Sep 08, 2025	R03
NIDA REI: Racial Equity Visionary Award Program for Research at Minority Serving Institutions on Substance Use and Racial Equity (DP1 Clinical Trial Optional)	RFA-DA-23-031	NIDA	Aug 9, 2022	Nov 15, 2024	DP1
NIDA REI: Research at Minority Serving Institutions on Neurocognitive Mechanisms Underlying the Impact of Structural Racism on the Substance Use Trajectory (R61/R33 Clinical Trial Optional)	RFA-DA-23-029	NIDA	Aug 9, 2022	Nov 15, 2024	R61/R33
NIDA REI: Racial Equity Visionary Award Program for Research on Substance Use and Racial Equity (DP1 Clinical Trial Optional)	RFA-DA-23-026	NIDA	Aug 9, 2022	Nov 15, 2024	DP1
NIDA REI: Addressing Racial Equity in Substance Use and Addiction Outcomes Through Community-Engaged Research (R01 Clinical Trial Optional)	RFA-DA-23-013	NIDA	Aug 9, 2022	Nov 15, 2024	R01
The Intersection of Sex and Gender Influences on Health and Disease (R01 Clinical Trial Optional)	RFA-OD-22-028	ORWH	Oct 13, 2022	Nov 23, 2024	R01
NIDA REI: Addressing Racial Equity in Substance Use and Addiction Outcomes Through Community-Engaged Research at Minority Serving Institutions (R01 Clinical Trial Optional)	RFA-DA-23-032	NIDA	Aug 9, 2022	Nov 15, 2024	R01
Dissemination and Implementation Research in Health (R21 Clinical Trial Optional)	PAR-22-109	NCI	May 10, 2022	May 08, 2025	R21
Dissemination and Implementation Research in Health (R01 Clinical Trial Optional)	PAR-22-105	NCI	May 10, 2022	May 08, 2025	R01

- Select a grant opportunity
- Read the instructions
- Recruit expertise if needed
- Make a timeline for submission



## Fine Arts: Theater Arts (2022-2023)



NCCIH will support research educational activities and experiences that are well aligned with <a href="the NCCIH Strategic Plan">the NCCIH Strategic Plan</a>
(<a href="https://www.nccih.nih.gov/about/nccih-strategic-plan-2021-2025">https://www.nccih.nih.gov/about/nccih-strategic-plan-2021-2025</a>) and provide exposure to research on nutritional, psychological, and physical approaches that may have originated outside of conventional medicine. These include natural products (e.g., dietary supplements, plant-based products, probiotics), mind and body approaches (e.g., yoga, massage therapy, meditation, mindfulness-based stress reduction, spinal/joint manipulation, acupuncture, music and arts-based approaches">music and arts-based approaches</a>), and multicomponent therapeutic systems. NCCIH is interested in research educational activities that advances research on whole person health, taking a transdisciplinary approach that integrates the natural, social, and health sciences and transcends traditional boundaries. Programs should align with NCCIH's Strategic Objective to support research training and career development opportunities to increase the number of well-trained scientists from diverse backgrounds conducting rigorous, cutting-edge research on complementary and integrative health practices. Potential applicants are encouraged to contact the NCCIH programmatic contact listed below.





# Daphne Pedersen Department of Sociology

Chester Fritz Distinguished Professor,

Department Chair

## Funding agencies

- S-STEM
- REAL / IUSE / EHR CORE
- IRES
- ADVANCE
- DISES



- Robert Woods Johnson Foundation
- Bush Foundation
- USDA Ag Extension
- EPA
- Small community projects
- Watch specifics of the RFP
- Expect a rejection





## **Multidisciplinary Teams**

- Who has the credentials?
- Who gets the work done (on time)?
- Who is a good team player?
- Be open to new partnerships and lines of research
- Be flexible about your role
- Make sure your directory info & Faculty Success (DM) are up to date
- Advocate for the resources you need
- Maintain open communication

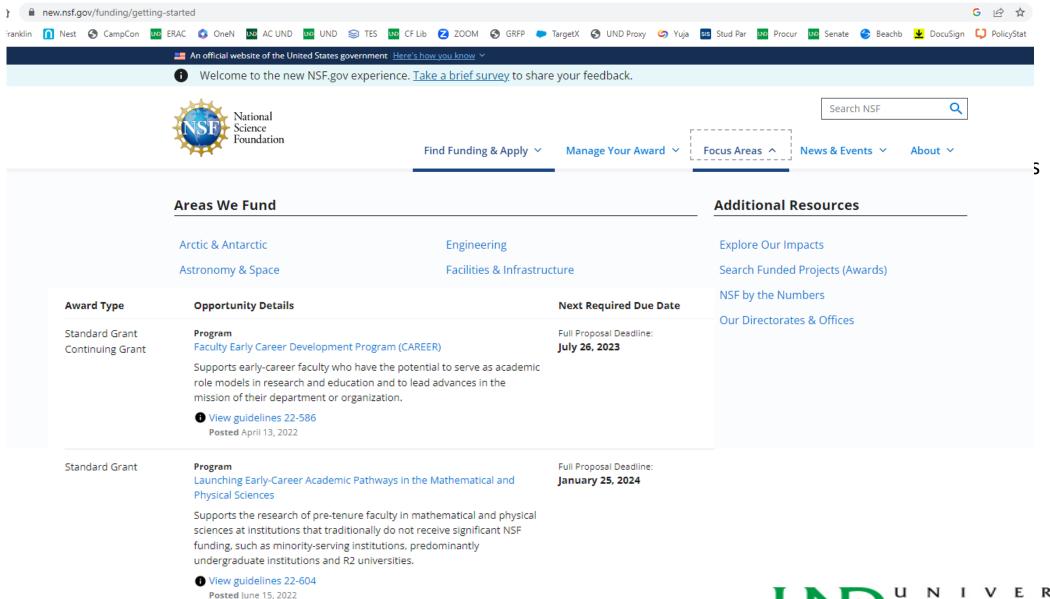




# Alena Kubatova Department of Chemistry

Chester Fritz Distinguished Professor Chair of the Department of Chemistry

## **National Science Foundation (NSF)**





## **Proposal preparation**

### **Prepare:**

- Attend workshops and webinars, talk to the project officer
- Consider available award, timeline, collaborations, and resources
- Communicate within department, college
- Prepare budget & justification and run through department and ERAC
- If external support is needed, initiate requests

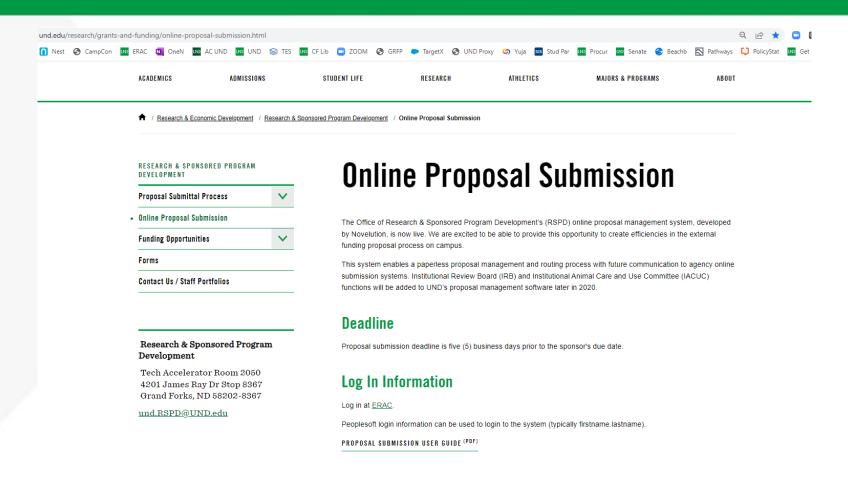
#### Write:

- Write proposal addressing solicitation for NFS Intellectual Merit & Broader Impacts, specific sections, follow PAPPG guideline <a href="https://new.nsf.gov/policies/pappg">https://new.nsf.gov/policies/pappg</a>
- Prepare supporting materials facilities, biosketches, data management plan
- Review & and have it Reviewed
- Upload early



## ERAC submission at UND Research.gov submission to the NSF

- Minimum 5 days ahead
- Have budget preapproved
- Communicate
- Prepare MOUs
- Once approved,
- Ensure submission on research.gov







# Naima Kaabauch School of Engineering and Computer Science

Professor



- Director of the Artificial Intelligence (AIR) Initiative
- Lead of Cybersecurity and Data Chain (Big Data), RIAS
- PI/CoPI/CoI for over \$30M grants from NSF, NASA, FAA, DoD, NIH, NDoT, Rockwell Collins (Collins), ND Chamber of Commerce, and other state sources.
- Panelist since 2012 for several NSF, state, and international programs



## Some Tips

- Align your proposal with the right program and directory.
- Consult with the Program Manager about the project: 1 or 2 pages white paper.
- Build a strong team for your project.
- Have some preliminary results
- Before submission, get feedback from successful colleagues about the proposal.
- Follow NSF requirements rules about the proposal's content and format.
- Never give up and try, try, try again!



## Five Merit Review Elements

- 1. What is the potential for the proposed activity to:
  - a. advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
  - b. benefit society or advance desired societal outcomes (Broader Impacts)?
- 2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
- 3. Is the plan for carrying out the proposed activities well-reasoned, well organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
- 4. How well qualified is the individual, team, or institution to conduct the proposed activities?
- 5. Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?



# Michael Mann Office of Research and Economic Development

Research Developer

Chester Fritz Distinguished Professor Emeritus

(Formerly Associate Dean for Research, CEM)

## Opportunities in Energy

#### Department of Energy - Office of Basic Energy Science

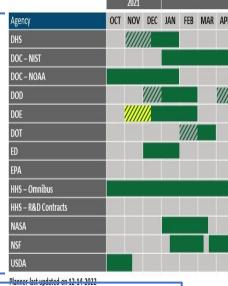
- Look at topics in annual Broad Area Announcement (BAA)
- Send white paper to project officer / make personal contact
- Much like NSF
- EPSCoR-State/National Laboratory Partnership Grants
- DOE Basic Energy Sciences Early Career Network (BES ECN)

#### Mission Agencies (Funding Opportunity Announcements - FOA)

- Need to periodically check and/or enroll in search engine
- Check deadlines / is concept paper required
- Are there limits to number submissions from UND
- Be responsive to goals of FOA
- Read the Q&A for that submission
- Team up early / Ask CEMRI Executive Director (Dan Laudal)
- A small bit of preliminary data good
- Strong literature section also helps
- Funding & Financing | Department of Energy
- www.energy.gov (Energy Economy / Funding and Financing)

#### SBIR/STTR

- Small Business Innovation Research (SBIR)
- Small Business Technology Transfer (STTR)
- Small business must be the lead
  - Most don't have their own research department
  - Rely on university to do most of proposal writing
- Faculty/students can form own company
- Many agencies have SBIR/STTR programs
- SBIR.gov



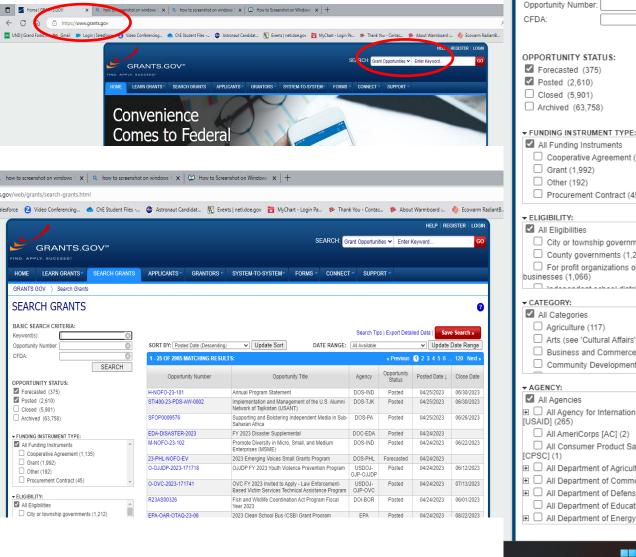
#### **State Programs**

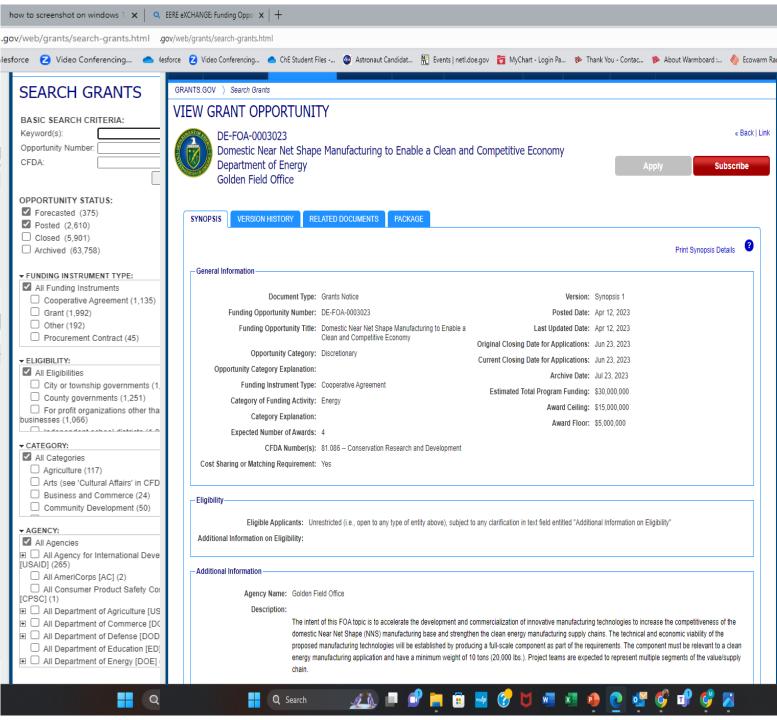
- Talk with program leads about ideas
- Align outcomes with needs of ND
- Need buy-in/cost share from industry partners
- Application oriented rather than fundamental
- Good source of cost share for DOE programs
- Home | North Dakota Industrial Commission www.ndic.nd.gov (Research & Grants Programs)



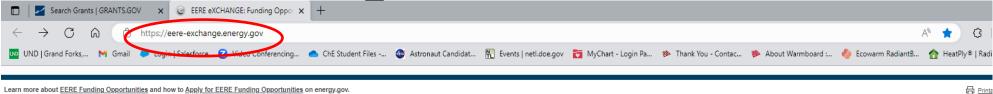
## **Using Grants.gov**

Keyword(s):





## **EERE Exchange**



Learn more about EERE Funding Opportunities and how to Apply for EERE Funding Opportunities on energy.gov.

Jump to a FOA:

DE-LC-0001002

DE-FOA-0002946

DE-LC-0000019

DE-FOA-0003022

Funding Opportunity

**Funding Archive** 

Login

Register

Manuals

Questions & Answers

Teaming Partners

#### Interested in learning about other DOE Funding Opportunities?

Check out the Funding & Financing | Department of Energy page

#### EERE FUNDING OPPORTUNITY ANNOUNCEMENTS

Placeholder for Teaming Partner List for Bipartisan Infrastructure Law Technology

FY23 Conversion Research and Development Funding Opportunity Announcement

Technical Resources for Industrial Pursuit of Lower Emissions (TRIPLE)

Enable a Clean and Competitive Economy

Commercialization Fund: Collaborative Alignment for Critical Technology Industries Lab Call

Notice of Intent to Issue FOA - DE-FOA-0003023: Domestic Near Net Shape Manufacturing to

FOA Number FOA Title LOI Deadline **CP** Deadline FA Deadline Announcement Type Teaming Partners List for DE-FOA-0003034: (OPTIMA) Operations and Planning Tools for TPL-0000018 Teaming Partner List Inverter-Based Resource Management and Availability for Future Power Systems Operation and Planning Tools for Inverter-Based Resource Management and Availability for Solar Energy Technologies Funding Opportunity Announcement (FOA) 6/5/2023 05:00 PM FT 8/15/2023 05:00 PM ET DE-FOA-0003034 Future Power Systems (OPTIMA) (SETO) Advanced Materials and DE-LC-0000023 Microelectronic Devices for Energy Efficiency Scaling Lab Call (LC) Manufacturing Technologies 5/23/2023 05:00 PM ET Office (AMMTO) Advanced Materials and NATIONAL LABORATORY CALL FOR REDUCING EMBODIED CARBON AND OPERATIONAL Manufacturing Technologies 6/30/2023 05:00 PM ET DE-LC-0000020 Lab Call (LC) ENERGY ACROSS THE BUILT ENVIRONMENT Office (AMMTO) Advanced Materials and National Laboratory Call for Proposals Strengthening Domestic Capabilities in Solid-State and DE-LC-0000027 Lab Call (LC) Manufacturing Technologies 5/12/2023 05:00 PM ET 6/23/2023 05:00 PM ET Flow Battery Manufacturing Office (AMMTO) Small Innovative Projects in Solar: Concentrating Solar Power and Photovoltaic (SIPS: CSP & Solar Energy Technologies DE-FOA-0002888 Funding Opportunity Announcement (FOA) 6/1/2023 05:00 PM ET (SETO) Advanced Materials and DE-FOA-0003023 Domestic Near Net Shape Manufacturing to Enable a Clean and Competitive Economy Funding Opportunity Announcement (FOA) Manufacturing Technologies 5/11/2023 05:00 PM ET 6/23/2023 05:00 PM ET Office (AMMTO) Solar Energy Technologies DE-FOA-0003074 Scaling the U.S. Solar Manufacturing Workforce Request for Information (RFI) 6/2/2023 05:00 PM ET (SETO) TPL-0000015 Teaming Partner List for NOI DE-FOA-0003022: Domestic NNS Manufacturing Teaming Partner List Energy Efficiency and Bi-Partisan Infrastructure Law (BIL) Energy Efficiency Conservation Block Grant (EECBG) DE-FOA-0002988 Funding Opportunity Announcement (FOA) Conservation Block Grant 6/5/2023 05:00 PM ET 8/7/2023 05:00 PM ET Competitive Program Program (EECBG) DE-FOA-0003064 Notice of Intent to Issue Funding Opportunity Announcement No. DE-FOA-Wind Energy Technologies Notice of Intent to Publish FOA (NOI) DE-FOA-0003064 TBD 0002954: WETO Offshore Wind 2023 Centers of Excellence (WETO) Advanced Materials and DE-FOA-0003059 Request for Information on Challenges and Opportunities of Increasing Material Circularity Request for Information (RFI) Manufacturing Technologies 5/1/2023 05:00 AM ET Office (AMMTO) 4/27/2023 11:59 PM ET DE-LC-0000021 VTO Fiscal Year 2023 Lab Call Lab Call (LC) Vehicle Technologies (VTO) Teaming Partner List for Bipartisan Infrastructure Law Technology Commercialization Fund: TPL-0000014 Teaming Partner List Collaborative Alignment for Critical Technology Industries Lab Call

Notice of Intent to Publish FOA (NOI)

Notice of Intent to Publish FOA (NOI)

Lab Call (LC)

Funding Opportunity Announcement (FOA)

Office of Technology

Decarbonization Office (IEDO) Advanced Materials and

Manufacturing Technologies

Office (AMMTO)

Transitions (OTT) Bioenergy Technologies

(BETO) Industrial Efficiency and



TBD

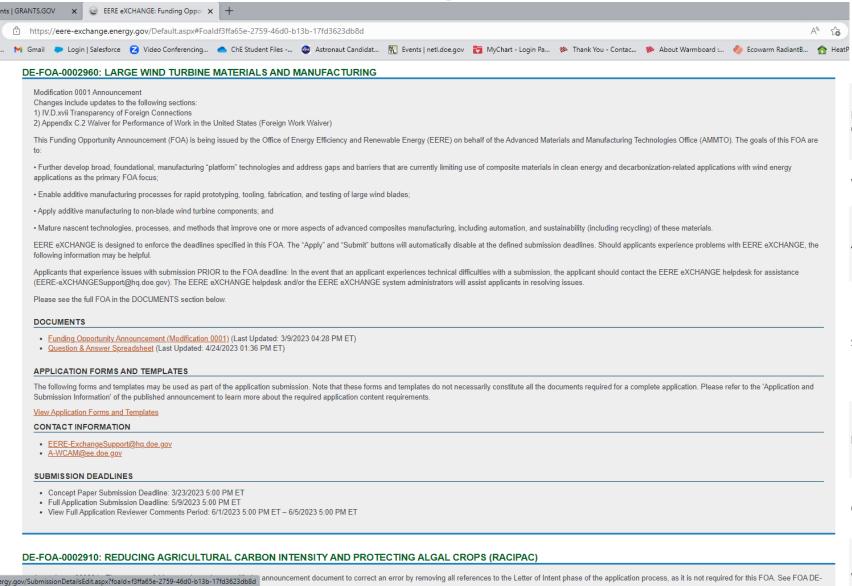
TBD

6/16/2023 05:00 PM ET

5/19/2023 05:00 PM ET

4/21/2023 05:00 PM ET

## **EERE Exchange**



#### www.energy.gov

(Energy Economy / Funding and Financing)
Open solicitations by branch – EERE example below

Hydrogen and Fuel Cells	Hydrogen and Fuel Cell Technologies Office FOA in Support of Hydrogen Shot	2/22/2023	4/28/2023
Wind	Improving Wind Turbine Composite Materials	2/10/2023	5/9/2023
АММТО	2023 Large Wind Turbine Materials and Manufacturing Funding Opportunity	2/10/2023	5/9/2023
Solar/Wind	Increasing Utilization and Reliability of Electric Infrastructure with Grid-Enhancing Technologies (GETs)	2/24/2023	5/9/2023
Bioenergy	Reducing Agricultural Carbon Intensity and Protecting Algal Crops (RACIPAC)	2/9/2023	5/16/2023
Cross Office	Clean Energy to Communities (C2C) In-Depth Partnerships	2/15/2023	5/17/2023
Wind	Technical Assistance: Increasing Adoption of Onsite Wind Energy	2/3/2023	5/19/2023



# Thomasine Heitkamp Office of Research and Economic Development

Research Developer

Chester Fritz Distinguished Professor Emeritus

## Background

#### **Tips**

- Webpage content is your best friend check eligibility. Read the guidance for applicants
- Ensure you have an active SAM.gov registration or renewal process 30 days prior to the deadline to secure Unique Identifier Number (UEI)
- Attend the training offered (or listen to the recording)
- The project officer is a resource but ensures wellformed questions
- Look at forthcoming, current, and expired funding of the agency
- Use their content materials and database
- Use team and set and adhere to deadlines
- Know the region to be served needs, population, dynamics (Rural/Tribal/At-Risk population, etc)

### **Types of Federal Grants**

- Competitive Funding (based on the merit of the proposal) Reviewed by a team of experts
- Formula Grants (awardees are predetermined)
   Typically these awards go to the State and Local Government Infrastructure and Jobs Act have formula grants.
- Continuation Grants (renewal of existing grant).
   Often based on performance during the grant period and costs of reissues a solicitation
- Pass-Through-Grants go to the State and funds are passed through (contracts with the state for a deliverable) Know the needs of states, know state officials, develop relationships in your field

## Health and Human Services/Justice

#### **Health and Human Services**

- ACF (Administration for Children and Families)
- ADPR (Administration for Strategic Preparedness and Response)
- AHRQ (Agency for Healthcare Research and Quality)
- CFBNP (Center for Faith-based and Neighborhood Partnerships)
- CDC (Center for Disease Control and Prevention)
- CMS (Center for Medicare and Medicaid Services)
- FDA (Food and Drug Administration)
- HRSA (Health Resources and Services Administration)
- IHS (Indian Health Services)
- SAMHSA (Substance Abuse and Mental Health Services Administration)
- National Institute of Health (NIH)

#### **Department of Justice**

- Office of Justice Programs
  - Bureau of Justice Assistance
  - Bureau of Justice Statistics
  - National Institute of Justice
  - Office of Juvenile Justice and Delinquency Prevention
  - Office of Victims of Crime
  - Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking
- Office on Violence Against Women
- Office of Community Outreach Policing

## **Other Funding Streams**

#### Sample of Associations/Foundation

- Bill and Melinda Gates Foundation and Harry B. Helmsley Charitable Trust - Educause
- North Dakota Board of Higher Education Expanding Access to OERs
- National Rural Health Association Suicide Prevention in Rural Areas
- Council for State Governments Justice-Involved/ Behavioral Health
- National Council for Mental Wellbeing Integrated Care
- Traumatic Brain Injury Technical Assistance and Resource Center – Behavioral Health Guide Consideration for Best Practices for Children, Youth, and Adults with Traumatic Brain Injury
- Otto Bremer Trust 81.6 million in grants in 2022 (ND, MT, WI, MN) – Expanding access to nutrition for children
- Northwest Area Foundation
   — Expanding rural leadership

#### **Other Federal Entities**

- U.S. Department of Agriculture USDA Rural Development (tribal college initiative)
- U.S. Department of Education
- U.S. Department of Housing and Urban Development
- U.S. Department of Transportation
- U.S. Department of Veterans Affairs
- U.S. Department of Commerce
- U.S. Department of Labor

## Grants.Gov – has a mobile app



