

Developing successful proposals at primarily undergraduate institutions: NSF insights on the RUI and MRI programs

Research in Undergraduate Institutions (RUI) and
Research Opportunity Awards (ROA) NSF 14-579 and
Major Research Instrumentation Program (MRI) NSF 18-513

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RUI NSF 14-579 – describes both RUI and ROA

RUI is a mechanism, not a separate funding stream

Housed within a specific research program and has the same *programmatic deadlines or submission windows as other proposals*

RUI: Designed to support faculty research in predominantly undergraduate institutions (PUI)

- 1. supports high quality research by faculty
- 2. strengthens research environment
- 3. promotes integration of education and research of undergrads

- Certificate of Eligibility required **Contact your AOR**
 - *20 or fewer PhD/DSci in NSF fields for 2 previous years*
 - PUI ≠ RUI



Research in Undergraduate Institutions (RUI)

Reviewed along side and on same basis as other proposals

- Reviewers instructed that:
 - the publication rate for RUI investigators and the pace of research at RUIs may be slower than at major research institutions
 - that the scope of the work may be more narrow
 - the quality of the science is as strong as other proposals

Distinguishing Feature:

- “RUI impact statement” (5-page maximum) – see pages 8-9 of NSF 14-579



RUI 5-page Impact Statement — a required component

- Allows reviewers to assess the impact of the proposed research
 - on the local PUI research environment
 - faculty career
 - department's ability to improve the preparation of students
- Should highlight
 - department record of student education and preparation
 - student recruitment and broadening participation
 - student inclusion and success metrics
 - teaching loads, productivity, resources
- RUI impact statement does not eliminate the need to discuss broader impacts in the 15 page project description



Research in Undergraduate Institutions (RUI)

- The title should begin with “RUI”
- Overriding purpose is to support faculty, but involvement of undergrads is important – no undergrads? – talk to a Program Officer.
Graduate students, postdocs CAN be included.
- Budget request can be the same as for PhD granting institutions. Ask for what you need.
- RUI eligible institutions are not required to submit as an RUI
- At a PUI but not RUI eligible? You can explain your environment in the proposal.



ROA - Research Opportunity Award – also described in NSF 14-579

- ROAs enable faculty at RUI eligible institutions, to pursue research as *visiting scientists* with NSF-supported investigators at other institutions.
- Goal is to “enhance the research productivity and professional development of science faculty at undergraduate institutions through research activities that explore the emerging frontiers of science”. It also enhances teaching.
- Most frequently, ROA activities are summer experiences, but partial support of sabbaticals may also be provided.
- Support for salary or stipend for undergraduate faculty, travel to host lab and/or to attend meetings, research supplies



Preparing to Submit an RUI Proposal

- When is the deadline?
- Deadlines/Windows for RUI are program dependent
- Consult the NSF website to locate a likely program (“Home” for your project).
- Make use of “Search Awards” capability to locate abstracts of proposals with comparable objectives/key words to your proposed work

<http://www.nsf.gov/awardsearch/>

<https://www.nsf.gov/awardsearch/advancedSearch.jsp>
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The screenshot shows the NSF website's navigation and search interface. At the top, the NSF logo and tagline "National Science Foundation WHERE DISCOVERIES BEGIN" are visible. Below this is a dark blue navigation bar with the following menu items: "Research Areas", "Funding", "Awards" (circled in red), and "Document". A secondary navigation bar below contains "Simple Search", "Advanced Search" (circled in red), "Popular Searches", "Download Awards", "Send Comments", and "Award Search Help". The main content area is titled "Awards Advanced Search" and includes a link for "Overview of Award Search Features". A section titled "Awardee Information" contains several input fields: "Principal Investigator First Name" (highlighted in yellow), "Principal Investigator Last Name", "Include Co-Principal Investigator in name search" (checkbox), "Organization", "State" (dropdown menu), "Zip Code", and "Country" (dropdown menu).

Presubmission

- 4-6 months in advance - Find a likely program. Look at the program synopsis. Does it resonate?
- Draft a 1-2 page (very specific) white paper
- Contact the Program Director to determine if your project is appropriate:
<https://www.nsf.gov/funding/programs.jsp?org=CHE>
- Do you know your Authorized Organizational Representative (AOR)?
- Read the *Proposal and Award Policies and Procedures Guide (PAPPG)* early and often: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg



MRI Proposals from PUIs (A Very Quick Intro...)

- For **shared** major **research** instrumentation (NSF 18-513)
 - Must demonstrate that this will be a **multi-user** instrument
- PUIs are evaluated separately from Ph.D. schools
- Evaluated on appropriateness and need for this instrument for the research described
 - Not on the actual research, no research support \$ included in proposal
- Plans for instrument management are important
- Broader Impacts can include use for teaching and any other outreach plans
 - BE DETAILED AND SPECIFIC – What courses? How many students?
 - Focus on impacts of THIS INSTRUMENT (not general activities of PI, department or university)



QUESTIONS?

