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
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)?
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?