



Experimental Program to Stimulate Competitive Research

Highlights: Communicating Outputs & Impacts

**Jeanne Small
Program Officer
OD/OIA/EPSCoR**

May 17, 2011



What is a Highlight?

- A brief summary of a significant achievement.



How are Highlights Used?

- To communicate the impact of your work to your State officials, Congress, the public, and NSF.



Where Do Highlights Go?

- To EPSCoR staff
- To the Science, Engineering & Education (SEE) Innovation website for public viewing



www.research.gov/seeinnovation

The screenshot shows the Research.gov website interface. At the top, the 'Research.gov' logo is displayed in green, with the tagline 'POWERING KNOWLEDGE AND INNOVATION' below it. A search bar is located on the right side of the header. The navigation menu includes 'Home', 'Contact Us', 'Site Map', and 'Help'. The date 'May 11, 2011' is shown in the top right corner. Below the navigation, there are social media and utility links for RSS, Email, Print Page, and Adjust Font Size. The main content area features a carousel of science-related articles. The central article is titled 'The Brain and the Senses' with the subtitle 'Scientists Study Sensory Mixing in the Brain'. Other visible articles include 'Faster Electronic', 'Understanding Quasars', 'Solar Robots', and 'Research Facility'. On the left side, there is a 'LOGIN AS' section with a dropdown menu set to 'NSF Visitor' and a 'Login' button. Below this is a vertical menu with categories: 'Who We Are', 'Service Offerings', 'News', 'SEE Innovation' (expanded), 'Research Areas', 'States & Territories', and 'Research Assets'. Under 'SEE Innovation', there are sections for 'APPLY FOR GRANTS' (with links to Grants.gov, NSF FastLane, and NASA Nspires) and 'FEEDBACK' (with a link to 'Tell Us What You Think'). At the bottom, a blue banner contains the NSF logo and the text: 'NSF-funded projects are advancing knowledge, transforming society, strengthening the economy, and helping to keep America secure. Learn about projects, people, and infrastructure in every state and all fields of science and engineering. [Learn More](#)'.



Highlights from Jurisdictions

Research Areas

[View All 12](#)



Astronomy & Space



Biology



States & Territories



Use the interactive map to explore NSF research facilities, award highlights and topics.

[Browse By Map](#)

[Alabama](#)

[Alaska](#)

[Arizona](#)

[Arkansas](#)

[California](#)

[Colorado](#)

[Connecticut](#)

[Delaware](#)

[Florida](#)

[Georgia](#)

[Hawaii](#)

[Idaho](#)

[Illinois](#)

[Indiana](#)

[International](#)

[Iowa](#)

[Kansas](#)

[Kentucky](#)

[Louisiana](#)

[Maine](#)

[Maryland](#)

[Massachusetts](#)

[Michigan](#)

[Minnesota](#)

[Mississippi](#)

[Missouri](#)

[Montana](#)

[Nebraska](#)

[Nevada](#)

[New Hampshire](#)

[New Jersey](#)

[New Mexico](#)

[New York](#)

[North Carolina](#)

[North Dakota](#)

[Ohio](#)

[Oklahoma](#)

[Oregon](#)

[Pennsylvania](#)

[Puerto Rico](#)

[Rhode Island](#)

[South Carolina](#)

[South Dakota](#)

[Tennessee](#)

[Texas](#)

[US Virgin Islands](#)

[Utah](#)

[Vermont](#)

[Virginia](#)

[Washington](#)

[Washington DC](#)

[West Virginia](#)

[Wisconsin](#)

[Wyoming](#)



ND EPSCoR Highlight

NSF Visitor

[How Do I Login?](#) | [Register](#)

- > Who We Are
- > Service Offerings
- > News
- ▼ SEE Innovation
 - > Research Areas
 - ▼ States & Territories
 - Choose State or Territory
 - North Dakota**
 - Award Highlights
 - People of Distinction
 - Award Statistics
- > Research Assets

APPLY FOR GRANTS

[Grants.gov](#)
[NSF FastLane](#)
[NASA Nspires](#)

FEEDBACK

[Tell Us What You Think](#)

**National Science
Foundation**

[More >>](#)

North Dakota

Go to:

North Dakota Statistics

2010	<div style="width: 100%; height: 10px; background-color: #003366;"></div>	\$19,202,000
2009	<div style="width: 80%; height: 10px; background-color: #ccc;"></div>	total awards for
2008	<div style="width: 60%; height: 10px; background-color: #ccc;"></div>	FY 2010

[More >>](#)

Local Research Assets: 0
2010 NSF Awards: 56

Visit North Dakota

[View full interactive map.](#)

Award Highlights

Mathematic Program Prepares Students for Tech Jobs
Turtle Mountain Community College has implemented the HAWKES Learning System, a computer-based learning tool that assists students learning math. With...

Research Areas: [Education](#), [Mathematics](#)

Bringing STEM Experiences to North Dakota
The Sunday Academies, an NSF-supported program for high-school students, was offered for the reservation high-school students and the Youth Summer Cam...

Research Areas: [Education](#)

Biojet Fuel from Crop Oils Takes Off
With support from NSF's Experimental Program to Stimulate Competitive Research (EPSCoR), the SUNRISE research group of the University of North Dakota ...

Research Areas: [Biology](#), [Earth & Environment](#)

[More >>](#)

People of Distinction

[Fredrick Strand](#)
Mathematics
Hatton, North Dakota

[Angela Hansen-Cook](#)
Mathematics
 Fargo, North Dakota

[View All >>](#)

Recent Awards & Abstracts



EPSCoR Guidelines

- **Highlights are expected for RII Track-1, Track-2 and C2 awards**
- **Highlights are required for RII Track-1 projects**
 - **Minimum of three submitted with the annual report**
 - **One science**
 - **One education/outreach**
 - **One open to choice**



NSF Guidelines for Highlights

- **Identify a project with an outcome or accomplishment whose impacts were**
 - **transformative, or**
 - benefited **society** or the **economy,**
 - or met a national or local **need.**
- **What does your governor care about?**



Focus Title on Outcome

- **What is your Suggested Title?**

Example: Rocks Indicate That Antarctica was Connected to North America



Define the Outcome

- **What is the outcome or accomplishment?**

Example: A team of scientists has shown that a rock from Antarctica is identical to a band of rocks in western North America, implying that the two continents were once adjacent to one another.



Describe the Impact

- **What is the impact?**

Example: Determining the past configuration of the continents can serve many purposes, including modeling past climates, understanding evolution, and helping to locate natural resources.



Give More Details

- **What explanation/background does the lay reader need to understand the significance of this outcome?**

Example: We currently have a good understanding of the last amalgamation of continents called Pangea, which existed from 545 to 180 million years ago...



Provide an Image*

*or more (up to 5 + video)

- **An image that can be understood by lay-people, with accompanying form NSF 1515**
 - The image should show the highlighted work itself – not a campus building or lab.
 - High quality visuals are important!



Provide a Caption

- **A suggested caption/description for the image (25 word max.)**

Example: Researchers collect rock samples in the TransAntarctic Mountains.





Provide Credit for the Image

- **The credit should accompany the image (usually the owner or copyright holder; can be individuals and/or their institutions)**

Example: John Goodge, University of Minnesota-Duluth; multiple credits can be entered



Example Finished Highlight

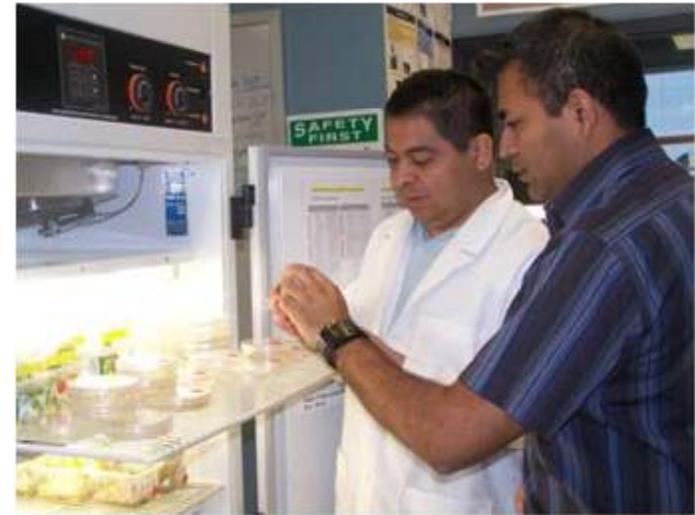
Arkansas scientists develop a natural source of resveratrol

EPS - 0701890

RII: Arkansas ASSET Initiative

08/15/2007 - 03/31/2011

PI: Gail McClure



Dr. Medina-Bolivar and graduate student, Cesar Nopo-Olazabal, examine peanut root cultures.

Credit: Arkansas EPSCoR

**Image Provided by:
gail.mcclure@arkansas.gov**

Form 1515



Example Finished Highlight

What is the outcome or accomplishment?

Experimental research led by Dr. Fabricio Medina-Bolivar and Dr. Maureen Dolan of the Biosciences Institute at Arkansas State University (ASU) has shown that the hairy roots of the peanut plant can be a consistent source of high quality resveratrol....

What is the impact?

Resveratrol is a plant-derived compound and is known for its anticancer properties and use as an antioxidant. Research has shown the beneficial effects of resveratrol on extending the life span of rodents...

What explanation/background does the lay reader need to understand the significance of this outcome?

Dr. Medina-Bolivar has many years of research experience in manipulating plant roots to produce biologically active compounds in a laboratory setting...



Considerations for Material

- Any highlight should have been majority-supported by the RII award
 - Multiple NSF funding sources okay
 - A majority of the funding should have been from an EPSCoR award
- Highlights should culminated during the most recent reporting period
- Highlights must be stand-alone stories



What Doesn't Work

- **Holding a meeting does not usually justify a highlight**
 - A significant outcome or product of a meeting might justify a highlight
- **Receiving an award does not usually justify a highlight**
 - The science that culminated in the award may be worthy of a highlight if there is recent activity from the EPSCoR award



Use Caution with These

- Having a prestigious journal accept an article is generally not a highlight.
 - The science behind article almost always is.
- Doing an education or outreach event is generally not a highlight unless its impacts have been measured.
 - Provide data, such as its impact on K-12 curriculum and teachers.



Consider Carefully

- **Getting a new grant or award, while worthy news, does not justify a highlight**
 - The work to be done is all in the future
 - Highlights are for recent accomplishments in the current award only
- **A press release by itself might not be enough for a highlight**
 - Include details about where the work was published and how the work and its impacts fit into the EPSCoR project

Thank You