

Webinar for Applicants Energy RFA E20-1 and RFA E20-2

- Thursday August 20, 2020
- 12:00 to 1:30 PM EDT
- Welcome! The webinar will begin shortly.



Today's Agenda

12:00 pm EDT Opening Remarks Donna Vorhees, Vice President and CEO, HEI-Energy

12:05 pm EDT Welcome and Introduction to HEI-Energy Robert O'Keefe, President, HEI-Energy

12:10 pm EDT Overview of the RFAs and Expectations for Research Proposals Donna Vorhees, Vice President and CEO, HEI-Energy

12:30 pm EDT Question and Answer Session

<u>Dr. George Hornberger and Dr. Ted Russell of HEI-Energy's Research Committee</u> will be available along with HEI-Energy staff to answer applicant questions during the webinar.

I:30 pm EDT Webinar ends

*After the webinar, HEI-Energy will post all questions and answers to the HEI-Energy website.



Logistics

- All attendees are muted with no audio for the duration of the webinar.
- Please reserve your questions for the Q&A portion of the webinar.
- Submit questions via the Q&A function. You can also "upvote" questions from other participants that match your own question.
- All the questions and answers from today's session will be compiled into a Q&A summary that will be available on the HEI-Energy website in the coming days. The Q&A summary also will include responses to any questions that we did not have time to answer during the webinar.
- This webinar is being recorded for internal purposes only to ensure that we accurately capture all your questions. The recorded webinar will not be distributed or broadcasted.
- If you experience any logistical difficulties, please contact us using the "Chat" box (HEI-Energy). You can also email us at <u>kliziewski@healtheffects.org</u>.
- Please complete the post-webinar survey. It will pop up on your screen as you exit the webinar. We appreciate your feedback. It will also be sent to you in a thank you email tomorrow.



Welcome and Introduction to HEI-Energy





HEI-Energy Purpose

A *new national research program*, focused initially on:

- Research on human exposures associated with onshore development of oil and natural gas from shale and other unconventional resources (UOGD) across the United States
- As feasible and appropriate based on findings from the exposure studies, targeted efforts to assess the potential health effects that might result from exposures

Overarching goal:

 Enhance understanding and inform public and private decision-making about potential exposures associated with UOGD



HEI-Energy is modeled after its parent organization: the Health Effects Institute (HEI)

- An independent, nonprofit corporation
- Chartered to provide policy-relevant highquality and impartial, science
- Funded jointly by government and the oil and natural gas industry and, occasionally, private foundations
- Funds research that is selected, conducted, overseen, and reviewed independently of HEI-Energy's sponsors

Ensuring the quality of research funded by HEI-Energy

HEI Energy Research Committee



George Hornberger, Chair Vanderbilt University, Nashville, Tennessee



Shari Dunn-Norman Missouri University, Rollo



Stefanie Ebelt Emory University, Atlanta, Georgia



Howard Hu University of Washington, Seattle



Judy S. LaKind LaKind Associates and University of Maryland, Baltimore City



Bhramar Mukherjee University of Michigan, Ann Arbor



Armistead (Ted) G. Russell Georgia Institute of Technology, Atlanta



Peter S. Thorne University of Iowa, Iowa City HEI-Energy staff work with the Energy Research Committee on:

- Workshops with Stakeholders
- Literature Reviews
- Defining research needs in Requests for Applications (RFAs)



Overview of the RFAs and Expectations for Research Proposals



Overview of the RFAs

- Air Quality and Noise (E20-1)
 - New empirical research

• Water Quality (E20-2)

• Synthesis and modeling of existing data and possibly new empirical research

See pp. 8-9 of the RFAs for objectives that are specific to E20-1 and E20-2.



Overview of the RFAs Overall Objectives for Research

- Improve the understanding of UOGD exposures across the United States, the conditions under which they occur, and the likelihood of occurrence.
 - Be able to document one or more complete exposure pathways, should they exist, between UOGD processes and communities potentially exposed to one or more UOGD agents.
 - Improve understanding of the temporal and spatial variability in exposure arising from routine operating conditions, but with the ability to document accidental conditions that might arise during the study period.
 - Maximize the applicability, or generalizability, of research to other locations, operations, and communities beyond the study location.
 - Collaborate with multiple sectors (e.g., communities, policy-makers, industry, and others) to maximize the utility and policy-relevance of the research
- Inform future health studies.





Overview of the RFAs Some Key Features of a Study Design

Build on Previous Work

- Demonstrate the research team's knowledge and accounting of earlier research in its proposed research.
- Review information summarized in HEI-Energy reports about exposure and epidemiology literature related to UOGD.

Engage with Communities and Other Stakeholders

- Engage with communities in study locations and other stakeholders <u>before</u>, <u>during</u>, and after research.
- Anticipate how results will be interpreted and communicated <u>before research</u> <u>begins</u>.

Collectively Provide a Coordinated, Transparent, and Useful Body of Research

- Answer important exposure questions for decision makers in a high-quality, efficient, and transparent manner.
- Be willing to work with HEI-Energy to ensure that the body of research is coordinated to allow for regional comparisons.





Publications

> All results from projects funded by HEI-Energy can be found here. Results will also be made available through annual conferences, workshops, and presentations to legislative bodies, public agencies, community organizations, and other interested groups.

Potential Human Health Effects Associated with Unconventional Oil and Gas Development: A Systematic Review of the Epidemiology Literature (FINAL REPORT)

HEI-Energy Research Committee

September 2019

This report reviews the epidemiology research that assesses whether exposure to <u>unconventional oil and natural gas development</u> (UOGD) might lead to adverse health effects.

Human Exposure to Unconventional Oil and Gas Development: A Literature Survey for Research Planning (FINAL COMMUNICATION)

HEI-Energy Research Committee

June 2020

<u>Communication 1</u> surveys the literature about environmental exposures associated with <u>unconventional oil and natural gas development</u> (UOGD). The Energy Research Committee conducted the survey as part of a larger effort to understand the current state of the science on UOGD exposures and their potential health effects.

<u>Strategic Research Agenda on the Potential Impacts of 21st Century Oil and Natural Gas Development in the Appalachian Region and Beyond (Published 2015)</u>

HEI-Energy Reports

Found here:

https://hei-energy.org/publications

Criteria for Evaluating Research Applications

- **Relevance** to the objectives of the RFA.
- Scientific merit.
- Alignment of the proposed research with the following key features:
 - <u>Determines whether an exposure pathway links a UOGD process with a community</u>. Allows for the detection of possible causal links between one or more UOGD processes and resulting human exposures, while distinguishing between agents released from UOGD and non-UOGD sources.
 - Useful for assessing health risk.
 - Expands understanding of temporal and spatial variability of exposure.
 - <u>Broadly generalizable</u>. Designed to be broadly applicable across regions, UOGD operating conditions, or communities over time, including periods of low and high UOGD activity, without sacrificing validity.
 - <u>Optimizes use of the research budget by maximizing efficiency</u>. Ensures that the research budget is spent on gathering data and information that is not already available and that prioritization and sequencing of data collection maintains a focus on exposures of possible concern (i.e., using a pre-specified Decision Framework).
 - <u>Brings value to and informs decision-making.</u> Useful to communities in study locations, government officials, industry, and other stakeholders.
- Experience, competence, and diversity of the research team.
- Adequacy of facilities.
- Reasonableness of the proposed budget.



Eligibility

- Researchers with advanced degrees (PhD, MD, or equivalent)
- Affiliated with an established research organization
- Researchers outside the United States can apply as long as the proposed research targets the objectives provided in the RFA
- HEI will consider the characteristics of the entire proposed study team, including:
 - Past research and publication history
 - Access to resources needed to complete the research
 - Diversity (see the <u>NIH statement on populations underrepresented in the</u> <u>extramural scientific workforce</u> for additional information)



Question & Answer Period

Please type your questions via the Q&A function. If someone else has already typed the same question that you have, please upvote that person's question.





Question and Answer Period General Questions Relevant to Both RFAs

At this time, we are answering questions related to:

- 1. Both RFA E20-1 and RFA E20-2, and
- 2. General application requirements
- Please type your questions via the Q&A function. If someone else has already typed the same question that you have, please upvote that person's question.





Question and Answer Period RFA E20-1 (Air Quality and Noise)

At this time, we are answering questions related to: ▶RFA E20-1 (Air Quality and Noise)

• Please type your questions via the Q&A function. If someone else has already typed the same question that you have, please upvote that person's question.





Question and Answer Period **RFA E20-2 (Water Quality)**

At this time, we are answering questions related to: ►RFA E20-2 (Water Quality)

• Please type your questions via the Q&A function. If someone else has already typed the same question that you have, please upvote that person's question.





Thank you for your interest!

Preliminary Application Deadline: September 24, 2020 at 5:00 pm EDT

- Questions and answers from today, including any not answered during the webinar, will be posted on the HEI-Energy website in the coming days.
- If you have additional questions, please contact us: <u>energy@healtheffects.org</u>
- For more information and application materials: <u>https://hei-energy.org/funding-opportunities/rfa/e20-1-e20-2</u>

