EQUIPMENT GRANT PROGRAMS: AN OVERVIEW

RESEARCH AND FACULTY DEVELOPMENT

FACULTY SUCCESS SEMINAR SERIES

Carly Cummings, PhD, CPRA
Director, Office of Research and Faculty Development

Please keep your microphone muted until the Q&A session

Please note that this presentation was previously recorded.
HOUSEKEEPING ITEMS

This seminar was previously recorded

If you have questions...

- Please stay muted until the Q&A slide at the end of the seminar and ask them at that point

- Type questions into the chat box

- I will respond to your questions after returning to the office
We provide proposal development assistance across the spectrum*

Meet goals in the UI strategic plan – grow research and creative efforts across all disciplines

Reach out to discuss ideas with us and request service – uidaho.edu/orfd

*Not including budget preparation

All services are optional and are granted on a first come, first served basis
OBJECTIVES

IN THIS SESSION, WE WILL DISCUSS:

- Overview of some equipment grant funding opportunities
- NSF Major Research Instrumentation (MRI)
- NIH Shared Instrumentation Programs (S10)
- USDA Equipment Grants Program (EGP)
- Department of Defense University Research Instrumentation Program (DURIP)
- M. J. Murdock Charitable Trust Scientific Research Instrumentation Program
CONSIDERATIONS FOR EQUIPMENT GRANTS

Know the **total projected costs** of the piece of equipment you are requesting:
- Obtain a quote from the vendor (purchasing, delivering, and installing)
- Know funding program’s upper and lower limits for funding

Does the equipment grant program require **cost share**? If so, how much, what type(s) are allowable, and where would this come from?

Are there **institutional limits** on the number of submissions?
- Internal deadlines in advance of sponsor deadline; RFD manages
NSF MRI PROGRAM - SYNOPSIS

- NSF-wide program: Office of Integrative Activities
- Goal is to increase access to multi-user scientific and engineering instrumentation for research and research training
- 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
- Expected to enhance research training of students who will become the next generation of instrument users, designers, and builders
MRI PROGRAM - SYNOPSIS

MRI Program provides support to:

- **Acquire critical research instrumentation** without which advances in fundamental science and engineering research may not otherwise occur.

- **Develop next-generation research instruments** that open new opportunities to advance the frontiers in science and engineering research.

- Recorded RFD Faculty Success Seminar with NSF MRI PO [here](#).
MRI PROGRAM BASICS

Awards:
- Track 1: Instrument requests between $100,000 to less than $1 million
- Track 2: Requests between $1M up to and including $4M

Duration: up to 3 years for acquisition proposals; up to 5 years for development proposals

Limit on Number of Proposals per PhD-granting Organization: 3 total
- 2 proposals allowed for Track 1; one allowed for Track 2
- Proposals within the two tracks may be either for acquisition or development
- RFD uses internal review process to determine which proposals will be submitted

Submission Window: January 1 – January 19, annually
MRI PROGRAM BASICS

- **Matching requirement:** 30% cost share on total project costs
  - Cash or in-kind

- **What the program **does not** fund:**
  - General-purpose equipment normally found in a laboratory or easily procured
  - Research, education, or outreach activities enabled by the requested instrumentation
  - Requests for multiple independent instruments to outfit a general-purpose laboratory or research environment
  - Instrumentation used primarily for STEM education courses and outreach
  - Research outside of NSF-supported fields of science and engineering
NIH S10 PROGRAMS - SYNOPSIS

NIH-wide program: Office of Research Infrastructure Programs

Goal: support purchases of state-of-the-art commercially available instruments to enhance research of NIH-funded investigators

- Instruments are typically too expensive to be obtained by an individual investigator with a research project grant

Every instrument awarded is used on a shared basis

- Three or more PIs with active NIH research awards

Three S10 Funding Programs

FAQs
Overview:

- Targets institutions that have not received $250K or more in S10 shared instrumentation award funding in any of the last 3 Federal fiscal years (FYs 2018-2020)

Awards:

- Between $25,000 to $250,000
- Examples: basic cell sorters, confocal microscopes, ultramicrotomes, gel imagers, or computer systems

Duration: one year

Limit on Number of Proposals Submitted Per Institution: 1

Cost Share Requirement: None

Deadline: June 1, 2021
S10 PROGRAM BASICS

S10 #1: Basic Instrumentation Grant Program (BIG; PAR-21-125)

Applicants are advised to discuss ideas with BIG Scientific/Research Contact

- Alena Horska, PhD, PhD (ORIP); 301-435-0772; SIG@mail.nih.gov
- Christina Liu, PhD PE (NIGMS); 301-451-3781; christina.liu@nih.gov
S10 PROGRAM BASICS

S10 #2: Shared Instrumentation Grant Program (SIG; PAR-21-127)

Overview:
- Purchase or upgrade a single item of high-priced, specialized, commercially available instruments or integrated instrumentation system

Awards:
- Between $50,000 to $600,000
- Examples: X-ray diffractometers, mass spectrometers, NMR, DNA and protein sequencers, biosensors, electron and light microscopes, cell sorters, biomedical imagers

Duration: one year

Limit on Number of Proposals Submitted Per Institution: No limit

Cost Share Requirement: None

Deadline: June 1, 2021
S10 PROGRAM BASICS

S10 #2: Shared Instrumentation Grant Program (SIG; PAR-21-127)

Applicants are advised to discuss ideas with SIG Scientific/Research Contact

- Alena Horska, PhD, PhD (ORIP); 301-435-0772; SIG@mail.nih.gov
- Christina Liu, PhD PE (NIGMS); 301-451-3781; christina.liu@nih.gov
S10 PROGRAM BASICS

S10 #3: High-End Instrumentation Grant Program (HEI; PAR-21-126)

Overview:
- Purchase or upgrade a single item of high-end, specialized, commercially available instruments or integrated instrumentation system

Awards:
- Between $600,000 to $2,000,000
- Examples: biomedical imagers, high-throughput robotic screening systems, X-ray diffractometers, mass spectrometers, NMR, DNA and protein sequencers, biosensors, electron and light microscopes, and cell sorters

Duration: one year

Limit on Number of Proposals Submitted Per Institution: No limit

Cost Share Requirement: None

Deadline: June 1, 2021
S10 #3: High-End Instrumentation Grant Program (HEI; PAR-21-126)

Applicants are advised to discuss ideas with HEI Scientific/Research Contact

- Guanghu (Jeff) Wang, PhD (ORIP); 301-435-0772; HEI@mail.nih.gov
- Christina Liu, PhD PE (NIGMS); 301-451-3781; christina.liu@nih.gov
What the Program Will NOT Support:

- An instrument with a base cost of less than award floor
- Multiple instruments bundled together
- Purely instructional equipment
- Instruments used for clinical (billable) care
- Instruments that are not commercially available and do not have a manufacturer warranty
- Institutional administrative management systems, clinical management systems
- Software, unless it is integrated in the operation of the instrument and/or necessary for generation of high-quality experimental data from the instrument
- Multiple stand-alone workstations for data processing, software licenses, and duplicate software items
What the Program Will NOT Support (cont’d):

- General purpose equipment (e.g., standard machine shop equipment), instruments to furnish a research facility (e.g., autoclaves, hoods, equipment to upgrade animal facilities), equipment for routine sustaining infrastructure (e.g., standard computer networks or data storage systems)
- Disposable devices, office furniture, and supplies
- Alteration or renovation of space to house the instruments
Goal: increase access to shared-use special purpose equipment/instruments for fundamental and applied research for use in the food and agricultural science programs at institutions of higher education

- Strengthen quality and expand the scope of fundamental and applied research at IHEs

FAQs
Overview:
- Increase access to shared-use special purpose equipment for use in the food and agricultural sciences programs at IHEs
- Aligned with USDA Strategic Goals 1-7 and USDA Science Blueprint Themes 1-4

Awards:
- Between $25,000 to $500,000

Duration: up to three years

Limit on Number of Proposals Submitted Per Institution: 2

Cost Share Requirement: None

Deadline: March 16, 2021

Program Contact: Carlos Ortiz, PhD
What the Program Will NOT Support:

- Acquisition of suites of equipment to outfit research laboratories/facilities or to conduct independent experiments simultaneously

- Common, general purpose ancillary equipment that would normally be found in a laboratory and/or is relatively easily procured by the organization or other NIFA grant programs

- Research projects, including research that uses the equipment acquired with support from the program

- Education or extension projects directly

- Installation, training, operation, consumable supplies, insurance, or maintenance of facilities, equipment, or research laboratories, or renovation of facilities that house the acquired equipment
DURIP - SYNOPSIS

1. Administered through the Air Force Office of Scientific Research (AFOSR), Army Research Office (ARO), and Office of Naval Research (ONR)
   - Choose agency based on a match with their research interests
2. Acquisition of major equipment to augment current or develop new research capabilities in support of DoD-relevant research
Overview:
- Improve capabilities of U.S. IHE to conduct research and to educate scientists in areas important to national defense, by providing funds for the acquisition of research equipment or instrumentation
- Aligned with specific agency missions

Awards:
- Between $50,000 to $1,500,000

Duration: one year

Limit on Number of Proposals Submitted Per Institution: None

Cost Share Requirement: None

Deadline: May 14, 2021
Strongly Encourage Contact with Program Officer(s)

- Deadline for program contact: April 23
- ARO Broad Agency Announcement (BAA) (W911NF-17-S-0002): research interest contacts
  - Expires March 31, 2022
- ONR Technology Areas: Review “Departments” on this page
- AFOSR BAA: Review program areas here
  - No expiration date noted; opened April 30, 2020

Applicants can submit proposals to more than one supporting agency
Review Criteria (of equal importance)

- **Impact** of the proposed equipment on research DoD funds, plans to fund and/or the likelihood your proposed equipment will enhance current research capabilities or establish new research capabilities relevant to DoD.

- Importance and priority to **DoD missions** of research the proposed equipment will support.

- Potential of the proposed equipment to enhance institution’s ability to educate future scientists and engineers through research conducted with the proposed equipment in disciplines important to DoD.
What the Program Will NOT Support:

- Purely instructional equipment
- General-purpose computing facilities
- Construction or modification of buildings
- Continued operation and maintenance, including extended warranties
- Direct salaries of faculty, postdoctoral associates, or students
M. J. Murdock Trust supports research universities in the Pacific Northwest.

Goal: to support scientific research in the form of major scientific instrumentation to be used by multiple users.

- Natural sciences, engineering, or medicine.
MURDOCK SCIENTIFIC RESEARCH INSTRUMENTATION PROGRAM

BASICS

Overview:
- Support scientific research in the form of major scientific instrumentation to be used by multiple users

Awards:
- Between $50,000 to $250,000 ($250K more typical)
- Can also request up to 12% for seed funds to recruit new users

Duration: three years

Limit on Number of Proposals Submitted Per Institution: 3 every 2 years
- Institutional priority

Cost Share Requirement: At least 50% of the purchase price
- Cash from University, another grant, or 3rd party
Application Process:

- Talk with Carly Cummings (ccummings@uidaho.edu) to discuss proposed idea
  - Carly will talk with Dr. Moses Lee at the Trust
- If Murdock is interested, we will submit a Letter of Intent (no specific deadlines)
- A full proposal may be requested
- A site visit from Dr. Moses Lee to meet with the PI team, to see the proposed space
- Murdock Trust Advisory Board reviews application and outcome from the site visit
  - They meet in Feb., May, Aug., and Nov.
  - 6-9 months of review time
## SUMMARY

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<th>Price range</th>
<th>Deadline</th>
<th>Cost share?</th>
<th>Limited**?</th>
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<td>NSF MRI</td>
<td>$100K - $4M</td>
<td>Jan. 19*</td>
<td>Yes</td>
<td>Yes</td>
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<td>NIH S10 BIG</td>
<td>$25K - $250K</td>
<td>June 1</td>
<td>No</td>
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<tr>
<td>NIH S10 SIG</td>
<td>$50K - $600K</td>
<td>June 1</td>
<td>No</td>
<td>No</td>
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<td>$600K - $2M</td>
<td>June 1</td>
<td>No</td>
<td>No</td>
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<td>USDA EGP</td>
<td>$25K - $500K</td>
<td>March 16*</td>
<td>No</td>
<td>Yes</td>
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<td>DURIP</td>
<td>$50K - $1.5M</td>
<td>May 14</td>
<td>No</td>
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<td>Murdock Trust</td>
<td>$50K - $250K</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
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*2021 deadline - refer to program page for updates

** RFD team manages internal competitions in advance of sponsor deadlines
INTERESTED? NEXT STEPS

1. Explore websites, BAAs/FOAs, talk with others
2. Contact Program Officer(s)
3. RFD can assist you!
   - Email: ored-rfdteam@uidaho.edu
   - Url: https://www.uidaho.edu/research/about/orfd

REQUEST RFD SERVICES
Thank you for attending!

See you next time!

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[QR Code]

WE GUIDE THE DEVELOPMENT OF COMPETITIVE EXTERNAL GRANT PROPOSALS

Office of Research and Faculty Development

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