



**REQUEST FOR APPLICATIONS 23-3
WALTER A. ROSENBLITH NEW INVESTIGATOR AWARD**

Please note that detailed instructions and all necessary application forms are available under [Instructions and Forms](#). Please also see our [FAQ page](#) for other information about applying to HEI.

INTRODUCTION

HEI established the Walter A. Rosenblith New Investigator Award as a career development award to provide funding for outstanding investigators who are beginning their independent research careers. By providing financial support for investigators early in their careers, HEI hopes to encourage highly qualified individuals from a wide range of disciplines to undertake research on the health effects of air pollution. A key component of the proposal and award is the mentorship plan, which outlines how awardees will interact with and learn from established experts in their field of study. Given the career-development nature of this award, HEI encourages applicants to propose bold and exciting studies that will allow them to develop as strong, independent researchers and to become innovators and ultimately leaders in their field of study. Applicants may have training and experience in any discipline relevant to air pollution.

Each award will be a maximum of \$600,000 for three years¹ in total costs to support a research project led by the candidate. It is expected that the investigator will devote at least 25% of their time to the proposed research. The funds can be used to provide salary support for the investigator and for junior personnel and support staff (e.g., consulting statisticians), and for supplies and equipment. Typically, HEI receives 15-25 preliminary applications to this RFA each year, invites 3-5 applicants to submit full applications, and ultimately funds one or two awards.

HEI RESEARCH PROGRAM

Since the early 1980s, HEI's research program has addressed a broad range of questions about the health effects of exposure to ambient air pollution from motor vehicles, wildfire smoke, and other important sources. HEI seeks to fund studies that span a range of scientific fields, including atmospheric science, epidemiology, exposure science, risk assessment, social science, statistics, economics, and toxicology. In all studies, accurate characterization of exposure and appropriate statistical analyses are important. In considering potential research topics, applicants should be aware of HEI's current areas of interest, as described in the HEI Strategic Plan for Understanding the Health Effects of Air Pollution 2020-2025². The current plan focuses on four key areas: (1) evaluating the effectiveness of air quality actions, (2) complex questions for the air pollution mixture, (3) transport and urban health, and (4) global health. In addition, emerging areas of interest for HEI include (a) climate, air quality, and health, (b) transportation and health in a changing landscape, and (c) environmental justice.

¹ Note that HEI allows for a no-cost extension in case an investigator needs to take time off for family or medical leave.

² Available at www.healtheffects.org/about/strategic-plan

HEI encourages investigators to submit applications addressing these high-priority research areas. We will, however, also consider particularly innovative or high-quality applications in other areas consistent with HEI's mission to support research to generate the scientific evidence needed to inform regulatory decisions, enhance public health practice, or better support risk assessments, while leveraging the most appropriate tools and models. Note that the proposed research should reflect an original investigation but may include working with data that were collected through earlier work. The proposed study should be the investigator's own study and not simply a continuation of a former supervisor's project.

HEI strongly encourages individuals who are underrepresented in environmental exposure and health research to apply and encourages all applicants to diversify their research teams by including underrepresented individuals, including those attuned to and knowledgeable about the communities in which the studies are taking place, to the extent appropriate given the study location(s). For this purpose, HEI has adopted the National Institutes of Health (NIH) definition of underrepresented populations in the U.S. Biomedical, Clinical, Behavioral and Social Sciences Research Enterprise³.

Refer to HEI's website for information on studies that have been funded in recent years (see [Research Reports](#) and [Ongoing Research](#)).

Recent Awardees

- 2023. Rachel Nethery, Harvard University. Designing optimal policies for reducing air pollution-related health inequities.
- 2023. Yoshira Ornelas Van Horne, Columbia University. What's in the air? Engaging Native American youth in the Northern plains to reduce air pollution.
- 2021. Lucas Henneman, George Mason University. Air pollution source impacts at fine scales for long-term regulatory accountability and environmental justice.
- 2020. Heresh Amini, University of Copenhagen. COUPH: Copenhagen Ultrafine Particles and Health.
- 2020. Joseph Antonelli, University of Florida. Robust statistical approaches to understanding the causal effect of air pollution mixtures.
- 2020. Raphael Arku, University of Massachusetts–Amherst. Urban air pollution in sub-Saharan Africa: A study of prenatal exposures, birth outcomes, and lower-respiratory infections in infants.
- 2019. Tanya Alderete, University of Colorado–Boulder. Air pollutants and the gut microbiota and metabolome during early life: Implications for childhood obesity.
- 2019. Megan Herting, University of Southern California. Air pollution exposure and prefrontal connectivity in early adolescence.

³ NIH's definition of underrepresented populations includes individuals from racial and ethnic groups underrepresented in health-related sciences on a national basis, individuals with disabilities who are defined as those with a physical or mental impairment that substantially limits one or more major life activities, and individuals from disadvantaged backgrounds, recognizing that women from these three backgrounds face particular challenges at the graduate level and beyond in scientific fields (source: <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-20-031.html>).



ROSENBLITH AWARD ELIGIBILITY REQUIREMENTS

Scientists of any nationality residing anywhere in the world and holding a PhD, ScD, MD, DVM, DrPH, or equivalent degree are eligible to apply. By the date that full applications are due, the applicant must be appointed at the Assistant Professor (USA), University Lecturer (UK), or equivalent level at an academic or research institution. The applicant cannot have held such a position for more than five years (60 months) by the date that full applications are due.

Holding a tenure-track position is not required. Note that time spent on non-research activities, such as parental or medical leave, may be excluded from the period listed above.

Prospective applicants are required to contact Dr. Dan Crouse (dcrouse@healtheffects.org) to verify their eligibility before submitting a preliminary application. Applicants will not be invited to submit a full application under this award program more than twice in their career.

PRELIMINARY APPLICATION

Content of Preliminary Application

Applicants should submit a brief **Preliminary Application** that provides the following information: title; abstract; scientific rationale; a brief description of the study aims, design, and methods; and anticipated results. The Preliminary Application should also discuss briefly the applicant's qualifications and include a biographical sketch (maximum two pages). An estimated total budget and study duration (2 to 3 years) should be provided (**no budget details are needed at this stage** although budgets should be appropriate for the project duration and amount of work proposed, see more detailed information below). Before applying, applicants should familiarize themselves with HEI's [study oversight and review procedures](#), which are more involved than many other grants.

Having one or more mentors is required for this career development award. Mentors should be active investigators in the area of the proposed research and be committed to the career development of the applicant. Applicants are expected to work with the mentors in preparing the application. Applicants can reach out to HEI if they need help identifying appropriate mentors for their study.

HEI requires the involvement of a (bio)statistician in the study design, selection of appropriate statistical approaches, and the final data analysis and interpretation on all funded studies. For Rosenblith applications, this person may be a mentor or consulting statistician.

Investigators should use HEI's Preliminary Application Form. Mentors should be listed on the form. **Cover letter, mentor biosketches, and letters of support are NOT needed at this stage.**

The preliminary application must be no more than 5 pages in length (using 11-point font size and 1-inch margins, single-spaced, excluding references and the applicant's biosketch); longer applications will be rejected. For the biosketch, applicants can use HEI form F-9 or another format as long as the biosketch is no longer than 2 pages. The application forms should be converted to a combined PDF with appropriate bookmarks before submitting.

The HEI Research Committee will review Preliminary Applications and invite selected applicants to submit a Full Application.

Deadline for Preliminary Applications

Preliminary Applications should be submitted by email in PDF format to funding@healtheffects.org (subject line: *PI last name RFA 23-3 Preliminary Application*) no later than **JANUARY 26, 2024**. HEI will acknowledge receipt of the application. Applicants will be informed whether to submit a full application by mid-March 2024.

FULL APPLICATION

Content of Full Application

The full application should include: (1) a formal proposal for a research project of up to 3 years and associated materials, (2) evidence of the applicant's qualifications and outstanding research potential, (3) a mentoring plan, and (4) evidence of strong institutional commitment to the applicant.

Specific budget requirements: The project should not exceed a total cost of \$600,000, including indirect costs. Indirect costs are limited to a maximum of 30% of direct costs, excluding equipment charges and subcontracts. Typically, costs should be spread equally among the project years with appropriate adjustments as explained in the budget justification. For example, if the project involves equipment purchases, the first year's budget might need to be increased relative to later years. On the other hand, many projects require the hiring of personnel and therefore start up more slowly; thus, a lower first year budget might be appropriate.

Funds can be used to support the applicant's salary, to hire additional staff (e.g., postdocs, graduate or undergraduate students, or technicians), provide project support (e.g., consulting statisticians or core facilities), or to purchase equipment and supplies. Funds cannot be used to support the salaries of co-investigators or mentors. **It is expected that the investigator will devote at least 25% of their time to the proposed research.** Under "Other Support", please specify the applicant's time commitment to other research projects.

Applicant's qualifications and research potential

In addition to the materials required in the application, the following should also be submitted as evidence of the applicant's outstanding research potential:

1. A cover letter (maximum 2 pages) from the applicant that describes their interest in the award and how this project fits with their career goals, including information concerning their long-term career plans and how the HEI award would contribute to these plans. The letter should also include how this award will help the applicant on a pathway to independence.
2. Three recent publications and a list of all publications by the applicant.

Mentoring plan

Applicants are required to submit a mentoring plan that identifies one or more established investigators who will act as a mentor and be available for consultation during the project. The mentoring plan should describe in detail how and how often the mentors will advise the applicant throughout the study. In addition, mentors are asked to provide a letter that indicates their commitment to helping the applicant and their availability for regular consultation, as well as their research qualifications in the area of the proposed research and their experience in fostering the development of independent investigators. During the period of the award, the mentors will also be requested to provide periodic evidence — for example, in the form of a letter describing meeting dates, reviews of research plans, and comments on manuscripts — that the mentoring plan is being followed. Mentors are asked to sign off on progress reports indicating that they have read the report and communicated with the awardee about potential issues that arose during the study.

Institutional commitment

Applicants are required to provide evidence of medium to long-term institutional commitment toward their career. The institutional commitment should be described in a letter from the department chair, dean, or other administrative official from the applicant's current institution, indicating tangible institutional commitment to the applicant's continued career development and their research. Commitments can take many forms, such as providing laboratory space, access to core facilities, financial support for a laboratory, or paying part of the applicant's salary. In addition, it should be evident that the applicant is guaranteed at least 50% time to pursue research. If a start-up package was awarded at the time of hiring, it should be described.

Please refer to application form F-2 (table of contents) for a list of all application materials and the order in which they should be assembled.

Deadline for Applications

Full applications for RFA 23-3 (by invitation only) should be submitted to funding@healtheffects.org (subject line: *PI last name RFA 23-3 Full Application*) no later than **JUNE 14, 2024**. Applications should be in PDF format with a maximum file size of 20 MB.

After submission, please notify our Science Administration Assistant (science-admin@healtheffects.org) of your submission; do not attach the PDF documents to this second email. (This step is to ensure we detect any potentially bounced messages due to file size or other issues.) HEI will acknowledge receipt of the application. Applicants will be notified of the funding decision by late July 2024.

Investigators invited to submit a full application should use forms **F-1 to F-12** and consult the [Instructions and Forms](#) webpage. Please note that the required font size is **11-point with 1-inch margins**, single spaced. The application forms should be turned into a **PDF with appropriate bookmarks** before submitting.

Please note that all necessary application forms are available under [Instructions and Forms](#).

See our [FAQ page](#) for other information about applying to HEI. HEI will hold a webinar for applicants on December 19, 2023. Please check our website for more information.

Contact Dr. Dan Crouse (dcrouse@healtheffects.org) if you have specific questions about this RFA or the award.



Applications will be evaluated by HEI's [Research Committee](#) and independent technical experts as described below. The Research Committee makes recommendations regarding funding of studies to HEI's Board of Directors, which reviews whether the selection process has been followed and if any conflicts of interest have been handled appropriately. The Board makes the final funding decision.

PRELIMINARY APPLICATIONS

Preliminary applications will be evaluated by the Research Committee according to the following criteria: relevance to the goals of the RFA, scientific merit of the approach, experience of the research team, adequacy of the facilities, reasonableness of the proposed budget, and plans for disseminating the results, as explained in more detail below. Rosenblith Award applicants will also be evaluated on their qualifications and research potential. The Research Committee will then invite a limited number of applicants to submit a detailed full application.

FULL APPLICATIONS

Full applications will be evaluated in a two-stage process: an external review by technical experts followed by an internal review by the Research Committee.

External review by technical experts

Applications first undergo a competitive evaluation of their scientific merit by independent scientists selected for their expertise in relevant areas. For certain major RFAs a special review panel may be formed. When a panel is formed, applications might also be sent to external scientists for additional evaluation: (1) to evaluate a specific aspect not covered by expertise on the panel, or (2) when panel members have a conflict of interest with a particular proposal and are barred from participating in the review of that proposal, leaving the panel short-handed in that area of expertise. The external reviewers will evaluate applications according to the following criteria:

- **Relevance** to the objectives of the RFA and HEI's overall mission to provide high-quality, policy-relevant research. The research is designed to be useful to scientists, government officials, industry, communities, or other stakeholders and broadly applicable to other populations, regions, states, tribes, regulatory climates, and times, and/or makes significant advances in scientific knowledge and methodology.
- **Scientific merit** and novelty of the study design, data collection and analysis methods, exposure generation or modeling approaches, data evaluation, and overall quality assurance.
- **Experience, competence, and diversity of the research team**, including principal investigator, scientific staff, and collaborating investigators. For the Rosenblith Award, this should be within the guidelines specified in the RFA. If the application includes partnership with a community-based organization, community partners are expected to be included as part of the research team, and the research team should demonstrate a clear track record of community engagement and community relationships. Allocation of adequate effort to each team member should allow for successful implementation of the proposed research, stakeholder engagement (as applicable), and dissemination of the results.
- **Adequacy of facilities**, including (1) access to study sites, instrumentation, and relevant data sets or specimens; and (2) adequacy and validity of facilities to implement the proposed research,

including laboratory space, exposure and health measurement capabilities, computing facilities, and other support necessary to deliver high-quality research (as applicable).

- **Reasonableness of the proposed budget.** Community partnerships and community engagement should be reflected in the proposed budget if they are part of the application.
- **Plans for disseminating results.** Well-developed plan for research translation to inform decision-making. The plan clearly describes how and to whom results will be shared, as well as decision-making applications for communities, government officials, industry, or other stakeholders, as applicable.

Additional criteria for the Rosenblith Award, as described in the RFA:

- Applicant's qualifications and research potential.
- Mentoring plan.
- Institutional commitment.

Internal Review by HEI's Research Committee

The internal review is conducted by the HEI Research Committee and generally focuses on the applications ranked highly by the external reviewers. The Committee discusses merits and potential concerns for all top ranked proposals and whether any issues can be resolved. They then rank the top proposals selected for funding based on the available budget for the RFA while making sure that studies funded collectively address the objectives of the RFA. HEI's process does not allow submission of revised proposals, but in some cases the Committee may postpone a decision and ask for further clarification before making a final recommendation. The Committee can also negotiate that a specific aim be dropped or expanded and that the study duration and budget be adjusted accordingly. HEI will notify applicants of the decision and provide anonymous feedback from the external reviewers.

CONFLICTS OF INTEREST

HEI's procedures for conflicts of interest are similar to the guidelines set forth by the [National Institutes of Health](#). Members of HEI's sponsor community are excluded from participating in RFA development, applying for support, application review, and funding decisions. A detailed conflict of interest policy can be found [here](#).

This document was posted at www.healtheffects.org in November 2023.

Health Effects Institute
75 Federal Street, Suite 1400
Boston, MA 02110, USA