



EDUCATING THE NEXT GENERATION

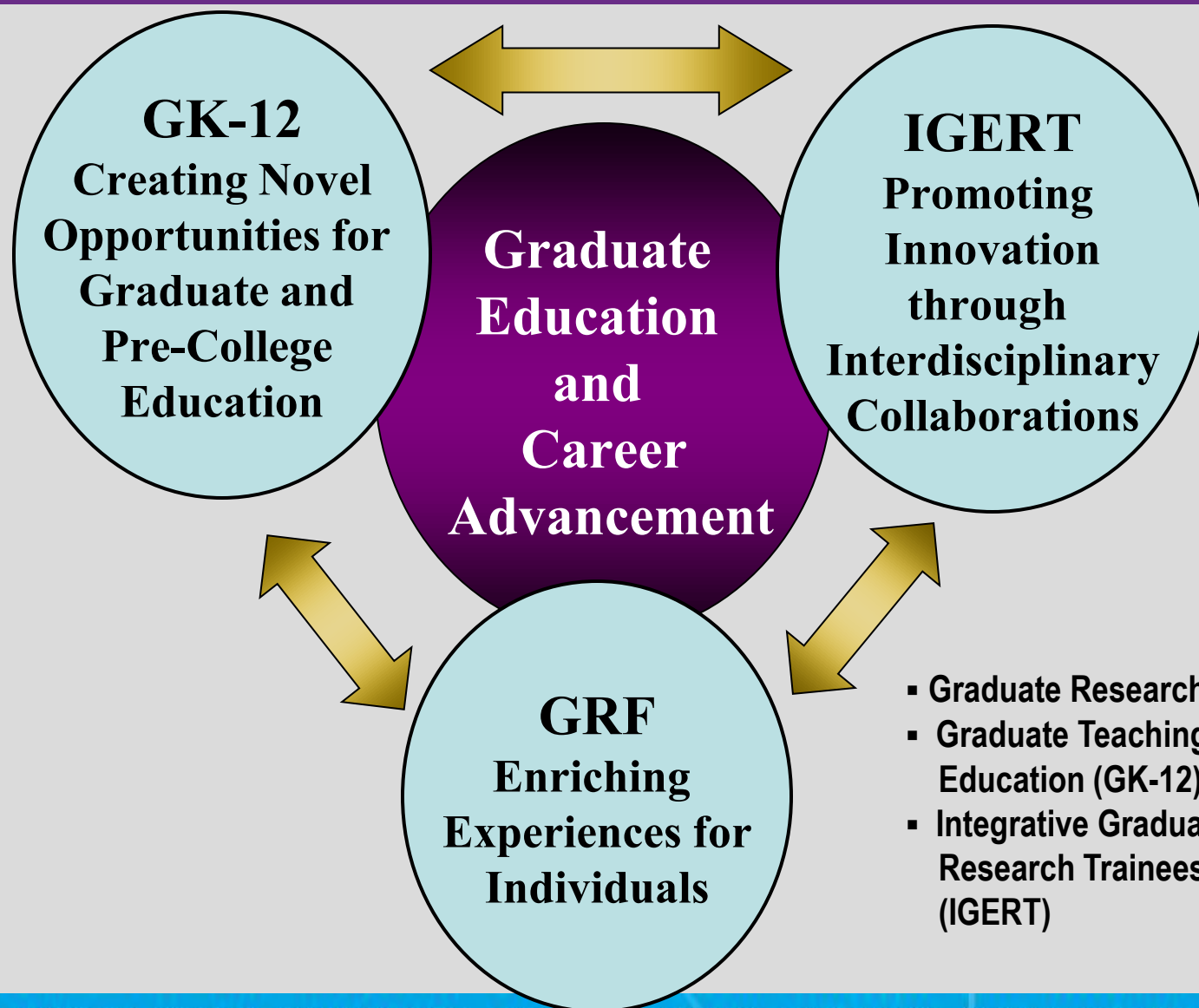
# The NSF Graduate Research Fellowship Program- Enabling Young Investigators

Program Director  
Dr. Carmen Sidbury, ([csidbury@nsf.gov](mailto:csidbury@nsf.gov))



NATIONAL SCIENCE FOUNDATION • DIRECTORATE FOR EDUCATION AND HUMAN RESOURCES

# NSF Division of Graduate Education



Initiated in 1952 – oldest NSF program

>43,000 students including FY2008 awards

Currently ca. 3300 fellows, ca. 2700 on “tenure”  
(taking stipend and cost of education)

Very successful students - high rates of PhD completion, shorter time to degree completion, high placement in faculty positions, high levels of research productivity, >20 Nobel laureates, etc.

# The NSF Graduate Research Fellowship



Three years of support over a five year period

Annual stipend of \$30,000 - cost of living

Annual tuition support of \$10,500 - cost of  
education allowance paid to institution

\$1,000 one-time international travel allowance

Cyberinfrastructure access via the TeraGrid

# The NSF Graduate Research Fellowship



**Portable** to graduate institutions in US or abroad

**Flexible** - your choice of project, advisor,  
department

**No service requirement** (national lab or military)

Typically awarded to ca. 1,000 students per year

Honorable Mention for meritorious applications  
(includes Cyberinfrastructure resources)

Specific programs to support underrepresented  
populations

# GRF Eligibility Criteria



## Academic level

**Level 1** - Seniors, baccalaureates with no graduate study

**Level 2** - First-year graduate students

**Level 3** - Second-year grad students (12 months of graduate study or less by Aug 31 prior to submission)

**Level 4** - >12 months graduate study - change in field

## Citizenship

U.S. Citizen, National or Permanent Resident

## Discipline

Research-based Masters or PhD in NSF-Supported Field



# NSF-Supported Disciplines



Chemistry  
Computer and Information  
Science and Engineering  
Engineering  
Geosciences  
Life Sciences  
Mathematical Sciences  
Physics and Astronomy  
Psychology (non-clinical)  
Social Sciences (non-clinical)



# Some Areas Not Supported by the GRF

Clinical work  
Counseling  
Business  
Management  
Social work  
Practice-oriented professional  
degree programs  
Joint science-professional  
degree programs (MD/PhD  
and JD/PhD)  
Medical, dental, law, or public  
health programs





# Application Materials - GRFP FastLane



Personal Statement Essay (2 pages)

Previous Research Experience Essay (2 pages)

Proposed Plan of Research Essay (2 pages)

Completed Graduate Study Essay (For Level 4)

Three Letters of Reference

Transcripts

GRE Scores (Optional but Highly Recommended)

# Intellectual Merit Review Criterion



“Demonstrated intellectual ability and other accepted requisites for scholarly scientific study, such as the ability to:

- (1) plan and conduct research;
- (2) work as a member of a team as well as independently;  
and
- (3) interpret and communicate research.”

# Assessed by:



- Academic performance & background (grades, curricula, GRE)
- Awards/honors
- Communication skills
- Research experience
- International experience
- Independence/creativity
- Publication/presentations
- Research plan
- Choice of institution
- References



Center for Environmental Analysis  
(CEA-CREST), California State  
University Los Angeles student  
Kwasi Connor



## Research Experiences for Undergraduates (REU)



[REU Program Overview](#)

[Program Solicitation](#)

[For Students](#)

- [Search for an REU Site](#)

[For Faculty](#)

## Search for an REU Site

[Astronomical Sciences](#)  
[Atmospheric Sciences](#)  
[Biological Sciences](#)  
[Chemistry](#)  
[Computer and Information Science and Engineering](#)  
[Cyberinfrastructure](#)  
[Department of Defense \(DoD\)](#)  
[Earth Sciences](#)  
[Education and Human Resources](#)  
[Engineering](#)  
[Ethics and Values Studies](#)  
[International Science and Engineering](#)  
[Materials Research](#)  
[Mathematical Sciences](#)  
[Ocean Sciences](#)  
[Physics](#)  
[Polar Programs](#)  
[Social, Behavioral, and Economic Sciences](#)

### SEARCH BY RESEARCH AREAS/KEYWORDS:

**Enter full or partial research areas/keywords separated by commas:  
(e.g. geophysics, ecology, nano, robot, ethics)**

AND/OR STATE:

All:

# Broader Impacts Review Criterion



“Contributions that:

- (1) integrate research and education at all levels, infuse learning with discovery, and assure that the findings are communicated in a broad context and to a large audience;
- (2) encourage diversity, broaden opportunities, and enable the participation of all citizens, underrepresented minorities, and persons with disabilities -- in science and research;
- (3) enhance scientific and technical understanding; and
- (4) benefit society.”



# Assessed by:



- Prior accomplishments
- Community outreach
- Impact on society and connectivity
- Future plans
- Leadership potential
- Individual experiences
- Integration of research and education
- Potential to reach diverse audiences





# National Science Foundation Graduate Research Fellowship Program

Search

Home

How to Apply

About the Program

Applicant Resources

Why Apply

For Fellows

For Educators

Panelist Information

Volunteer to Help  
Applicants

Propose Institution or  
Conference Visit

Contact Us

## NSF Graduate Research Fellowship Program

As an educator, you play a critical role in the promotion of the GRFP. By reviewing applications as a panelist, giving presentations at your institution, and mentoring those students wishing to apply, the support you provide is invaluable to the applicants' success. Included in this section are all of the resources needed to get involved with the GRFP. You can [download promotional materials](#) or [register as a potential panelist](#) or [register as a guide to help students at your institution](#).

## Want to See A Fellow's Research Featured on This Site?

If you are in contact with a current or past fellow, please have them send an email to [outreach@nsfgrfp.org](mailto:outreach@nsfgrfp.org) that includes the following:

- Their name
- Year awarded fellowship
- Institution attending/attended
- Image depicting their research (may or may not have people)
- Caption describing image, including what the viewer is looking at and the benefits of the research. Please use language that is easily understandable to someone outside the research field.

## Included in this section:



*Fellow Joshua Atwood from the University of Rhode Island assists the O'ahu Early Detection Project in seeking and removing Miconia calvenscens on a hillside in Honolulu, HI. M. calvenscens is an invasive plant that competes with native vegetation and promotes erosion by forming shallow-rooted monocultures.*

## **TIPS for Applying:**

- [http://www.nsfgrfp.org/applicant\\_resources/tips\\_for\\_applying](http://www.nsfgrfp.org/applicant_resources/tips_for_applying)

## **List of important questions to ask yourself before starting each section:**

- [http://www.nsfgrfp.org/how\\_to\\_apply/application\\_materials](http://www.nsfgrfp.org/how_to_apply/application_materials)

# The review process



- Panelists will read many, many applications, with quite a few outside of their immediate discipline
  - Your application should be clear, concise, well-written, and understandable
  - Address review criteria explicitly, especially for Broader Impacts
- Who are the panelists? – recruit your professors to sign up!

# Contact Information



**GRFP Website: <http://www.nsfgrfp.org/>**

NSF GRF description, solicitation (August), and links:

**<http://www.nsf.gov/grfp/>**

Online Application, User Guides, and Official Announcements:

**<http://www.fastlane.nsf.gov/grfp/>**

866-NSF-GRFP (673-4737)      [help@nsfgradfellows.org](mailto:help@nsfgradfellows.org)



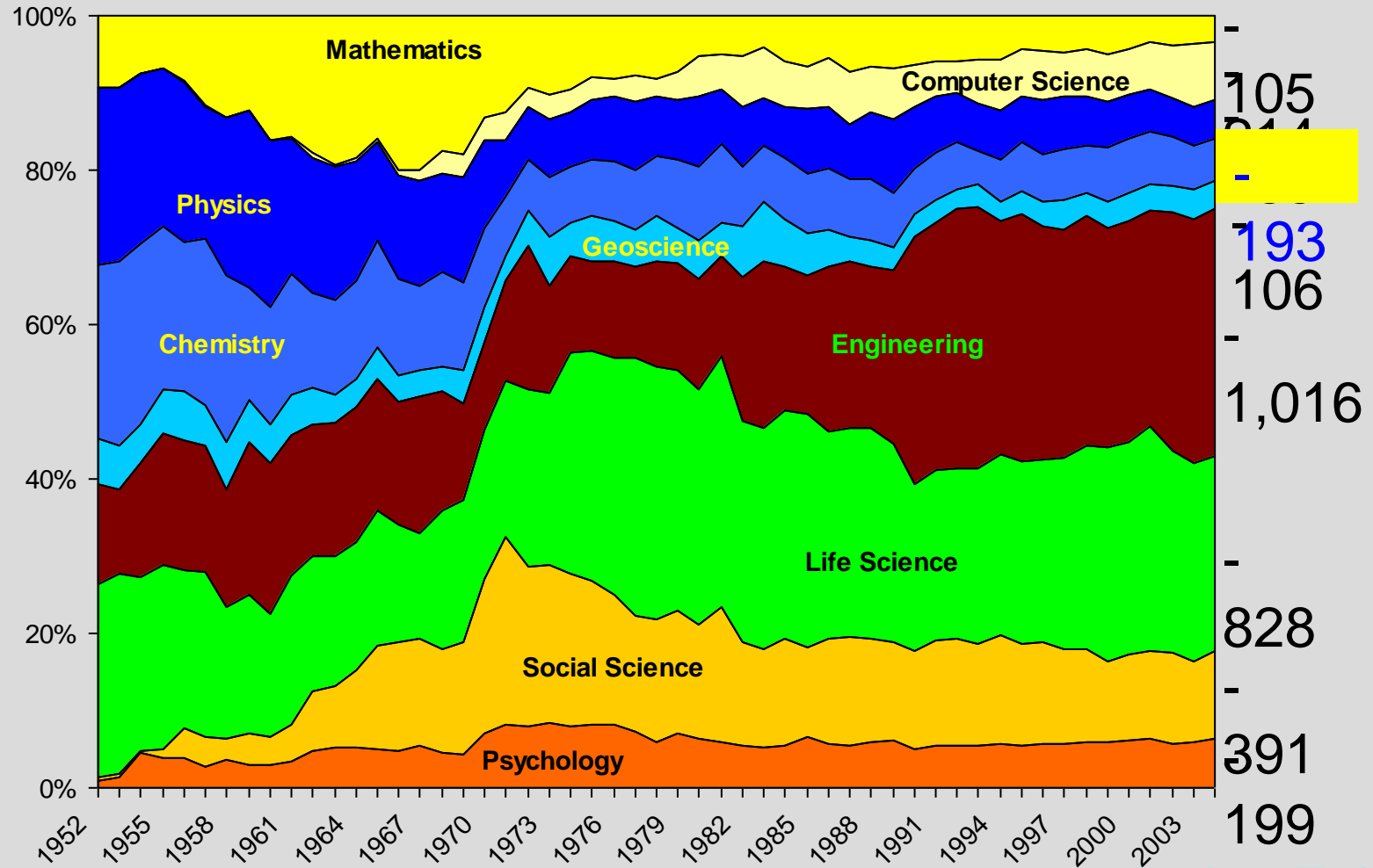
# Back-up Slides



# Top baccalaureate institutions of black U.S. citizen S&E doctorate recipients: 2002–06

Academic institution	Doctoral degrees		Academic institution	Doctoral degrees
Howard University	87		University of Michigan Ann Arbor	32
Spelman College	77		Jackson State University	29
Florida A&M University	68		University of Virginia	28
Hampton University	65		Yale University	27
Morehouse College	46		University of Illinois Urbana Champaign	25
North Carolina A&T State University	41		University of Maryland Baltimore County	24
Southern University and A&M College	41		University of North Carolina Chapel Hill	24
Xavier University	40		University of Pennsylvania	24
Morgan State University	38		Norfolk State University	23
Tuskegee University	38		Princeton University	22
University of Maryland College Park	34		Massachusetts Institute of Technology	21
Harvard University	33			
University of California Berkeley	32			

# Disciplinary Distribution



Active Fellows  
(2009)