Collaborative Funding Opportunities for Researchers at PUls

Karen Hinkle
Norwich University
VGN Grant Writing Workshop
November 11, 2017
Common Funding Mechanisms for Investigators at PUlS:

• NIH Academic Research Enhancement Awards (AREA):
  Goals
  • Support meritorious research
  • Expose undergraduate and graduate students to hands-on research in eligible environments
  • Strengthen the research environment of schools that have not been major recipients of NIH support

Institutional Eligibility: <$6 million/year of NIH funding in 4 of the last 7 years
Funding rates for NIH R01 and R15 proposals

2016 R15 Funding Rate: 17.1%

https://loop.nigms.nih.gov/2014/05/a-look-at-our-area-grants/
Common Funding Mechanisms for Investigators at PUls:

• NSF Research in Undergraduate Institution (RUI) Awards: Goals
  • Support high-quality research by faculty at predominantly undergraduate institutions (PUls)
  • Strengthen the research environment in academic departments that are primarily oriented toward undergraduate instruction
  • Promote the integration of research and education of undergraduate students

Institutional Eligibility: 2 & 4 year colleges that have awarded 20 or fewer Ph.D./D.Sci. degrees in all NSF-supported fields during the combined previous two academic years
NSF Biological Sciences (BIO) Funding Rates: 2017

Overall FY 2017 BIO Funding Rate: 21%

Source: NSF.org

2017 NSF-BIO Funding Rate: 21%
RUI funding percentage of overall NSF awards: 2002-2012

Table 14. Award Numbers, Average Size and Duration and Total Award Dollars for Research at PUIs, NSF BIO Directorate 2002-2012

<table>
<thead>
<tr>
<th></th>
<th>All Awds</th>
<th>PUI Only</th>
<th>Non-PUI Only</th>
<th>All RUI*</th>
<th>RUI, PUI</th>
<th>RUI, Non-PUI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Awards</td>
<td>8,675</td>
<td>695</td>
<td>7,980</td>
<td>487</td>
<td>409</td>
<td>78</td>
</tr>
<tr>
<td>Percent Total Number of Awards</td>
<td>100.0%</td>
<td>8.0%</td>
<td>92.0%</td>
<td>100.0%</td>
<td>84.0%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Average Award Size</td>
<td>$632,484</td>
<td>$386,168</td>
<td>$653,936</td>
<td>$369,425</td>
<td>$365,532</td>
<td>$389,791</td>
</tr>
<tr>
<td>Average Award Duration (Months)</td>
<td>3.75</td>
<td>3.65</td>
<td>3.76</td>
<td>3.74</td>
<td>3.72</td>
<td>3.8</td>
</tr>
<tr>
<td>Average Annual Award Size</td>
<td>$167,721</td>
<td>$109,367</td>
<td>$172,803</td>
<td>$103,849</td>
<td>$103,573</td>
<td>$105,293</td>
</tr>
<tr>
<td>Percent Average Annual Award Size</td>
<td>100.0%</td>
<td>65.2%</td>
<td>103.0%</td>
<td>100.0%</td>
<td>99.7%</td>
<td>101.4%</td>
</tr>
<tr>
<td>Total Awards Amount</td>
<td>$5,486,795,558</td>
<td>$268,773,035</td>
<td>$5,219,062,627</td>
<td>$179,540,640</td>
<td>$149,502,509</td>
<td>$30,403,663</td>
</tr>
<tr>
<td>Percent Total Awards Amount</td>
<td>100.0%</td>
<td>4.9%</td>
<td>95.1%</td>
<td><strong>3.3%</strong></td>
<td>2.7%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

Slocum and Scholl, *CUR Quarterly*, 2013
How can researchers at PUIs stay in the game despite challenges in acquiring independent funding?

• Heavy teaching, advising, and service loads at many PUIs limit productivity

• Scientific questions developed from Ph.D. theses and/or post-doctoral work may not be fundable or feasible

• Highly competitive funding rates coupled with the above make independent funding difficult
Benefits of “not going it alone” at a PUI

• Collaborator at the R1 institution can make a broader impact by working with a PUI researcher and students

• PUI researcher can participate in and contribute to federally-funded research despite reduced resources, heavier teaching/advising loads, etc.

• PUI researcher can expose students to R1 research equipment and facilities

• Progress of research is accelerated; increased publication rate
Collaborative funding opportunities beyond the R15 and RUI mechanisms

• NIH Subawards
  • R01, R15, etc.
  • F&A cost rate of the subawarded institution applies

• NSF: Collaborative Proposals
  • Single proposal from collaborators from different institutions (e.g. subawards administered by lead institution)
  • Simultaneous submission of separate proposals from each organization requesting separate awards

• NSF: Research Opportunity Awards (ROA)
Facilitating Research at Primarily Undergraduate Institutions:

CONTACTS

RUI/ROA inquiries regarding this announcement should be directed to discipline-specific contacts found at http://www.nsf.gov/crssprgm/rui_roa/contacts.jsp.

PROGRAM GUIDELINES

Solicitation 14-579

Important Information for Proposers

**ATTENTION:** Proposers using the Collaborators and Other Affiliations template for more than 10 senior project personnel will encounter proposal print preview issues. Please see the Collaborators and Other Affiliations Information website for updated guidance.

A revised version of the NSF Proposal & Award Policies & Procedures Guide (PAPPG) (NSF 17-1), is effective for proposals submitted, or due, on or after January 30, 2017. Please be advised that, depending on the specified due date, the guidelines...
NSF-Research Opportunity Awards (ROA)

• ROA: “awards typically allow faculty to work as visiting scientists at research-intensive organizations where they collaborate with other NSF-supported investigators”

• ROA opportunities include:
  • A supplement to an existing NSF award to support ROA activities for PUI faculty.
  • Requests to rebudget funds in an existing NSF award to support ROA activities for PUI faculty.
  • Submission of a new collaborative proposal between a PUI and another institution(s), with a ROA component as a subaward or as part of a linked collaborative proposal.
NSF-ROA: Overview

• All NSF Directorates may support the ROA mechanism

• In recent years: NSF made ~45 ROA awards/year; ~$3 million/year

• PUI faculty must collaborate with a currently funded OR submitting NSF investigator at a research intensive institution to apply for the ROA supplement
NSF-ROA: What does it fund?

• Investigator supported by ROA must be from a PUI

• Typically used for summer salary/supplies or to supplement a sabbatical during the academic year
  • Salary and fringe benefits
  • Travel costs
  • Essential supplies

• Typically 2-12 months in duration

• Up to $80K can be requested for one ROA
Submitting an ROA supplement request on existing NSF grant

• Identify an NSF host researcher (can be done by searching the award abstracts on the NSF Web site)

• Contact disciplinary Program Officer to determine the feasibility and timing of ROA request

• PUI and NSF researcher work on research plan and budget; submit to the Program Officer

**Program Officer is sole reviewer; not subject to external merit review**
Submitting an ROA supplement request on a new NSF proposal

- Two possibilities:

1) Linked collaborative proposal; lead institution submits proposal and PUI submits a proposal that represents the ROA subaward request
   *If project is awarded, the PUI recipient is credited with an NSF award*

2) One proposal submitted from lead institution which includes a subaward to the PUI investigator as an ROA

92% funding rate!
### NIH Awards by Location & Organization

Explore year-by-year NIH funding by institution, state, congressional district, and more!


#### Fiscal Year
- 2016

#### Location
- VT

#### By Organization

<table>
<thead>
<tr>
<th>Organization</th>
<th>City</th>
<th>State</th>
<th>Country</th>
<th>Awards</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>EASY, LLC</td>
<td>BURLINGTON</td>
<td>VT</td>
<td>UNITED STATES</td>
<td>1</td>
<td>$458,445</td>
</tr>
<tr>
<td>GAMETHEORY, INC.</td>
<td>BURLINGTON</td>
<td>VT</td>
<td>UNITED STATES</td>
<td>1</td>
<td>$189,621</td>
</tr>
<tr>
<td>MICROBRIGHTFIELD, INC.</td>
<td>WILLISTON</td>
<td>VT</td>
<td>UNITED STATES</td>
<td>5</td>
<td>$2,535,383</td>
</tr>
<tr>
<td>MIDDLEBURY COLLEGE</td>
<td>MIDDLEBURY</td>
<td>VT</td>
<td>UNITED STATES</td>
<td>2</td>
<td>$383,916</td>
</tr>
<tr>
<td>TAYLOR ASSOCIATES COMMUNICATIONS, INC</td>
<td>WINOOSKI</td>
<td>VT</td>
<td>UNITED STATES</td>
<td>1</td>
<td>$171,137</td>
</tr>
<tr>
<td>UNIVERSITY OF VERMONT &amp; ST AGRIC COLLEGE</td>
<td>BURLINGTON</td>
<td>VT</td>
<td>UNITED STATES</td>
<td>105</td>
<td>$44,999,633</td>
</tr>
</tbody>
</table>
### Advanced Search Results

**You Searched For:**
- State: Vermont
- Active Awards: true
- NSF Organization: Direct For Biological Sciences

#### Awards:

**Sort By:** Relevance
**Results size:** 50 per page
**Table | List**

<table>
<thead>
<tr>
<th>REU Site</th>
<th>Interdisciplinary Research on Human Impacts in the Lake Champlain Ecosystem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award Number: 1358858</td>
<td>Principal Investigator: Jason Stockwell; Co-Principal Investigator:; Organization: University of Vermont &amp; State Agricultural College; NSF Organization: DBI Start Date: 04/15/2014; Award Amount: $18,650.00; Relevance: 64.0;</td>
</tr>
</tbody>
</table>

**RAPID: Investigation of Natural Selection and Host-microbiome-virome Interactions in an Unprecedented and Ongoing Marine Epidemic**

**Award Number:** 1555038
**Principal Investigator:** Melissa Pespeni; Co-Principal Investigator:; Organization: University of Vermont & State Agricultural College; NSF Organization: IOS Start Date: 03/01/2016; Award Amount: $196,476.00; Relevance: 64.0;

**CSBR: Natural History: Launching the University of Vermont Natural History Museum Step One: Securing the Collections**

**Award Number:** 1349205
**Principal Investigator:** David Barrington; Co-Principal Investigator: Ingolf Agnarsson, William Kilpatrick; Organization: University of Vermont & State Agricultural College; NSF Organization: DBI Start Date: 06/01/2014; Award Amount: $471,072.00; Relevance: 64.0;

**Delination of Semaphorin6a/ PlexinA2 Signaling in Zebrafish Eye Development**

**Award Number:** 1455816
**Principal Investigator:** Alicia Ebert; Co-Principal Investigator: Bryan Balf; Organization: University of Vermont & State Agricultural College; NSF Organization: IOS Start Date: 07/15/2015; Award Amount: $520,000.00; Relevance: 64.0;

**Collaborative Research: Comparative analyses of structural designs underlying functional performance of the toughest spider silk**

**Award Number:** 1556840
**Principal Investigator:** Ingolf Agnarsson; Co-Principal Investigator:; Organization: University of Vermont & State Agricultural College; NSF Organization: IOS Start Date: 05/01/2017; Award Amount: $126,257.00; Relevance: 64.0;

**REU Site: Summer Neuroscience Undergraduate Research Fellowship Program at UVM**

**Award Number:** 1560180
**Principal Investigator:** Bryan Balf; Co-Principal Investigator: Alice Ebert; Eugene Deley; Organization: University of Vermont & State Agricultural College; NSF Organization: DBI Start Date: 05/15/2016; Award Amount: $273,728.00; Relevance: 64.0;

**Evolutionary genetics of vernalization responsiveness in the temperate grass subfamily Pooidae**

**Award Number:** 1355056
**Principal Investigator:** Jill Preston; Co-Principal Investigator:; Organization: University of Vermont & State Agricultural College; NSF Organization: IOS Start Date: **