



# **Nuts and Bolts Session**

**David Campbell  
Program Director  
Division of Research on Learning  
dcampbel@nsf.gov**

**Discovery Research K-12 Principal  
Investigators Webinar  
November 29, 2016**



# Accountability

- **You need to report and document the impact and effectiveness of your project to NSF**
- **NSF takes your information to document the impact and effectiveness of the DR K-12 program to Congress**



# Evaluation and Reporting

## Annual reports

- Due 90 days before the anniversary of your award
- Standard vs. continuing awards
- Your CGI depends on approval of annual report
- Delinquent annual reports in other divisions of NSF will affect timely funding of your DR K-12 award!

## Final reports

- Due no later than 120 days after the end date of your award
- Overdue final reports will affect timely funding of awards elsewhere in the foundation
- A final report should be more than a last annual report!



# Evaluation and Reporting

Research.gov has a report template

You can attach .pdf files

- Charts, news articles, photographs; external evaluation report; etc.
- Don't go berserk! If you must attach 200+ pages worth of material, send an email to the PI indicating the most important 20 pages or so to read!

(After submitting, check your report for spelling, cut-and-paste errors, etc.)

Don't use .pdf files in place of entering text in the report!!!!



# Evaluation and Reporting

## Annual reports

### **Accomplishments**

- What are the major goals of the project?
- What was accomplished under these goals (you must provide information for at least one of the 4 categories below):
  - Major activities
  - Specific objectives
  - Significant results
  - Key outcomes or other achievements
- What opportunities for training and professional development has the project provided?
- How have the results been disseminated to communities of interest?
- What do you plan to do during the next reporting period to accomplish these goals?



# Evaluation and Reporting

## Annual reports

### **Products**

- Journals
- Websites

### **Participants**

- What individuals have worked on the project?
- What other organizations have been involved as partners?
- Have other collaborators or contacts been involved?



# Evaluation and Reporting

## Annual reports

### **Impacts**

- What is the impact on the development of the principal discipline(s) of the project?
- What is the impact on other disciplines?
- What is the impact on the development of human resources?
- What is the impact on physical resources that form infrastructure?
- What is the impact on institutional resources that form infrastructure?
- What is the impact on information resources that form infrastructure?
- What is the impact on technology transfer?
- What is the impact on society beyond science and technology?



# Evaluation and Reporting

## Annual reports

### Changes

- Changes in approach and reasons for change
- Actual or anticipated problems or delays and actions or plans to resolve them
- Changes that have a significant impact on expenditures
- Significant changes in use or care of human subjects
- Significant changes in use or care of vertebrate animals
- Significant changes in use or care of biohazards



# Special Requirements

- Respond to the items in this section if they are applicable.
- Mention any requests submitted to FastLane Notifications and Requests. For example, you may have submitted a request for significant modifications to the scope of work or reallocation of funds originally budgeted for participant support. You can see the web site for a complete list of notifications and requests.
- (**NOTE:** NOTIFICATIONS AND REQUESTS ARE A SEPARATE FastLane/Research.gov action. Merely including this information in your annual report is not sufficient).

# Attachments

- You must put relevant information into the appropriate text boxes and ONLY attach PDF files as backup documentation. Among the things that are appropriate to send as PDF attachments are:
  - Evaluation information such as reports from your Advisory Committee and evaluators. These are often confidential or preliminary and not appropriate to be broadly shared.
  - Charts, graphs, data tables, pictures, news articles, and similar material that cannot be represented in text-only format.
  - Documents that are too long to be included in the text boxes, such as modules or short publications.



**Interim Annual Reports**

**Returned Annual Reports**

# Project Outcomes Report for the General Public

- Within 90 days following expiration of the grant, a project outcomes report for the general public must be submitted electronically via Research.gov. This report serves as a brief summary, prepared specifically for the public, of the nature and outcomes of the project. This report will be posted on the NSF website exactly as it is submitted and will be accompanied by the following disclaimer:

“This Project Outcomes Report for the General Public is displayed verbatim as submitted by the Principal Investigator (PI) for this award. Any opinions, findings, and conclusions or recommendations expressed in this Report are those of the PI and do not necessarily reflect the views of the National Science Foundation; NSF has not approved or endorsed its content.” 12

# Advisory Boards

- Often a good idea for a project to have one
- If you have one, USE IT!!!
- Annual visits
- A group of experts who provide advice, assess the plans and progress of the project, and enhance dissemination
- 4-10 members

# Site Visits

- A Program Officer will try to visit your project at least once
- Reverse Site Visits
- Needs to be more than a dog and pony show: What works, what isn't working, where you could use help, where you could help others
- Site visit reports become part of the award's official record



# Institutional Review Boards (IRBs)

All projects involving human subjects must either (1) have approval from the organization's Institutional Review Board (IRB) before issuance of an NSF award or, (2) must affirm that the IRB or an appropriate knowledgeable authority previously designated by the organization (not the Principal Investigator) has declared the research exempt from IRB review, in accordance with the applicable subsection, as established in section 101(b) of the Common Rule.



<http://www.nsf.gov/bfa/dias/policy/docs/45cfr690.pdf>

# Working with NSF DR K-12 Program Officers

## Communicate with Program Officers and Keep them informed of Progress

- Not just when things are going wrong!
- Tell us about the good stuff, too.
- Newspaper clippings, television, radio, campus news
- NSF Highlights – might be featured in NSF's budget request to Congress
- Tell us when something is going to happen; e.g., a professional development workshop might be good time for a site visit by a Program Officer
- Emails are usually the best way
- **Please** put your award number in the subject line of the email!





# Crediting NSF



## Acknowledgment of Support

- "This material is based upon work supported by the National Science Foundation under Grant No. (NSF grant number)." (Oral acknowledgment if appropriate.)

## Disclaimer

- "Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation."

## Copies

- The grantee is responsible for assuring that the cognizant NSF Program Officer is provided access to, either electronically or in paper form, a copy of every publication of material based on or developed under this award, clearly labeled with the award number and other appropriate identifying information, promptly after publication.

## Logos

- <http://www.nsf.gov/policies/logos.jsp>



# Who's my Program Officer?

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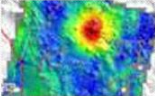
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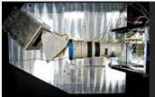
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 **A Mississippi River Diversion Helped Build Louisiana Wetlands, Penn Geologists Find**  
October 22, 2012

 **Language Is Shaped by Brain's Desire for Clarity and Ease**  
October 18, 2012

 **Using Cellphone Data to Curb the Spread of Malaria**  
October 11, 2012

 **Researchers ID Unique Geological "Sombrero" Uplift in South America**  
October 11, 2012

 **Las Cumbres Observatory Achieves First Light With NRES Spectrograph**  
October 11, 2012

 **Penn Researchers Find New Way to Mimic the Color and Texture of Butterfly Wings**  
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### Awards Advanced Search

**NEW** See What's New in the New Award Search

#### Awardee Information

**Principal Investigator First Name**

**Principal Investigator Last Name**

Include Co-Principal Investigator in name search

**Organization**

**State**

**Zip Code**

**Country**

#### Program Information

**NSF Organization**

**Element Code**

Any  All

**Reference Code**

Any  All

**HINT:** The "Program" box searches both program element and program reference names and codes.

**Program**

**Program Officer**

#### Additional Information

**Keyword**

**HINT:** The Keyword field searches on the title and abstract only.

Search Award Title Only

**Award Number**

**From**  **To**

**HINT:** Data prior to 1976 may be less complete.

Active Awards  Expired Awards

**Original Award Date** **From**  **To**

**Start Date** **From**  **To**


**Expiration Date** **From**  **To**

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**National Science Foundation**  
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### Awards

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About Awards

**How to Manage Your Award**  
Grant Policy Manual  
Grant General Conditions  
Cooperative Agreement Conditions  
Special Conditions  
Federal Demonstration Partnership  
Policy Office Website

### Award Abstract #1019721

#### Collaborative Research: Confronting the Challenges of Climate Literacy

<b>NSF Org:</b>	<a href="#">DRL</a> <a href="#">Division of Research on Learning in Formal and Informal Settings (DRL)</a>
<b>Initial Amendment Date:</b>	September 28, 2010
<b>Latest Amendment Date:</b>	September 28, 2010
<b>Award Number:</b>	1019721
<b>Award Instrument:</b>	Continuing grant
<b>Program Manager:</b>	David B. Campbell DRL Division of Research on Learning in Formal and Informal Settings (DRL) EHR Directorate for Education & Human Resources
<b>Start Date:</b>	September 15, 2010
<b>Expires:</b>	August 31, 2012 (Estimated)
<b>Awarded Amount to Date:</b>	\$1107743
<b>Investigator(s):</b>	Tamara Ledley tamara_ledley@terc.edu (Principal Investigator) Cathryn Manduca (Co-Principal Investigator) Susan Buhr (Co-Principal Investigator)
<b>Sponsor:</b>	TERC Inc 2067 Massachusetts Avenue Cambridge, MA 02140 617/547-0430
<b>NSF Program(s):</b>	DISCOVERY RESEARCH K-12, CLIMATE CHANGE EDUCATION, Antarctic Education
<b>Field Application(s):</b>	
<b>Program Reference Code(s):</b>	SMET, 9177, 6891
<b>Program Element Code(s):</b>	7645, 6891, 5294

**ABSTRACT**

This project is developing three inquiry-based, lab-focused, online Climate Change EarthLabs modules as a context for ongoing research into how high



# Notifications and Requests

## Examples:

- Change in objectives, scope, or methodology
- Budget changes
- Time lines
- Principal Investigator changes
- Participant Support
- No-cost extensions

It's best to discuss these with a Program Officer before you make official requests in Fastlane or Research.gov



# Notifications and Requests

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October 22, 2012
- Language Is Shaped by Brain's Desire for Clarity and Ease**  
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- Penn Researchers Find New Way to Mimic the Color and Texture of Butterfly Wings**  
October 10, 2012

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FastLane is an interactive real-time system used to conduct NSF business over the Internet. FastLane is for official NSF use only. [More About FastLane...](#)

FastLane User Support (7 AM to 9 PM Eastern Time • M-F)  
1-800-673-6188  
FastLane Availability (recording):  
1-800-437-7408

Proposals, Awards and Status | Proposal Review | Panelist Functions | Research Administration | Financial Functions

Honorary Awards | Graduate Research Fellowship Program | Postdoctoral Fellowships and Other Programs

### Quick Link

- Registration Information
- Award Search and Funding Trends
- FastLane FAQs (Opens new Browser Window)
- Grants.gov FAQ (Opens new Browser Window)
- DEMONSTRATION SITE

### System Use Notification

This Government Computer System is provided as a public service by the National Science Foundation. It is intended for use by the public for viewing, submission and retrieval of authorized information only. All usage of information retrieved from this Computer System should follow the guidelines in Computer Fraud and Abuse Act of 1986. Unauthorized attempts to upload information, change or access information on this service are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986. Usage may be monitored.

### Advisories

- 10/20/08 - ATTENTION Partnership for Innovation (PFI) APPLICANTS submitting Letters of Intent (LOIs) to PFI (NSF 08-583): Special LOI Submission Instructions
- 10/10/08 - Please Note: Information for Preparers of Project Reports to the Division of Undergraduate Education
- 10/01/08 - Important Information about the NSF Proposal & Award Policies & Procedures Guide (Opens new browser window)
- 09/15/08 - Special Exceptions to the NSF Deadline Date Policy Due to Natural or Anthropogenic Events
- 09/06/08 - Log in to FastLane with your NSF ID instead of your Social Security Number (SSN).
- 07/31/08 - Graduate Research Fellowship Program FastLane Enhancements, 08/01/2008
- 10/22/07 - Effective January 5, 2008, proposers are required to register in the Central Contractor Registration prior to proposal submission.

National Science Foundation  
4201 Wilson Boulevard, Arlington, Virginia 22230, USA  
Tel: 703-292-5111, FIRS: 800-877-8339 | TDD: 703-292-5090

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**Notifications & Requests** | MAIN ▶

PI Organization: NSF Cayuse Test Organization

Prepared by PI All by Status

**Prepare a New Notification or Request for Award #: 0707551**

**Award Amount:** \$1.00  
**Expiration Date:** 01/31/2015  
**Division:** Division Of Information Systems  
**Award Title:** PRS demo awd  
**Awardee Organization:** NSF  
**PI/PD:** Alphanan, Alan

**Select the Notification or Request Type:**

GRANTEE NOTIFICATION TYPES	Topic Guidance
<input type="radio"/> Grantee Approved No Cost Extension	<a href="#">AAG</a>
<input type="radio"/> Anticipated Residual Funds in excess of \$5,000 or 5%	<a href="#">AAG</a>
<input type="radio"/> Short-Term Absence of the PI/PD (Up to Three Months)	<a href="#">AAG</a>
<input type="radio"/> Significant Changes/Delays or Events of Unusual Interest	<a href="#">AAG</a>
<input type="radio"/> Significant Changes in Methods/Procedures	<a href="#">AAG</a>

GRANTEE REQUEST TYPES (Requires NSF Approval)	Topic Guidance
<input type="radio"/> Withdrawal of PI/Co-PI	<a href="#">AAG</a>
<input type="radio"/> Pre-award Costs in Excess of 90 Days	<a href="#">AAG</a>
<input type="radio"/> Reallocation of Funds Budgeted for Participant or Trainee Support Costs	<a href="#">AAG</a>
<input type="radio"/> Rearrangement/Alteration \$25,000 or over (Follow these links for more information on <a href="#">Non-FDP Organizations</a> or <a href="#">FDP Organizations</a> . They will open a PDF file in new window.)	<a href="#">AAG</a>
<input type="radio"/> NSF Approved No-Cost Extension	<a href="#">AAG</a>
<input type="radio"/> Changes in Objective or Scope	<a href="#">AAG</a>
<input type="radio"/> Long-Term Absence of the PI/PD (Over Three Months)	<a href="#">AAG</a>
<input type="radio"/> Addition of SubAward	<a href="#">AAG</a>
<input type="radio"/> Significant Change in Person-Months Devoted to Project	<a href="#">AAG</a>
<input type="radio"/> PI Transfer	<a href="#">AAG</a>
<input type="radio"/> Change of PI	<a href="#">AAG</a>

\*\*Topic Guidance is provided through the Award & Administration Guide (AAG) reference.

Download [Adobe Acrobat Reader](#) for viewing PDF files



**Notifications & Requests** | MAIN ▶

PI Organization: Stanford University

Prepared by PI    All by Status

Notifications & Requests is in the process of moving from FastLane to Research.gov. Some types of notifications and requests are only available in Research.gov. Please visit [Research.gov Notifications and Requests](#) for more information.

Prepare a New Notification or Request for Award #: 0700000

**Award Amount:** \$1,875,000.00  
**End Date:** 01/31/2015  
**Division:** Division Of Undergraduate Education  
**Award Title:** eGovernment Technical Challenges  
**Awardee Organization:** NSF  
**PI/PD:** Demo, Terry

**Select the Notification or Request Type:**

GRANTEE NOTIFICATION TYPES	Topic Guidance
<input type="radio"/> Grantee Approved No Cost Extension	<a href="#">AAG</a>
<input type="radio"/> Short-Term Absence of the PI/PD (Up to Three Months)	<a href="#">AAG</a>

GRANTEE REQUEST TYPES (Requires NSF Approval)	Topic Guidance
<input type="radio"/> NSF Approved No-Cost Extension	<a href="#">AAG</a>
<input type="radio"/> Subawarding, Transferring or Contracting Out Part of an NSF Award	<a href="#">AAG</a>
<input type="radio"/> PI Transfer	<a href="#">AAG</a>
<input type="radio"/> Change of PI	<a href="#">AAG</a>

\*Topic Guidance is provided through the Award & Administration Guide (AAG) reference.

[Prepare](#)   [Cancel](#)

## **About Notifications and Requests**

Notifications and requests communicate changes in the scope, time, staff or budget of an NSF funded project. Depending on the type of change, awardee organizations must notify or request approval from NSF prior to taking action. Depending on the type of notifications or requests, they can be created and submitted by either the Principal Investigators (PIs) and/or Sponsored Project Offices (SPOs).

### [Full listing of all NSF notifications and requests](#)

As part of the effort to modernize FastLane, the National Science Foundation is transitioning the notifications and requests functionality from FastLane to Research.gov. The table below provides the location for each notification and request.

[https://www.research.gov/research-portal/appmanager/base/desktop?nfpb=true&pageLabel=research\\_node\\_display&nodePath=/researchGov/Service/Desktop/NotificationRequest.html](https://www.research.gov/research-portal/appmanager/base/desktop?nfpb=true&pageLabel=research_node_display&nodePath=/researchGov/Service/Desktop/NotificationRequest.html)

Type	Notification or Request	Policy Reference	Location
<b>Budget Activities</b>			
Additional categories of participant support costs other than those described in 2 CFR § 200.75 (such as incentives, gifts, souvenirs, t-shirts and/or memorabilia)	Request	<a href="#">GPG (II.C.2.g(v))</a>	Research.gov
Change in Person-Months Devoted to Project	Request	<a href="#">AAG (II.B.2.d)</a>	Research.gov
Pre-award Costs in Excess of 90 days	Request	<a href="#">AAG (V.A.2.b)</a>	Research.gov
Reallocation of Funds Provided for Participant Support Costs	Request	<a href="#">GPG (II.C.2.g(v))</a>	Research.gov
Rearrangements/Alterations in excess of \$25,000 (Construction)	Request	<a href="#">AAG (V.C.1)</a>	Research.gov
Salaries of Administrative or Clerical Staff	Request	<a href="#">GPG (II.C.2.g(i)(b))</a>	Research.gov

Travel Costs for Dependents	Request	<a href="#">GPG (II.C.2.g(iv)(a))</a>	Research.gov
<b>No-Cost Extension</b>			
Grantee-Approved No-Cost Extension	Notification	<a href="#">AAG (I.D.3.c(i))</a>	Research.gov
First NSF-Approved No-Cost Extension	Request	<a href="#">AAG (I.D.3.c(ii)(a))</a>	Research.gov
Second NSF-Approved No-Cost Extension	Request	<a href="#">AAG (I.D.3.c(ii)(b))</a>	Research.gov
<b>Changes in Objectives, Scope, or Methodology or other Significant Changes</b>			
Changes in Objectives or Scope	Request	<a href="#">AAG (II.B.1.a)</a>	Research.gov
Significant Changes/Delays or Events of Unusual Interest	Notification	<a href="#">AAG (II.B.1.c)</a>	Research.gov

Significant Changes in Methods/Procedures	Notification	<a href="#">AAG (II.B.1.b)</a>	Research.gov
<b>Changes in PI/PD and co-PI/PD</b>			
Long-Term Disengagement of the PI/Project Director (PD) or co-PI/co-PD	Request	<a href="#">AAG (II.B.2.c)</a>	Research.gov
PI/PD or co-PI/co-PD Transfer from one organization to another	Request	<a href="#">AAG (II.B.2.g)</a>	FastLane
Substitute PI/PD or co-PI/co-PD	Request	<a href="#">AAG (II.B.2.f)</a>	FastLane
Withdrawal of PI/PD or co-PI/co-PD	Request	<a href="#">AAG (II.B.2.e)</a>	Research.gov
<b>Other</b>			
Annual and Final Cost Share Notification by Recipient	Notification	<a href="#">AAG (II.D.5)</a>	FastLane
Conflicts of Interest that cannot be satisfactorily managed, reduced or eliminated and research that proceeds without the imposition of conditions or restrictions when a conflict of interest exists	Notification	<a href="#">AAG (IV.A)</a>	Research.gov
Subawarding, Transferring or Contracting Out Part of an NSF Award	Request	<a href="#">GPG (II.C.2.g(vi)(e))</a>  <a href="#">AAG (II.B.3)</a>	FastLane

# **NSF's Fastlane**

- **Some Notifications and Requests**
- **Proposal submission**
- **Reviewing – including procedures for Preliminary and Formal proposals**

## **Research.gov**

- **Most Notifications and Requests**
- **Financial (Business Office) Transactions**
- **Annual and Final Reports**
- **Project Outcomes Reports**

# Supplemental Support

- In unusual circumstances, small amounts of supplemental funding and up to six months of additional support may be requested to assure adequate completion of the original scope of work. Such requests for supplemental funding support should be submitted to the cognizant NSF Program Officer at least two months prior to the need for the additional funds and must be adequately justified. Program officers may make decisions regarding whether or not to recommend a small supplement without merit review of the supplemental request. Requests for larger supplements may require external merit review.



# **NSF Highlights**

View the new website at:

<http://www.research.gov/seeinnovation>





## A highlight shows...

- an exciting outcome of an NSF-supported project
- transformative results
- impacts of this outcome, including benefits to society, economy, industry, nation, region, science & engineering

## Audiences include...

- Congress, other federal and state policymakers
- business & industry
- general public
- NSF (briefings, speeches, websites -- such as [www.nsf.gov](http://www.nsf.gov) and "Science, Engineering, and Education Innovation" at [www.research.gov/seeinnovation](http://www.research.gov/seeinnovation))

## When writing a highlight...

- **DO write short, straightforward sentences that articulate a single point . DON'T use** long sentences with multiple clauses.
- **DO use simple language. DON'T use complicated scientific terminology.**
- **DO write for a public audience. DON'T write the way you do when publishing in** science journals. The public is interested in high-level impacts/benefits, not deep science.

Research.gov - SEE Innovation - High-school students hunt for viruses - Windows Internet Explorer

http://www.research.gov/research-portal/appmanager/base/desktop?sessionId=...

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## High-school students hunt for viruses

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**NSF Award:** [CAREER: The Role of RNAi in the Nematode and Mammalian Antiviral Response](#) (University of Texas at Austin)

**State:** [Texas](#)

**Congressional Districts:**  
Texas District 25

**Research Areas:** [Biology](#), [Education](#)


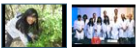
High-school student interns received a crash course in viruses, field ecology and lab work when they joined undergraduates and researchers at The University of Texas at Austin (UT Austin) in their attempt to isolate a nematode virus.

This summer program brought students from underrepresented minority populations to the university to learn firsthand how researchers are using virus-host interactions in model systems to identify nematode viruses. The interns also learned about experimental methods, and learned how to give and interpret scientific presentations.


This work comprises a valuable subcomponent of the research being carried out at UT Austin to understand virus-host interactions. The researchers want to learn more about an emerging area of gene regulation called "RNA interference," or RNAi. This type of regulation plays a role in preventing virus infection in some organisms, but not in others such as mammals.

The ability to study viral infection in the nematode would allow researchers to better understand viral infection, RNAi and evolution. Although the group did not isolate the nematode virus, the student interns gained valuable scientific experience and glimpsed a view of university life. Lessons learned from this collaboration will be applied to subsequent summer high-school courses.

**Images (1 of 2)**


### Recent Award Highlights



**Tactile displays increase STEM access for the blind and visually impaired**  
Device designed by a team of students converts both graphics and text into Braille

**Research Areas:** [Engineering](#), [Education](#)

**Locations:** [Iowa](#), [Texas](#)



**Science through skateboards**  
Sk8lab Houston delivers lessons in experimentation and data collection

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

**Locations:** [Texas](#)

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# Reviewing Proposals for NSF

- Good professional development
- Service to the education community
- Opportunity to forge new collaborations
- Send your Program Officer a 2-page CV
- Not just DR K-12; ITEST, ECR, AISL, programs in DUE, DGE, HRD

# Questions?



*"Pardon me, but could you tell us where the public trough is?"*

CN  
COLLECTION



# CADRE

This webinar was hosted by CADRE, the resource network for the DR K-12 Program.

Slides and a recording of this webinar will be available on our website:

<http://cadrek12.org>.

Upcoming opportunities:

- Share your project news with the DR K-12 community. Email it to us at [cadre@edc.org](mailto:cadre@edc.org) and we will post it online.
- Join us for a webinar on writing annual reports this spring!
- Read our newsletter for other upcoming opportunities.

For up-to-date STEM Ed and DR K-12-related news and resources, follow us on Twitter (@cadrek12) or Facebook (<http://facebook.com/cadrek12>)

Questions? Email us at [cadre@edc.org](mailto:cadre@edc.org).



**Community for Advancing  
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