

# **OBJECTIVE**

The EDGE Center Pilot Projects Program supports short, one-year projects to provide preliminary data that will be useful for competitive, full-scale grant applications in the area of environmental health sciences (EHS) research. Successful applications demonstrate a strong likelihood of leading to significant NIEHS funding in the near term. The review process emphasizes:

- Relevance to the mission of the EDGE Center and NIEHS
- Responsiveness to themes identified in the request for proposal
- Utilization of EDGE Facility Cores
- Potential for translation of science into public health applications and practice
- Community-engaged research

## **BUDGET**

The budget for these projects is capped at \$40,000 for direct costs. Applications with budgets of more than \$40,000 in direct costs will not be considered. Please include applicable indirect costs in your proposed budget. Proposals that include a <u>substantive community engagement component</u>, in collaboration/consultation with the EDGE Community Engagement Core (CEC), will be eligible for a \$5,000-\$10,000 addition to their budget. Please note that EDGE is being considered for a competing renewal in fall 2025, with an earliest possible start date of April 2026. <u>Our ability to award pilot funding is dependent on EDGE's successful competing renewal and dependent on the timing of receipt of those funds.</u> Pilot funding will begin no earlier than April 2026 and conclude no later than March 31, 2027 (the period we project for our Year 31 EDGE funding). All funds must be used before March 31, 2027; extensions are not allowed. If EDGE funds are not received until later in 2026 (e.g. summer of 2026), the award window for the pilots will be shortened commensurate with an abbreviated EDGE funding period for Year 31.

Typically, budgets for funded EDGE pilots are created as sub budgets at the UW. If your institution does not permit you to direct a budget at the UW for your work (i.e., you are based at another institution), it is possible for funding to be issued by subaward to successful applicants. In this case, investigators are responsible for requesting an indirect cost waiver from their institution or securing another source of funding for indirect costs. In past years, Seattle Children's Hospital (SCH) and the Fred Hutch Cancer Center (FHCC) have provided such waivers for EDGE pilot projects. Please note that this only applies to pilot projects with non-UW PIs. If you are a UW PI and will be sub-awarding a portion of your pilot project to another institution, that subaward institution's indirect costs are allowed, but need to be included in your budgeted direct costs.

If your pilot project has a component of research with human subjects and/or vertebrate animals, the sponsor will not release funding until the proposed human study and/or vertebrate animal study has been reviewed and approved by the Institutional Review Board and/or the Institutional Animal Care and Use Committee (IACUC) at your institution and the NIH. Studies that involve clinical trials (as defined by the National Institutes of Health [NIH]) are not eligible for funding. Please see <a href="NIH">NIH</a> guidance for details on determining whether your study may be a clinical trial.



#### **ELIGIBILITY**

Only faculty members from the **University of Washington**, **Seattle Children's Hospital**, or the **Fred Hutch Cancer Center** holding one of the following ranks are eligible to serve as Principal Investigator on a pilot project proposal:

| Assistant Professor | Research Assistant Professor | Assistant Teaching Professor |
|---------------------|------------------------------|------------------------------|
| Associate Professor | Research Associate Professor | Associate Teaching Professor |
| Professor           | Research Professor           | Teaching Professor           |

Individuals holding a UW Affiliate Faculty appointment are not eligible. UW, SCH, or FHCC faculty members who hold one of the above titles, but who are not currently members of EDGE, must collaborate with an EHS Core Investigator already affiliated with the EDGE Center who agrees to serve as a sponsor of the proposal. Early career scientists (i.e. postdocs, assistant clinical professors) who do not hold a faculty appointment are encouraged to serve as a Co-PI.

We welcome and encourage researchers with diverse backgrounds to apply. If you are interested in applying to be an EDGE member, please contact Nancy Judd at <a href="mailto:njudd@uw.edu">njudd@uw.edu</a>. A list of current EDGE Facility Core Directors is included at the end of these guidelines and a complete list of EDGE membership is available online at: <a href="https://deohs.washington.edu/edge/member-directory">https://deohs.washington.edu/edge/member-directory</a>. If a <a href="principal investigator">principal investigator</a> (PI) submits multiple proposals, only one will be accepted.

#### **FURTHER INFORMATION ON EDGE & NIEHS**

More information about the EDGE & NIEHS mission and goals can be found on the below websites: <a href="http://deohs.washington.edu/edge/">http://deohs.washington.edu/edge/</a>
<a href="https://www.niehs.nih.gov/about/strategicplan/index.cfm">https://www.niehs.nih.gov/about/strategicplan/index.cfm</a>

## **PROGRAM BACKGROUND**

The UW Center for Exposures, Diseases, Genomics & Environment (EDGE) is an Environmental Health Sciences (EHS) Core Center of the National Institute of Environmental Health Sciences (NIEHS). The purpose of EDGE is to provide an administrative infrastructure and technical support to foster the multidisciplinary collaborations necessary to extend basic studies on environmental health problems to direct application in human populations. The purpose of the pilot projects program in the EDGE Center is to provide funding for pilot data necessary to successfully apply for NIH funding relevant to the mission of the EDGE Center and the NIEHS. Pilot projects applications should directly address scientific questions of interest to both EDGE and NIEHS.

Questions concerning the relevance of a proposed research topic should be directed to Dr. Sheela Sathyanarayana, EDGE Pilot Program Director (email: <a href="mailto:sathyana@uw.edu">sathyana@uw.edu</a>).



#### **EDGE CORES**

EDGE provides its investigators and pilot project awardees with access to two Facility Cores (launching in Spring 2026) and the Community Engagement Core:

The **<u>Data Sciences Core</u>** (DS) will provide the following services:

- Biostatistics: Expert consultation at all stages of research and analysis
- Bioinformatics: Assistance with identifying solutions and performing computing with highdimensional data
- Artificial intelligence and machine learning: Assistance in incorporating newly developed tools into research
- Data management: Consultation in design, architecture, and assistance with securing and documenting
- Data sharing: Consultation and assistance with expectations of funders and journals, and navigation of key platforms
- Spatial and geo-spatial statistics and modeling: Maintenance of extensive geodatabase and consultation and assistance with incorporation of spatial data into analyses; expertise extends to analysis of spatial data from 3-dimensional tissue analyses
- Data report-back: Communities expect data and study results return, and participants in studies expect results back; the DSC will team with the CEC to use best practices for Center members

The <u>Translational Research Support Core (TRSC)</u> will be comprised of three units that will provide the following services:

## Clinical and epidemiological services:

- Study design and execution
- Human subjects review procedures
- Clinical and physiological testing
- Collection/storage of human samples
- Identification of patient groups or existing cohorts
- Recruitment of participants
- Access to controlled human exposure facilities

## Exposure sciences services:

- Measuring and characterizing environmental exposures
- Developing biomarkers for those exposures
- Designing/evaluating sensors incorporating GPS, environmental exposures, and data-loggers, and common wireless communications (e.g., cellular, Bluetooth, WiFi)
- Advanced analytical services for various environmental pollutants

## **Omics services:**

- Consultation on designs and technologies
- Access to advanced preparative and analytical technologies for omics (including genomics,



transcriptomics, epigenomics, proteomics, and metabolomics)

- Data analysis and interpretation
- Access to evolving experimental non-whole-mammalian systems (often called "New Approach Methodologies" NAMs) including organoids, microphysiological systems, high-throughput zebrafish facilities, and *in silico* approaches

The Community Engagement Core (CEC): A well-established CEC provides EDGE investigators with assistance in public engagement, science communications, and research translation activities. This core helps investigators identify and connect with stakeholders relevant to their research projects, contributing to planning for stakeholder engagement, or helping investigators develop materials or host events to share important research findings with community groups, public health professionals, policymakers, K-12 teachers, and students, or other members of the public. Pilot project applications that include a community engagement component will be eligible for additional funding (up to \$10,000) if the CEC is consulted regarding the planned activities and CEC services are utilized where appropriate. This consultation must occur at least 2 weeks before the due date of the full application. Please consult with our CEC staff before submitting your application; contact information is located on page 9.

Pilot project applicants are expected to plan for use of at least one service unit of the TRSC and/or the CEC and all applicants must also consult with the Data Sciences Core on their data analysis, management, and sharing plans. Facility Core directors/contacts are included at the end of these guidelines.



## **RESEARCH THEMES OF INTEREST**

The EDGE Center has supported <u>pilot projects</u> across a variety of environmental health topics in the past. The NIEHS 2025-2029 <u>strategic plan</u> identifies six areas of emphasis which are also of key interest to the EDGE Center:

- Exposomics
- Precision environmental health
- Mechanistic biology and toxicology
- Data science and computational biology
- Environmental health disparities
- Protecting health from the impacts of extreme weather and disasters

The NIEHS areas of interest largely overlap with the EDGE Collaborative Translational Research Teams (CTRTs) (launching in Spring 2026):

- Microbiome and chronic diseases
- Exposomics and precision environmental health
- Toxico-epigenetics and developmental origins of health and disease (DOHaD)
- Air pollution and environmental epidemiology
- Building resilient communities

The following are example areas of special interest that the three units of the **TRSC** core are well positioned to support.

## Clinical and epidemiological services:

- Pediatric and reproductive environmental health concerns
- Community-engaged and informed research
- Research addressing disparities in environmental health conditions
- Indoor and outdoor air pollution including wildfire smoke
- Intervention-based research designs

## Exposure sciences services:

- Mobile monitoring and spatio-temporal mapping of transportation-related air pollution, including vehicle and airplane emissions
- Characterization of diesel exhaust composition, exposure and health effects including use of our controlled exposure laboratory
- Mass spectrometry-based imaging of metal deposition in biological samples
- Use and evaluation of low-cost air pollution sensors networks for evaluating exposures and health outcomes
- Evaluation of air cleaners to reduce environmental exposures to woodsmoke and traffic-related air pollution

#### Omics services:

Facilitating the generation of single cell RNA-Seq data



- Statistical and bioinformatics analysis of single cell RNA-Seq data
- Facilitating the generation of spatial transcriptomics data
- Statistical and bioinformatics analysis of spatial transcriptomics data

In addition, the following are example areas of special interest that the **CEC** is well positioned to support.

- Working with community groups and public agencies to make EDGE science more relevant to those they serve
- Providing training and resources to assist EDGE researchers in developing equitable community/academic partnerships
- Co-developing classroom activities with teachers based on EDGE science that excites them
- Creating multi-media stories for a general audience to convey key concepts of environmental health
- Supporting community-engaged disaster and climate-relevant research

## **APPLICATION PROCESS DETAILS**

**STEP ONE:** Complete a pre-application form (less than 2 pages) available on the EDGE website: <a href="http://deohs.washington.edu/edge/pilot-projects">http://deohs.washington.edu/edge/pilot-projects</a> and submit it by email to Nancy Judd <a href="mailto:njudd@uw.edu">njudd@uw.edu</a>, by Wednesday, **November 19, 2025** at 5 pm PT.

**STEP TWO:** You will be notified by Wednesday, **November 26, 2025** if your project is eligible to submit a full proposal. Invited application instruction containing details on items in Step Four will be sent to successful pre-applicants.

**STEP THREE:** Prepare a full proposal application and receive signatures of endorsement, as applications must be routed through the Investigator's Department Chair (and College Dean if in the School of Medicine).

**STEP FOUR:** Submit full proposal application (if invited) by Monday, **January 12, 2026**, at 5 pm PST. Full proposal applications are not submitted through the Office of Sponsored Programs; therefore, an e-GC-1 form is NOT required.

Complete applications should include the following components (details will be provided to successful preapplicants):

- 1. A completed "EDGE Pilot Project Grant Application" form (invited application instructions will be emailed to you upon invitation, with details on the items below)
- 2. An abstract (300 words or less)
- 3. Outline of research plan (not more than four single-spaced pages)
- 4. A proposed budget and a budget justification (on PHS398 Budget Form). Administrative salaries cannot be covered. Travel to conferences to present research findings is not permitted with these funds. The EDGE pilot program is not approved to cover food or beverages. If travel to a research location is required, then per diem (including meals) may be included in a pilot budget. No project expenses can be incurred outside of the U.S. without explicit NIEHS approval. Equipment will be supported only if tied directly to the research project and equipment costs may not exceed \$5,000 except in exceptional circumstances.
- 5. NEW: A basic timeline for completion of work within **9 months**, noting key milestones.
- 6. NEW: A data sharing plan developed and formatted per NIH requirements: Data Management and



## Sharing Plan Format Page | Grants & Funding

- 7. A current NIH Biosketch for the Principal Investigator and any co-Pls (not to exceed five pages each) and a list of any additional key personnel.
- 8. A complete list of <u>current</u> and <u>pending</u> funding, including project title, source, amount, and period of funding for PI/mPI (not other investigators).
- 9. OPTIONAL: For projects that include a community engagement component, a letter of support from EDGE CEC staff, and a detailed budget of up to \$10,000 in additional funding for the engagement component.
- 10. OPTIONAL: Letters of support from EDGE cores and/or other collaborators are not required but are permissible if they demonstrate the availability of expertise, resources, or critical collaborations needed to complete the proposed research.

Invited applicants (per Step 1) should submit these documents listed above via email to Nancy Judd (njudd@uw.edu) by **January 12, 2026**, at 5:00 PM PST. General questions about this RFA should be directed to Nancy Judd (njudd@uw.edu). Previous examples of pilot projects are posted on the <u>EDGE website</u>. Note: RFAs may have changed slightly from previous years.

## **SPECIFIC PROVISIONS:**

- 1. An official budget ceiling has been established at \$40,000 for direct costs. Applications with budgets of more than \$40,000 in direct costs will not be considered unless it is in the form of institutional matching funds. Projects that wish to include a community engagement component for consideration of additional funding of up to \$10,000 must include a separate budget for this component of the pilot project detailing how the funds would be used (labor, supplies, etc.)
- 2. The EDGE Center will only review one proposal by a given Principal Investigator or Co-Principal Investigator during a single review period. This decision is based in part on the amount of overlap in the proposals, the need to provide a fair distribution of funds to all investigators, and the level of funding already available to the applicant(s).
- **3.** Where possible, the personnel for research should be drawn from the ranks of students working on advanced degrees. These students may be hired at 50% FTE (the regular status of a Graduate Research Assistant). Hourly help support is also acceptable.
- **4.** Notification of the award will be sent by e-mail no later than March 11, 2026. The anticipated budget year will be April 2026 (though this may be delayed as discussed on page 1) through March 31, 2027.
- **5.** Projects will be funded for a maximum of twelve months (April 1, 2026 through March 31, 2027).
- **6.** Extensions will not be allowed. The Principal Investigator is responsible for the proper administration of funds. Each award will be assigned a dedicated UW worktag (a sub-budget to the EDGE Parent budget) and, if needed, a sub-contract from the EDGE budget to an institution that requires a non-UW budget to be used to fund the research. Funds may not be transferred between projects. EDGE will monitor expenses on the project and provide budget projections and other support as requested but will not assume fiscal responsibility for over-expended budgets.
- 7. NEW: If the pilot and a community engagement supplement are awarded, PIs will be required to



complete the video training and associated exercise in the science communication training series found here: <u>Finding Your Message training</u>. The exercise will be returned to Lisa Hayward and Lisa will provide feedback. The other two videos are optional.

- 8. NEW: Manuscripts presenting research supported in whole or in part by EDGE pilot funds must be immediately available on PubMed Central upon publication (consistent with a new NIH Public Access Policy). UW Libraries has posted a help guide with key changes here. The EDGE Center is not allowed to support publication costs.
- 9. Cite the UW Interdisciplinary Center for Exposures, Diseases, Genomics, & Environment (EDGE) and the grant number (P30ES007033) in all presentations and publications presenting research supported in whole or in part by EDGE pilot funds or otherwise supported by EDGE, including in kind consultation).
- **10.** If human or animal subjects are included, no award will be issued until approval from the Institutional Review Board (IRB) or Institutional Animal Care and Use Committee (IACUC) has been received and the NIEHS has authorized the allocation of funds. <u>Approval is not required until a project has been funded</u>.
- 11. Studies that involve clinical trials (as defined by the National Institutes of Health [NIH]) are not eligible for funding. Please see <a href="NIH guidance for details on determining whether your study may be a clinical trial">NIH guidance for details on determining whether your study may be a clinical trial</a>. For information on vertebrate animal use in research, please visit the <a href="UW Office of Animal Welfare website">UW Office of Animal Welfare website</a>. For information on human subjects, please visit the <a href="UW Human Subjects Division website">UW Human Subjects Division website</a>.

#### **REVIEW CRITERIA**

Investigators who are invited to submit full applications will be notified of Review Committee results by e-mail by mid-March 2026 (assuming EDGE Notification of Award has been received). Please do not contact the EDGE Center before this time. Applications will be internally triaged for responsiveness and compliance with the above requirements. Proposals undergo full scientific review using the criteria given below.

# EVALUATION CRITERIA: (Percentage figures refer to the relative weight each criterion will be given when making funding decisions.):

- Importance of the research (significance, innovation, and scientific merit including relevance to EDGE & NIEHS missions) (40%)
- Rigor and feasibility (approach to research) (40%)
- Expertise and resources (strength of investigators and use of EDGE Cores) (20%)
- 1. The relevance of the proposed research to the theme, mission, and goals of EDGE and NIEHS must be clearly described. The EDGE Center intends to provide initial funding of new projects that could lead to an NIH R21/R01 application that would logically be assigned to the NIEHS. It is expected that applicants will eventually seek outside grant support for the continuation of their



research programs. (40%)

- 2. The scientific merit of the proposed research and its feasibility are critical factors that will be used in evaluating an application. Projects that may result in a scientific publication after project completion will be considered for funding, as well as more preliminary work likely to lead to successful procurement of a full study grant from an outside source in the future. This element includes consideration of the qualifications of the investigators. Investigators are expected to bring expertise and strength of research record. (40%)
- 3. The EDGE Center provides access to facility cores: *Data Sciences and TRSC, including specific sub-unit(s)*. Use of these Facility Cores, as well as efforts to learn the various techniques they employ, is encouraged. Pilot Project applicants are encouraged to discuss their projects with Facility Core Directors before submission if substantial use of a Core (or TRSC unit) is proposed. A list of Facility Core Directors and contacts is included at the end of these guidelines. (20%)
- 4. (For CEC Related Applications Only this criterion will replace #3 for evaluation purposes) Projects that can demonstrate active collaboration with CEC staff, creative and innovative use of CEC resources, and meaningful involvement of EDGE investigators will be given priority. Of note, if applicants apply to use both EDGE Center and CEC resources, they will not be given greater weight in review. (20%)

In addition, the EDGE Center is committed to providing career development and mentoring for young investigators (including junior faculty and also non-faculty). Proposals that support these investigators' research will be accorded special consideration. Note that non-faculty can serve as co-Pls.

## **REPORTING REQUIREMENTS**

A brief (< 2 pages) written progress report will be required in December 2026 so the results can be included in the EDGE Annual Progress Report for that year. It is also expected that an oral or poster presentation of progress on funded pilot projects will be made at the 2027 Annual EDGE Symposium (date and location to be determined, usually late spring on campus). We strongly encourage pilot project recipients to attend this retreat in its entirety to maximize interactions with potential collaborators.

If publication(s) result, directly or indirectly, from award allocations, they must carry an acknowledgment of the source of such support from the UW NIEHS-sponsored Center for Exposures, Diseases, Genomics & Environment, Grant #: NIH/NIEHS P30ES007033.

We will be checking in with pilot recipients a few times a year for several years by email to gather information about future publications, grant funding, promotions, and honors or recognitions that EDGE pilot projects may have directly or indirectly helped support.

## **CONTACT INFORMATION**

General questions about this RFA should be directed to Nancy Judd (<u>njudd@uw.edu</u>). Applicants are encouraged to consult with senior Center investigators (see below contact information) in the preparation of pilot project proposals. Feel free to contact us to learn more about Core expertise and services and how engaging with one or more Cores might strengthen your proposal.



## **Facility Core Directors and Contacts**

# **Translational Research Support Core (TRSC)**

Director, Catherine Karr, <u>ckarr@uw.edu</u>, 206-616-4355 Associate Director, Cora Sack, <u>cssack@uw.edu</u>

Clinical and epidemiological services: Karen Jansen, Manager, kjansen@uw.edu, 206-685-6392

Exposure sciences services: Chris Simpson, <a href="mailto:simpson1@uw.edu">simpson1@uw.edu</a>, 206-543-3222 Omics services: Theo Bammler, Manger, <a href="mailto:tbammler@uw.edu">tbammler@uw.edu</a>, 206-616-7378

## **Data Sciences contacts for pilot consultations**

Clinical and epidemiological, Christine Loftus, cloftus@uw.edu, 206-753-9073

Exposure Sciences, Elena Austin, <u>elaustin@uw.edu</u>, 206-221-6301 Omics services: Theo Bammler, <u>tbammler@uw.edu</u>, 206-616-7378

## **Community Engagement Core (CEC)**

Director, Nicole Errett, <a href="mailto:nerrett@uw.edu">nerrett@uw.edu</a>, 206-897-1555 Co-Director, Jamie Donatuto, <a href="mailto:donatuto@uw.edu">donatuto@uw.edu</a> Manager, Lisa Hayward, <a href="mailto:lhayward@uw.edu">lhayward@uw.edu</a>, 206-685-8244