

# Webinar for Potential Applicants to RFA 24-2: Insights into the Health Effects of Exposure to Low Concentrations of Particulate Matter

**Health Effects Institute**

**October 1, 2024**

The meeting will begin shortly.

A few logistics before we start:

- If you experience logistical difficulties, please email Robert Shavers: [rshavers@healtheffects.org](mailto:rshavers@healtheffects.org)
- You can turn on **closed captioning** at the bottom of your screen to the *right* of the Q&A button
- Please put questions about the RFA or application process in the **Q&A** box
- The recording is for internal purposes only
- After the webinar, HEI will post the webinar slides and all questions and answers to the HEI website



# Today's Agenda

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- Introduction to HEI
- Overview of the RFA and Expectations for Research Proposals
- Question and Answer Session

# Introduction to HEI

# The Health Effects Institute

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- An independent, nonprofit corporation chartered to produce policy-relevant, high-quality, and impartial science
- Funded jointly by government and the worldwide motor vehicle industry and, occasionally, private foundations
- Funds research that is selected, conducted, overseen, and reviewed independently of HEI's sponsors
- Does not take policy positions

# How HEI Provides Impartial Science



# HEI's Research Committee

Works with HEI staff on defining research needs for Requests for Applications (RFAs) and selecting and overseeing funded studies



**Marianne Hatzopoulou**

Ph.D., Professor, Civil and Mineral Engineering, University of Toronto; Canada Research Chair in Transport Decarbonization and Air Quality



**Heather A. Holmes**

Associate Professor, Department of Chemical Engineering, University of Utah



**David A. Savitz, Chair**

Professor of Epidemiology, School of Public Health, and Professor of Obstetrics and Gynecology and Pediatrics, Alpert Medical School, Brown University



**Benjamin Barratt**

Professor, Environmental Research Group, School of Public Health, Imperial College London



**David C. Dorman**

Professor, Department of Molecular Biomedical Sciences, College of Veterinary Medicine, North Carolina State University



**Christina H. Fuller**

Associate Professor, School of Environmental, Civil, Agricultural and Mechanical Engineering, University of Georgia College of Engineering



**Alexandra M. Schmidt**

Professor of Biostatistics, School of Population and Global Health, McGill University



**Neeta Thakur**

Associate Professor of Medicine, University of California, San Francisco



**Neil Pearce**

Professor of Epidemiology and Biostatistics, London School of Hygiene and Tropical Medicine



**Evangelia (Evi) Samoli**

Professor of Epidemiology and Medical Statistics, Department of Hygiene, Epidemiology and Medical Statistics, School of Medicine, National and Kapodistrian University of Athens, Greece



**Gregory Wellenius**

Professor, Department of Environmental Health, Boston University School of Public Health and Director, BUSPH Center for Climate and Health

# Overview of the RFA 24-2

# Background and Rationale

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- National Particle Component Toxicity (NPACT) Initiative (2013)
- Low-Exposure Epidemiology Initiative (2023)
- In December 2023, HEI hosted a scoping workshop on the State of the Science of PM Health Effects to identify research needs and priorities, with an emphasis on informing United States policy.
- Driven by remaining questions from NPACT and the Low-Exposure Epidemiology Initiative, the HEI Research Committee used the workshop findings to develop the objectives for this RFA.



# Overall Objective of RFA 24-2

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HEI is seeking to fund studies to provide further insights into the health effects associated with long-term exposures to persistent ambient PM concentrations near or below current health-based standards. Such studies could meaningfully influence the interpretation of the overall body of the epidemiological research by proposing novel or improved methods or approaches, linking multiple sources of evidence to identify important sources of heterogeneity in the health effect estimates or exposure–response functions, or further informing biological mechanisms and disease processes.

# Specific Objectives

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In the context of the overall objective, HEI seeks to fund studies that can accomplish at least one of the following specific objectives:

1. Evaluate the influence of individual or repeated short-term high-intensity air pollution exposure events on long-term health and disease development.
2. Develop, validate, and apply novel or improved exposure assessment methods suitable for estimating exposures to specific microenvironments, PM size fractions, PM from specific sources, or important or understudied co-pollutants. Assessment of individual PM components without linkage to specific source emissions will be considered nonresponsive.
3. Identify markers of disease onset or progression or modifiable factors that confer increased susceptibility or vulnerability to the health effects of PM.
4. Provide evidence of the biological mechanisms or disease processes of the health effects of PM.

# Critical Study Design Considerations

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- The RFA is open to toxicological, clinical, and epidemiological studies, or combinations of these
  - Toxicological proposals must clearly articulate the relevance of the research to the human health effects of PM at low ambient concentrations.
- Proposed studies must clearly articulate the relevance of the research to the human health effects of PM in the United States.
- Studies must address long-term PM<sub>2.5</sub> exposure at concentrations relevant to current ambient pollution in the United States; this includes studies that are investigating high-intensity air pollution exposure events.

# Timeline and Budget

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- Studies must be no longer than 3 years in duration
- \$2.5 million total available for this RFA
  - Budgets should closely align with the selected specific objective(s) and scope of work. Preparation of the final report should be included in the budget.
- Indirect costs capped at 30% of direct costs
- HEI issues annually renewed cost-reimbursement contracts (not grants)

# Eligible Organizations

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- Lead organization must be an academic or independent, nonprofit, research institution
- Scientists from non-regulatory government agencies can participate but not lead a study
- For-profit companies can participate as consultants

# Research Team

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- Principal Investigator (PI)
  - Must possess an advanced degree (PhD, MD, or equivalent) and be affiliated with the lead organization
  - Must be an expert in their field with a track record of producing high-quality and objective research published in the peer-reviewed scientific literature in areas relevant to the proposed work
  - Must demonstrate experience in successfully leading a multidisciplinary team of scientists
- Other team members
  - We encourage diverse research teams and have adopted the [NIH definition](#) of underrepresented populations in environmental health research
  - Any potential participation of HEI sponsors in advising the study must be described

# Two-Stage Application Process

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- Preliminary applications
  - HEI Research Committee reviews and recommends proposals to invite a full application
- Full applications
  - Special Panel (and external reviewers as needed) reviews and recommends proposals for consideration by the HEI Research Committee
  - HEI Research Committee reviews and recommends studies for funding
  - HEI Board of Directors makes final funding decision

# Criteria for Evaluating Research Applications

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- Relevance of the proposed research to the RFA
- Scientific merit of the proposed study design, approaches, methodology, analytic methods, and statistical procedures
- Personnel and facilities, including
  - Experience and competence of the PI, scientific staff, and collaborating investigators
  - Extent of collaboration among investigators in pertinent fields who will contribute to the conduct of the study
  - Adequacy of effort on the project by scientific and technical staff
  - Adequacy and validity of existing data and data to be collected
  - Adequacy of facilities
- Reasonableness of the proposed cost



# Investigator Commitments

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- Adhere to Ethics, Quality Assurance / Quality Control, and Data Access policies
- Biannual progress reports and informational site visit(s) or webinar(s)
- Present a poster at HEI's Annual Conference each study year
- Changes to proposed work or budget require Research Committee approval to ensure the study stays true to its original goals and the RFA
- [Final Report](#) requirements

PLEASE REVIEW HEI'S PROCESS BEFORE APPLYING:  
<https://www.healtheffects.org/research/investigators/commitments>

# Important Dates

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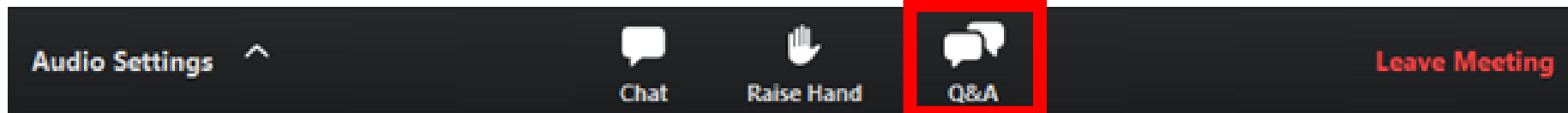
Date	Action
<b>November 4, 2024</b>	Preliminary applications due via email to <a href="mailto:funding@healtheffects.org">funding@healtheffects.org</a>
December 2024	HEI Research Committee reviews preliminary applications
<b>February 17, 2025</b>	Invited full applications due via email to <a href="mailto:funding@healtheffects.org">funding@healtheffects.org</a>
March 2025	Special Panel reviews full applications
May 2025	HEI Research Committee reviews full applications
Summer 2025	IRB approval and contract negotiations
Fall 2025	Study initiation

More information on this and other funding opportunities:

<https://www.healtheffects.org/research/funding/>

# Question & Answer Period

**Please type your questions about the RFA and application process via the Q&A function.**



We will post the webinar Q&A summary to our website

For general questions related to the HEI application process, please visit: <https://www.healtheffects.org/faqs>

If you have additional questions, please contact Dr. Eva Tanner: [etanner@healtheffects.org](mailto:etanner@healtheffects.org)

# Save the date!

## HEI Annual Conference: Austin, Texas, May 4 – May 6, 2025

