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 Justin.allen.berg@und.edu
  • Thomasine Heitkamp thomasine.heitkamp@und.edu
  • 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

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, >$1 million)
- P01 (up to 5 years, >$1 million)
- P20 (up to 5 years, >$1 million)
- U01 (up to 5 years, >$1 million)

Many, many more......

- 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
### Social Sciences: Anthropology (2022-2023)

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

<table>
<thead>
<tr>
<th>Title</th>
<th>NDOG/Notice Number</th>
<th>Issuing Organization</th>
<th>Release Date</th>
<th>Expiration Date</th>
<th>Activity Code</th>
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<tbody>
<tr>
<td>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 (R01/R33 Clinical Trial Not Allowed)</td>
<td>RFA-AG-24-020</td>
<td>NIA</td>
<td>Feb 10, 2023</td>
<td>Sep 29, 2023</td>
<td>R1/R33</td>
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<tr>
<td>Research on Biotechnological Issues Related to Bionic and Robotic Device Development and Translation (R21 Clinical Trial Optional)</td>
<td>RFA-EB-23-001</td>
<td>NIHBB</td>
<td>Feb 1, 2023</td>
<td>Oct 31, 2023</td>
<td>R21</td>
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<tr>
<td>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)</td>
<td>RFA-AG-24-019</td>
<td>NIA</td>
<td>Feb 10, 2023</td>
<td>Sep 29, 2023</td>
<td>R01</td>
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<td>NIDA REI: Research on Neurocognitive Mechanisms Underlying the Impact of Structural Racism on the Substance Use Trajectory (R01/R33 Clinical Trial Optional)</td>
<td>RFA-DA-23-028</td>
<td>NIDA</td>
<td>Aug 9, 2022</td>
<td>Nov 15, 2024</td>
<td>R1/R33</td>
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<tr>
<td>Dissemination and Implementation Research in Health (R13 Clinical Trial Not Allowed)</td>
<td>P01-22-106</td>
<td>NCi</td>
<td>May 9, 2022</td>
<td>Sep 08, 2025</td>
<td>R01</td>
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<tr>
<td>NIDA REI: Racial Equity Visionary Award Program for Research at Minority Serving Institutions on Substance Use and Racial Equity (DP1 Clinical Trial Optional)</td>
<td>RFA-DA-23-031</td>
<td>NIDA</td>
<td>Aug 9, 2022</td>
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<td>NIDA REI: Research at Minority Serving Institutions on Neurocognitive Mechanisms Underlying the Impact of Structural Racism on the Substance Use Trajectory (R01/R33 Clinical Trial Optional)</td>
<td>RFA-DA-23-029</td>
<td>NIDA</td>
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<td>NIDA REI: Racial Equity Visionary Award Program for Research on Substance Use and Racial Equity (DP1 Clinical Trial Optional)</td>
<td>RFA-DA-23-026</td>
<td>NIDA</td>
<td>Aug 9, 2022</td>
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<td>NIDA REI: Addressing Racial Equity in Substance Use and Addiction Outcomes Through Community-Engaged Research (R01 Clinical Trial Optional)</td>
<td>RFA-DA-23-013</td>
<td>NIDA</td>
<td>Aug 9, 2022</td>
<td>Nov 15, 2024</td>
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<td>The Intersection of Sex and Gender Influences on Health and Disease (R01 Clinical Trial Optional)</td>
<td>RFA-OD-22-028</td>
<td>ORWH</td>
<td>Oct 15, 2022</td>
<td>Nov 23, 2024</td>
<td>R01</td>
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<td>NIDA REI: Addressing Racial Equity in Substance Use and Addiction Outcomes Through Community-Engaged Research at Minority Serving Institutions (R01 Clinical Trial Optional)</td>
<td>RFA-DA-23-032</td>
<td>NIDA</td>
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<td>Nov 15, 2024</td>
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<td>Dissemination and Implementation Research in Health (R01 Clinical Trial Optional)</td>
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<td>NCi</td>
<td>May 10, 2022</td>
<td>May 08, 2025</td>
<td>R01</td>
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</table>
NCCIH will support research educational activities and experiences that are well aligned with the NCCIH Strategic Plan (https://www.nccih.nih.gov/about/nccih-strategic-plan-2021-2025) 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), 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

- Other
  - 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
### Areas We Fund

<table>
<thead>
<tr>
<th>Award Type</th>
<th>Opportunity Details</th>
<th>Next Required Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Grant</td>
<td>Program: Faculty Early Career Development Program (CAREER)</td>
<td>Full Proposal Deadline: July 26, 2023</td>
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<tr>
<td></td>
<td>Supports early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization.</td>
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<td></td>
<td>● View guidelines 22-586</td>
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<tr>
<td></td>
<td>Posted April 13, 2022</td>
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<tr>
<td>Continuing Grant</td>
<td>Program: Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences</td>
<td>Full Proposal Deadline: January 25, 2024</td>
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<td></td>
<td>Supports the research of pre-tenure faculty in mathematical and physical sciences at institutions that traditionally do not receive significant NSF funding, such as minority-serving institutions, predominantly undergraduate institutions and H2 universities.</td>
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<td>● View guidelines 22-604</td>
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<td>Posted June 15, 2022</td>
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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 https://new.nsf.gov/policies/pappg
• 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!

*Naima Kaabouch*
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](https://www.energy.gov)
- [www.energy.gov](https://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](https://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](https://www.ndic.nd.gov) (Research & Grants Programs)
Using Grants.gov
<table>
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<tr>
<th>FOA Number</th>
<th>FOA Title</th>
<th>Announcement Type</th>
<th>Program</th>
<th>SOI Deadline</th>
<th>CP Deadline</th>
<th>FA Deadline</th>
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<tr>
<td>DE-CO-000314</td>
<td>Hydrogen: Equity, Efficiency, and Environment (HEE) Program</td>
<td>Funding Opportunity Announcement (FOA)</td>
<td>Advanced Materials and Manufacturing Technologies Office (AMMTO)</td>
<td>6/29/2023 05:00 PM ET</td>
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<td>DE-CE-0006227</td>
<td>National Laboratory Call for Proposals: Chemical and Biological Energy Conversion: The Future of Biotechnology (DOE-CE-0006227)</td>
<td>Funding Opportunity Announcement (FOA)</td>
<td>Advanced Materials and Manufacturing Technologies Office (AMMTO)</td>
<td>6/30/2023 05:00 PM ET</td>
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<td>DE-FO-000848-001</td>
<td>Small Business Innovation Research (SBIR) Program</td>
<td>Request for Information (RFI)</td>
<td>Solar Energy Technologies (SETO)</td>
<td>6/1/2023 05:00 PM ET</td>
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<td>DE-FO-000852-001</td>
<td>Advanced Manufacturing Innovation (AMI) Program</td>
<td>Request for Information (RFI)</td>
<td>Solar Energy Technologies (SETO)</td>
<td>6/1/2023 05:00 PM ET</td>
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<td>DE-SC-000298-001</td>
<td>Technical Assistance for Small Business Innovation Fund (STBIF)</td>
<td>Notice of Intent to Publish (NIP)</td>
<td>Advanced Materials and Manufacturing Technologies Office (AMMTO)</td>
<td>5/1/2023 05:00 PM ET</td>
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<td>DE-FO-000403-001</td>
<td>Request for Information on Opportunities and Challenges of Innovations in Materials Fabrication</td>
<td>Request for Information (RFI)</td>
<td>Advanced Materials and Manufacturing Technologies Office (AMMTO)</td>
<td>5/1/2023 05:00 PM ET</td>
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<td>DE-SC-000451-001</td>
<td>Technical Assistance for Small Business Innovation Fund (STBIF)</td>
<td>Funding Opportunity Announcement (FOA)</td>
<td>Industrial Efficiency and Resource Conservation (IERC)</td>
<td>4/21/2023 05:00 PM ET</td>
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Open solicitations by branch – EERE example below

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<tbody>
<tr>
<td>Wind</td>
<td>Improving Wind Turbine Composite Materials</td>
<td>2/10/2023</td>
<td>5/9/2023</td>
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<tr>
<td>AMMTO</td>
<td>2023 Large Wind Turbine Materials and Manufacturing Funding Opportunity</td>
<td>2/10/2023</td>
<td>5/9/2023</td>
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<td>Solar/Wind</td>
<td>Increasing Utilization and Reliability of Electric Infrastructure with Grid-Enhancing Technologies (GETs)</td>
<td>2/24/2023</td>
<td>5/9/2023</td>
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<td>Bioenergy</td>
<td>Reducing Agricultural Carbon Intensity and Protecting Algal Crops (RACIPAC)</td>
<td>2/9/2023</td>
<td>5/16/2023</td>
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<td>Cross Office</td>
<td>Clean Energy to Communities (C2C) In-Depth Partnerships</td>
<td>2/15/2023</td>
<td>5/17/2023</td>
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<td>Wind</td>
<td>Technical Assistance: Increasing Adoption of Onsite Wind Energy</td>
<td>2/3/2023</td>
<td>5/19/2023</td>
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</table>
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 well-formed 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

- 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
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
- 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