

Informational webinar for EPA STAR RFA on "Air, Climate and Energy (ACE) Centers: Science Supporting Solutions"

July 9, 2014, 12PM – 1PM ET



Air, Climate and Energy (ACE) Centers: Science Supporting Solutions Request for Applications (RFA)

http://www.epa.gov/ncer/rfa/2014/2014-star-ace.html

 Or visit <u>www.epa.gov/ncer</u> and click on "Funding Opportunities"



Outline

- Overview of RFA and Research Areas
- Peer Review Criteria
- Programmatic Review Considerations
- Tips for Grants.gov
- Questions & Answers



EPA Office of Research and Development (ORD) Air, Climate and Energy (ACE) Program & Motivation for this Research

The three ACE research themes described below flow from the problems identified in the previous section and will provide the science to:

- Assess Impacts—Assess human and ecosystem exposures and effects associated with air pollutants and climate change at individual, community, regional, and global scales (Research Theme 1);
- **Prevent and Reduce Emissions**—Provide data and tools to develop and evaluate approaches to prevent and reduce emissions of pollutants into the atmosphere, particularly environmentally sustainable, cost-effective, and innovative multipollutant and sector-based approaches (Research Theme 2); and
- Respond to Changes in Climate and Air Quality—Provide human exposure and environmental modeling, monitoring, metrics and information needed by individuals, communities, and governmental agencies to adapt to the impacts of climate change and make public health decisions regarding air quality (Research Theme 3).





Evolution of Research Centers





Air, Climate and Energy Centers RFA

Solicits research on the development of sound science to systematically inform policy makers at the state and local levels regarding the development of innovative approaches to enable effective implementation of air pollution control strategies to achieve the greatest public health benefits by reducing exposure to harmful air pollution.

Priority Research Areas:

- enhancing understanding of spatial and temporal differences in individual pollutants and pollutant mixtures within and across different areas (including urban areas, or between urban, suburban, and rural areas) or geographic regions;
- identifying and improving the characterization of the most important factors contributing to regional or city-to-city differences or similarities in air pollution and health effects beyond topography and meteorology;
- improving the ability to understand and project how these contributing factors and differences may change over the next one to several decades; and
- advancing scientific knowledge and tools needed to develop robust strategies for air pollution control to improve public and environmental health under a variety of conditions, including consideration of approaches for addressing climate change preparedness.



RFA Research Questions

 Applications should address two or more of the research questions, including Question #3 and/or Question #4 (See RFA Section 1.D)



Q1: Spatial and temporal differences within and across regions

- 1. What measurement or analysis approaches can be used to generate or analyze new or existing data to improve characterization of the temporal or spatial differences in individual pollutants and pollutant mixtures within and across regions?
- Every region of the U.S. faces different challenges in either reaching or sustaining good air quality due to differences in pollutant emission source sectors, topography, local climate and meteorology, population demographics, and socioeconomic and cultural patterns.
- The primary goal is to identify and improve understanding of the differences within and across a geographic area or region.



Q2: Factors controlling air pollution and its impacts

- 2. In addition to topography and meteorology, what are the most important factors contributing to regional differences in air pollution and air pollution public health effects?
 - Two categories of modifiable factors can be considered in this broader context: (a) factors leading to changes in air pollutant emissions and associated ambient mixtures; and (b) factors that change the exposures of individual, communities and those populations at greatest risk of an air pollution-induced health effects.
 - Of particular interest is the identification of individual or communitylevel factors that contribute to significant regional differences in emissions levels and variations in the mix of sources, as well as to increased risk and exposure.



Q3: Changes over the next several decades

- 3. How can we improve the ability to understand and project how these regional differences might change over the next one to several decades due to global change, technology evolution, societal choices, and the effectiveness of air pollution control strategies?
 - The particular focus here should be on identifying both the *modifiable factors* that state and local programs and plans can influence in ways that improve public health outcomes, and also understanding the uncertainty of factors which have the potential to affect control strategies in ways that impede the ability to achieve air and climate protection goals.
 - The objective should be leveraging understanding of modifiable and uncertain factors to develop regional strategies that are robust and also work to achieve potential co-benefits.

EPA United States Environmental Protection Agency Q4: Insights and tools for solutions

- 4. How can insights about factors contributing to air pollution and public health effects be used to advance the development of robust integrated strategies for air pollution control to improve public health or environmental quality?
 - Projects should consider how research results can be used to develop approaches to evaluate opportunities to support more effective and robust implementation plans with respect to generating the greatest public health benefits.
 - The emphasis should be not on developing a plan of action, but on advancing the scientific insight and tools available to enable groups to make choices that will generate public health benefits to the greatest extent possible.



- For all proposals, research results that can be applied or transferable to a broad range of areas and within the development of a variety of settings to improve public health and environmental quality are of the highest interest.
- Proposals should address whether and how future climate change may impact research results, and especially the relevance and impact of plans to adapt to climate change.
- Centers should include multidisciplinary teams involving appropriate expertise to address the selected research questions. Teams may include health scientists and atmospheric scientists, as well as social scientists or other appropriate disciplines.



Important Reminders

- Centers must not have more than 5 projects and must not have more than 2 Units
- Applications must include the Human Subjects Research Statement (more on this later)
- Please refer to the RFA for specific requirements





- Estimated Number of Awards: Approximately 3
- Potential Funding per Award: Up to a total of \$10 million, including direct and indirect costs, with a maximum duration of 5 years. Cost-sharing is not required.
- Subawards allowed, with restrictions
- Closing date: September 4, 2014 (11:59:59 PM ET)



Human subjects

- Extensive (6-page) human subjects research statement
- More detail in RFA
- www.epa.gov/osa/phre/policy.htm
- Special considerations and exclusions for sensitive populations (40 CFR 26)



Application Peer Review: RFA Section V.A (descending importance)

- 1. Research Proposal
- 2. Overall Center
- 3. Administrative Unit
- 4. Nature and quality of facility support units, if proposed
- 5. Responsiveness
- 6. Facilities and Equipment
- 7. Budget



Program Relevancy Review: RFA Section V.B

- Purpose: to ensure an integrated research portfolio
- Relevance of the proposed science to EPA research priorities
- Principal Investigator (PI) requested to provide info on past performance and reporting history for prior & current grantors for last 3 years, of similar size and scope:
 - -Level of success in managing and completing each agreement
 - -History of meeting reporting requirements under each agreement



Helpful Reminders for Electronic Submitters using Grants.gov

Electronic Submissions

- Get your Grants.gov account early
- DUNS and SAM Registration (is registration active?)
- Check all the application content before you "Save and Submit"
- Plan to submit ahead of the deadline (a day or two early)
- Don't wait until the last minute



Helpful Reminders for Electronic Submitters using Grants.gov

Problem Solving

- Forgot a section or found an error -> resubmit
- Problems: Adobe software versions and Zip Codes
 - -Call the Help Desk, get an incident number!
 - -1-800-518-4726
 - -Write an email and explain issues with submitting an application, but no later than 5pm Eastern Time the day after close





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