

# Funding Opportunities for Undergraduate, Graduate and Postdoctoral Students

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# NSF Programs

For Undergraduates: REU; RCN-UBE

For Graduates: GRFP; DDIG

For Postdocs: Minority Postdoc

For Faculty: ROA, RIG?



# Research Experiences for Undergraduates (REU)

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- Two types of funding: Sites and Supplements
- Research training program for undergrads both at your institution and those outside
- Undergrads must be US citizens, US nationals, or permanent residents
- REU Sites: Usually 10 weeks in summer for 10 students
- Students are paid \$500/week and provided housing, meals and travel to and from Site
- Participation in hands-on, exciting research projects leading to presentations and publications

**Solicitation: NSF 09-598**

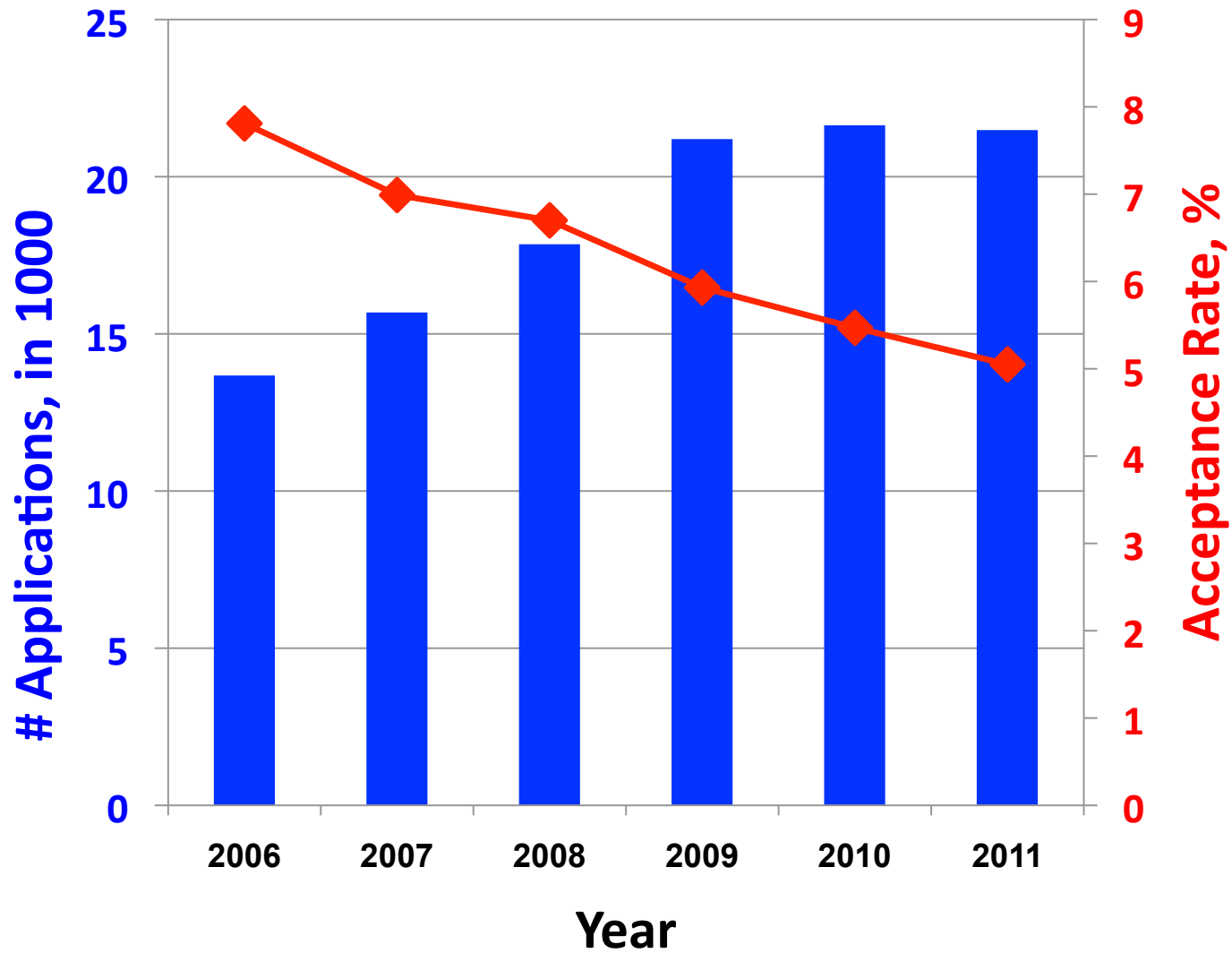
**Due Date: Aug 24, 2011; ~mid-August annually**

# BIO-funded REU: Summer 2011

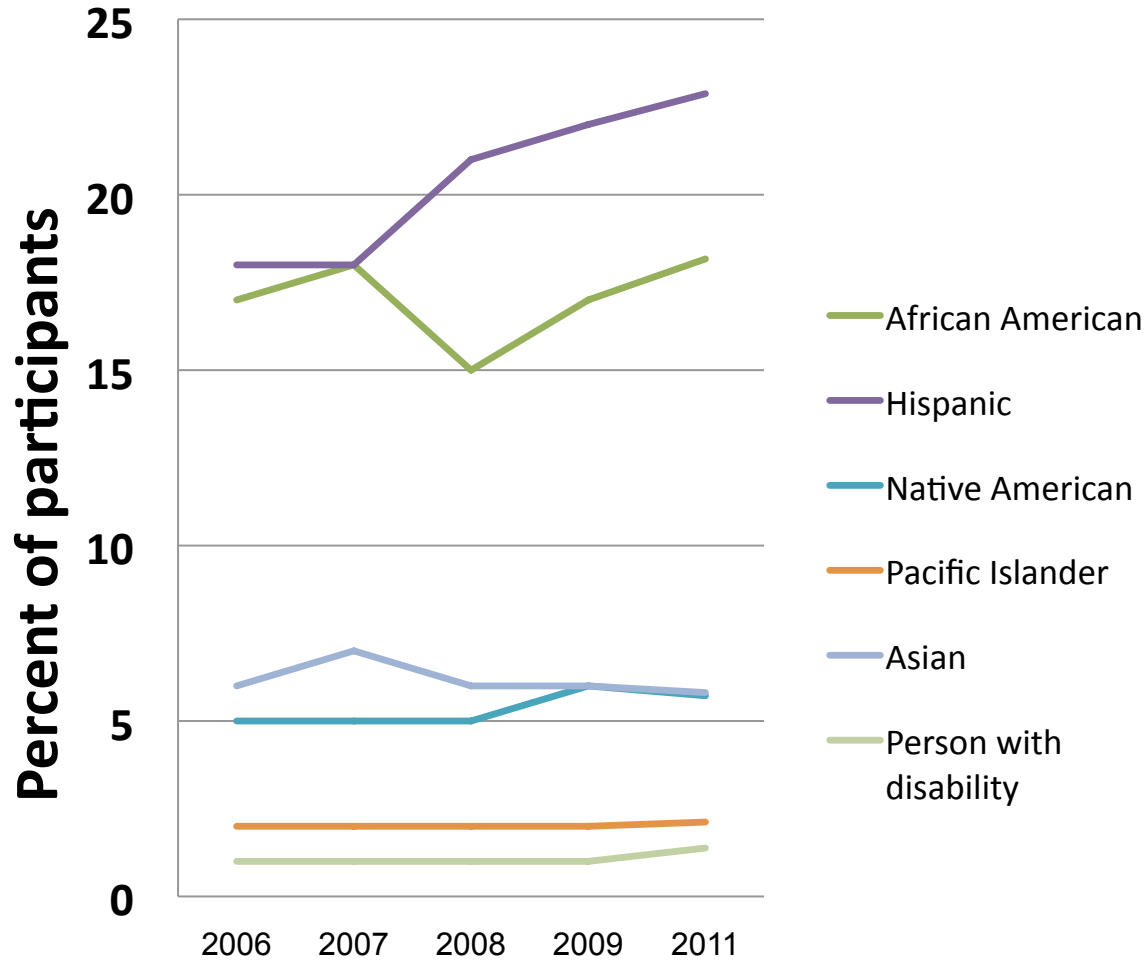
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- In summer 2011, **114** BIO-funded programs engaged **1,084** students from 2- and 4-year colleges
- Over 21,400 applications were received by REU Program Directors in summer 2011
- Programs were in all areas of biology
- Programs were at institutions spread across the US and abroad (colleges, universities, field stations, labs)
- Over 50% of participants in summer 2011 were underrepresented minority students
- Participants were predominantly female and upperclassmen
- In FY11, average award amount for a 10-wk 10-student program is \$100,000, or \$1k per student per week

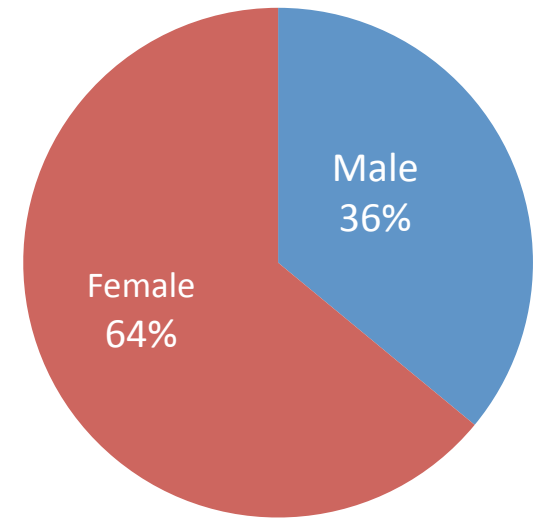
# Student Application Data



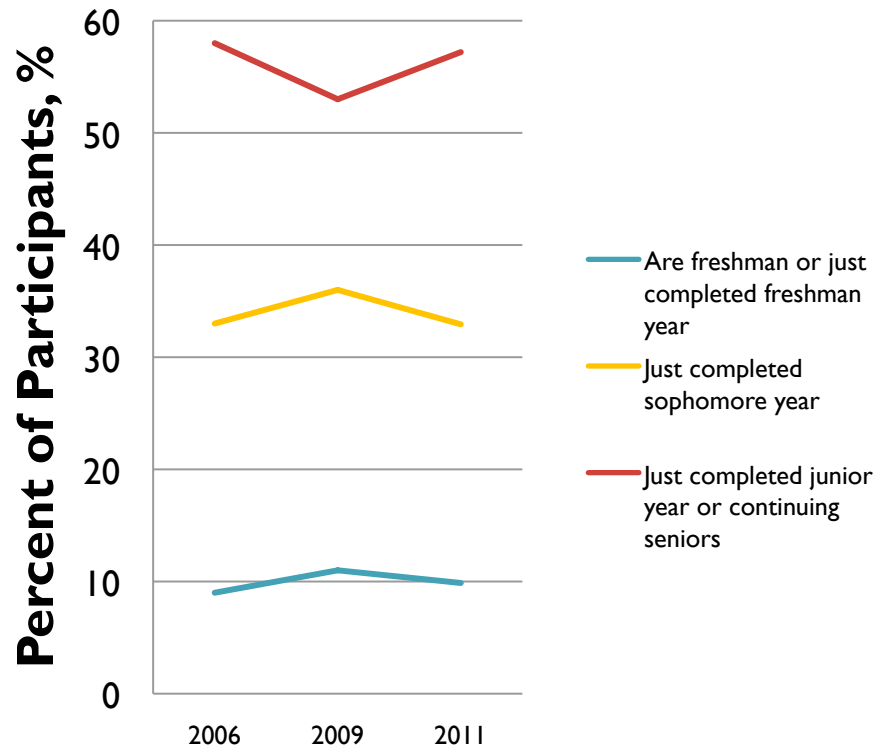
# BIO REU Demographics



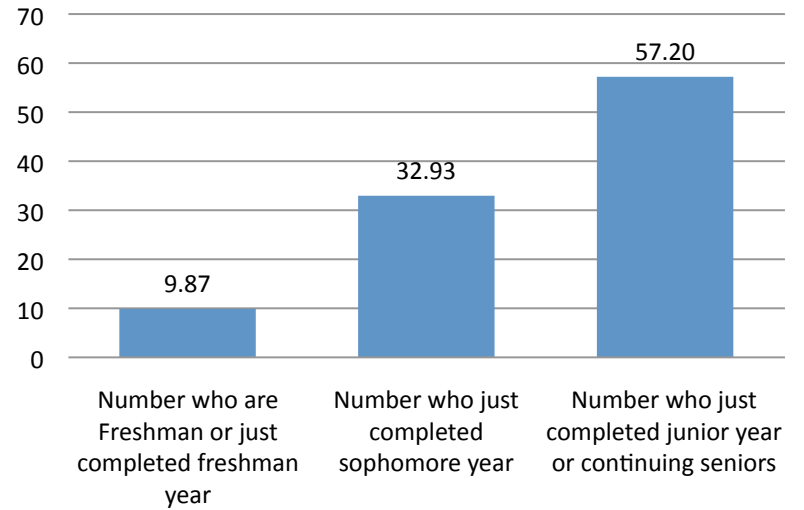
Gender, 2011



## Academic Background Trends



## 2011 Participant Year in College



# Research Coordination Network – Undergraduate Biology Education (RCN-UBE)

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- Goal: **improve** undergraduate biology education
- Program will fund network of biology faculty who will design, implement, and assess modules or improvements in biology education
- Two types: incubator awards and full awards
- Incubators are designed to form new teams; one year duration; \$50,000 maximum for workshops/meetings
- Full awards are designed to expand the teams; up to five years duration; up to \$500,000 of support

**Solicitation: NSF 11-531**

**Due Date: June 15, 2012; mid June annually**



# The NSF Graduate Research Fellowship Program (GRFP)

[www.nsf.gov/grfp](http://www.nsf.gov/grfp)  
[www.nsfgrfp.org](http://www.nsfgrfp.org)



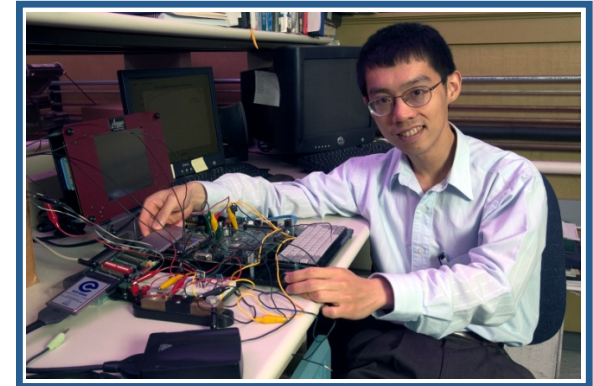
## GRFP

- **Identifies Nation's future STEM leaders**
  - Focuses on the individual
  - Promotes diversity in the STEM workforce
  
- **Five Year Award – \$121,500**
  - ▶ Three years of support; flexibility in use
  - ▶ \$30,000 Stipend; \$10,500 Education allowance



# GRFP Eligibility

- U.S. citizens and permanent residents
- Early-career graduate students
- Pursuing research-based MS and PhD
- NSF supported fields
- Enrolled in accredited institution in US



## Academic Levels

- **1:** Seniors/baccalaureates; no graduate study
- **2:** First-year graduate students
- **3:** Second-year grad students
  - $\leq 12$  months of graduate study by August
- **4:**  $>12$  months graduate study
  - Must have significant change in field

Academic levels evaluated together





# GRFP Unique Features

- **Flexible:** choice of project, advisor & program
- **Unrestrictive:** No service requirement
- **Portable:** Any accredited institution  
– MS  $\xrightarrow{\hspace{1.5cm}}$  PhD
- **2010:** 2,000 Fellowships
- **2011:** 2,000 Fellowships

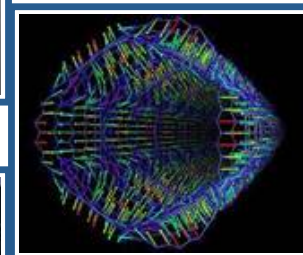


12,000 Applications - ~17% success rate



# NSF-Supported Disciplines

- Chemistry
- Computer & Information Science/Engineering
- Engineering
- Geosciences
- Life Sciences
- Mathematical Sciences
- Materials Science
- Physics and Astronomy
- Psychology
- Social Sciences





# GRFP Complete Application

## NSF FastLane

- Personal statement (2 pages)
- Previous research experience (2 pages)
- Proposed plan of research (2 pages)
- Three letters of reference
- Transcripts





# GRFP Resources

- NSF GRFP Website ([www.nsf.gov/grfp](http://www.nsf.gov/grfp))
  - Solicitation and links
- NSF GRFP FastLane Website ([fastlane.nsf.gov/grfp](http://fastlane.nsf.gov/grfp))
  - Application, guides, announcements
- GRFP Website ([www.nsfgrfp.org](http://www.nsfgrfp.org))
- Current & former fellows
- Phone & e-mail  
866-NSF-GRFP (673-4737)  
[info@nsfgrfp.org](mailto:info@nsfgrfp.org)



# Doctoral Dissertation Improvement Grant (DDIG)

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- Goal: support for graduate students to enable them to improve/finish their PhD dissertation
- Up to \$15,000 for up to 24 months
- Now limited to projects in DEB or Behavioral Systems cluster of IOS
- Must have advanced to candidacy before submission deadline (certification required)
- Supports costs to participate in scientific meetings, to conduct research in specialized facilities or field settings, and to expand an existing body of dissertation research
- PI is dissertation advisor

Solicitation: NSF 11-569

Send inquiry email to relevant PO: [ddig-deb@nsf.gov](mailto:ddig-deb@nsf.gov)

or [ddig-ios@nsf.gov](mailto:ddig-ios@nsf.gov)

# Training/broadening participation

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- Supplement: Research Assistantships for **High School Students** (RAHSS)
- Supplement: Research Opportunity Awards (ROA)
- Supplement: Research Experience for **Teachers** (RET)
- Research Initiation Grants (RIG)
- Partnerships in International Science and Education (PIRE)
- Supplement: **international** research collaboration
- BP: RIG; BRIGE; OEDG

# Research Opportunity Awards (ROA)

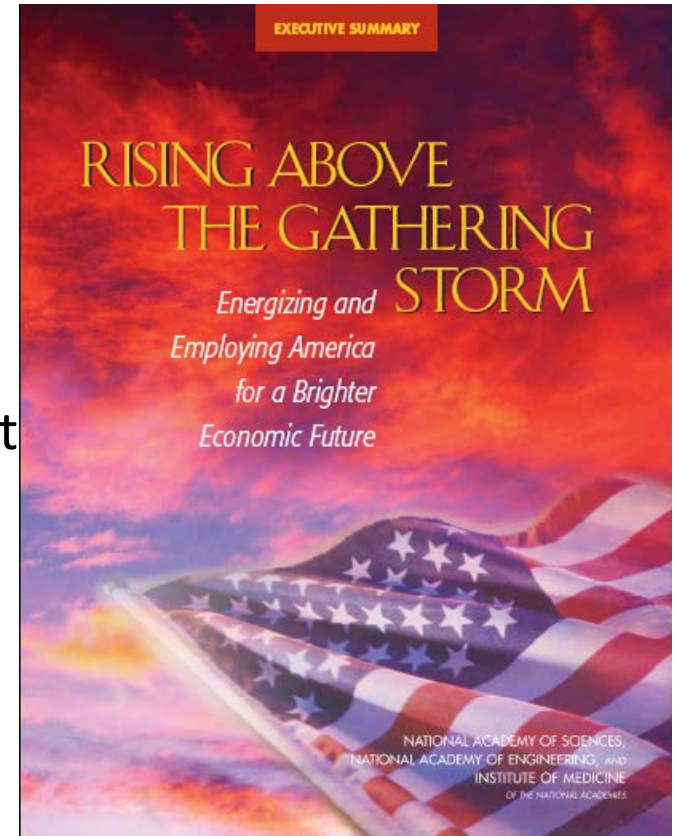
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- Funded as supplements to active NSF grants
- Salary or stipend for faculty, travel to/from host lab, attend a meeting/conference, research supplies, etc.
- Provide support for faculty from PUIs to participate in ongoing, NSF-funded research projects for limited periods, usually a summer
- Goal -- Provide research experience for faculty to enhance research at home institution and host lab, improve research & teaching
- Making connections with an NSF grantee:
  - Network at scientific meetings
  - Consult NSF FastLane list of awards in relevant program
  - Contact NSF Program Director in your area of interest (Consult the NSF web site for contact information)

# Research Initiation Grants

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- Broaden the participation of scientists from under-represented groups
- Assist members to become actively engaged in research as independent investigators
- CAA: Targets scientists other than Beginning Investigators to enhance career development
- Improve competitiveness for research funds;  
Acquire new skills/tools for contemporary research
- Estimated Awards: 15 – 25, about \$3 Million annually



Solicitation

Target Date: 2<sup>nd</sup> Monday in Jan

# Opportunities for Supplementing Current Awards

- Research Experiences for Undergraduates (REU)  
supports undergraduate researchers
- Research Opportunity Award (ROA)  
for faculty at predominantly undergraduate institutions to participate in NSF-supported projects
- Research Experiences for Teachers (RET)  
builds long term collaborative relationships between K-12 teachers of science and mathematics and the NSF research community
- Research Apprenticeship for High School (RAHSS)  
supports HS student training in research

# Keeping Abreast of NSF Funding Opportunities

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## Opportunities

- g Opportunities
- Due Dates
- pare Your
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- g Opportunities

## Special Notices

- [NSF Accepting Nominations for the 2012 Alan T. Waterman Award](#)
- [Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring \(PAESMEM\) Accepting Nominations for 2012](#)
- [National Science Board Calls for Nominations for New Members](#)
- [NSF Information Related to the American Recovery and Reinvestment Act of 2009](#)

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### NSF Grant Launches Center for Synthesizing Environmental and Related Research Results

Released August 2, 2011  
Press Release

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