PILOT PROJECT PROGRAM

Request for Applications 2025



Table of Contents

INTRODUCTION	
AWARD TYPE	3
Early Stage Investigator Award	
Innovation and High Impact Award	
Community-engaged research Award	
KEY DATES	
GOALS	
SCOPE	5
PRIORITIES FOR FUNDING	5
FUNDING INFORMATION	6
ALLOWABLE EXPENSES	6
Non-allowable expenses	
IRB GUIDELINES	6
SUBMISSION GUIDELINES	
Application Style	
LETTER OF INTENT (LOI)	
FULL APPLICATION SUBMISSION PROCESS	8
FULL APPLICATION REQUIRED COMPONENTS	8
Cover Page(s)	8
Budget and Budget Justification	
Body of the Proposal	
Mentoring and Career Development Plan (Early Stage Investigators only)	
Mentor Endorsement (Early Stage Investigators only)	
Letter from Supervisor/Department Chair	12
REVIEW PROCESS AND CRITERIA	12
AWARDEE RESPONSIBILITIES	14
RFA APPENDIX	14
FULL APPLICATION CHECKLIST	15
NOTES	



Goals of the UK-CARES Pilot Project Program

The UK Center for Appalachian Research in Environmental Sciences (UK-CARES) is now accepting applications for Pilot Projects. The mission of UK-CARES is to discover and translate research on how the environment affects the health of people in rural Appalachia. UK-CARES is aligned closely with the NIEHS Strategic Plan (https://www.niehs.nih.gov/about/strategicplan). For more information about UK-CARES, visit our website at (https://www.research.uky.edu/uk-cares).

The overall goal of the Pilot Project Program (PPP) is to support the mission of UK-CARES and NIEHS by supporting innovative and high impact environmental health sciences research, early-stage investigators and those new to environmental health sciences, and foster collaboration between environmental health scientists and community partners to address emerging environmental health issues, particularly in Appalachian communities. All proposed pilot projects MUST use at least one UK-CARES Core. For consultation and core support questions, contact our UK-CARES team through the Research Support Portal.

Award Types

Innovation and High Impact Award

Purpose: This award is intended to stimulate innovation and to support pilot studies that will advance the field of environmental health sciences.

Funding: This award is up to \$50,000 in direct costs which must be spent over 12 months. If a community partner plans a key role in translational science, an additional amount of \$5k may be requested to support the research led by the community partner.

Eligibility criteria:

- Eligibility is limited to full-time faculty (all title series including regular, research, clinical and special) at the University of Kentucky.
- UK faculty at all stages of faculty ranks.
- Investigators who are established in the area of environmental health research are encouraged to apply.
- Investigators who have previously been supported through the CARES Pilot Program are welcome to apply.

Early Stage/New to EHS Award

Purpose: This award is intended to support pilot studies by early stage investigators or those new to the field of environmental health sciences.

Funding Support: The maximum award will be \$25,000 in direct costs which must be spent over 12 months. If a community partner plans a key role in science, an additional amount of \$5k may be requested to support the research lead by the community partner.

Eligibility Criteria:

- Eligibility is limited to full-time faculty (all title series including regular, research, clinical and special) of the University of Kentucky.
- This award is open to investigators in the early stage of their career (<u>NIH definition</u>), OR investigators who are transitioning into environmental health sciences.
- Applications must include a research team member that has a track record of NIEHS funding or experience in environmental health sciences research and is a UK-CARES member.



Community-Engaged Research Award

Purpose: This award is to support community-academic partnerships that address critical research needs identified by community partners. The research must address an environmental health issue of significance to Appalachia.

Funding: The award amount is up to \$10,000. The amount will be shared between the community-academic partners to accomplish the goals of the project. This award could be in conjunction to the above awards to support the community partnerships.

Eligibility Criteria:

- This is a Multiple Principal Investigator (MPI) award for a community partner and UK faculty member.
- The UK faculty must be full-time. All title series are eligible. The faculty member must have the appropriate expertise to address the environmental health research needs of the community.

Key Dates

1/6/2025	Call for Letter of Intent released
2/10/2025	Letter of Intent due
2/28/2025	Notice of Meritorious Letter of Intent sent
3/28/2025	Full Application due
4/18/2025	Notice of Award sent
4/18/2025	College Grant Officer (CGO) in the Principal Investigator's college/department will need to initiate an e-IAF for the UK-CARES Pilot Project proposal. The e-IAF should be received in OSPA three business days before the due date of the application. CGO should enter this into the comment sheet: "Do not import the e-IAF until OSPA is notified of funding. These proposals do not go to the Research Administrator in OSPA but go directly to the
	UK-CARES Pilot Project Program managers."
5/1/2025	Project start date NOTE:
	If you do not have an approved IRB/IACUC by 5/1/2025, the start date could be delayed until 6/1/2025.
4/30/2026	Project end date



Scope

Within the general guidelines outlined above, the types of projects that will be considered within this mechanism include projects that:

- Stimulate the development of new inter- and multidisciplinary teams in environmental health sciences.
- Support investigators entering into the field of environmental health sciences.
- Support investigators changing focus within the discipline of environmental health sciences. For example, investigators moving from environmental science related to diabetes to environmental science associated with cancer.
- Promote community-engaged research in collaboration with community partners to conduct environmental health research that addresses community-identified issues in Appalachia, particularly Appalachian Kentucky.
- Provide support for early career investigators.
- Develop new methodologies to leverage institutional strengths and new initiatives.
- Pursue high-risk, high reward studies.

Priorities for Funding

The main priorities for funding are:

- Health topics of interest to NIEHS (https://www.niehs.nih.gov/health/topics/index.cfm) and NIH climate change and health initiative (https://www.nih.gov/climateandhealth), with a specific emphasis on environmental factors associated with cancer and aging.
- Pilot studies which generate critical preliminary data that will lead to subsequent external funding and/or commercial development.
- Multidisciplinary research teams representing the basic, clinical and/or applied sciences with an emphasis on bridging the divisions between basic and clinician scientists.
- Scientific rigor and novelty of the proposed approach.
- At least one UK-CARES Core must be utilized; these can be found at <u>UK-CARES Cores</u>
- Projects that focus on environmental health research needs of Appalachia, particularly Appalachian Kentucky.
- Priority will be given to applications with well-defined future extramural funding plans and timelines (ex. identification of the study section).



Funding Information

Budgets for awarded pilot projects will include direct costs and indirect costs. Proposed costs should be commensurate with the work. Sufficient justification and detail should be provided to validate the need and cost of each item. The budget will be comprehensively reviewed to ensure that the funds being requested are relevant to the research being proposed.

Allowable expenses

- Salary support and fringe benefit costs for the Principal Investigator is required.
- Salary support and fringe benefit costs for staff conducting the research is optional.
- Funds are to be used for the conduct of the project, including supplies, subject payments, assays, etc.
- Travel funds needed for study execution are allowed, if essential.
- Facilities and Administrative (F&A) costs. Use 53% rate, which was in place at the time of the initial UK-CARES award from NIEHS.

Non-allowable expenses

- Travel to conferences is not supported.
- Mentor's time and effort is not supported.
- No funds will be provided for publication costs.

In the event that additional intra/extramural funds are secured to support the study outlined in your application you must immediately notify Amy Thomas (859-323-7395, amy.thomas17@uky.edu). Individual principal investigators will not be allowed to hold more than one UK-CARES pilot research award at any one time.

IRB Guidelines

Applicants will be required to submit proof of IRB/IACUC *Submission* or proof of non-human subjects research at time of Full Application Deadline. If human subjects research, applications without IRB submission prior to that deadline will be administratively disqualified. **If human subjects research**, **applications must have IRB approval no later than May 1, 2025**. Human subjects research projects that do not have full IRB approval by this date will not be considered for funding. Pls of all projects involving human subjects are strongly encouraged to meet with UK-CARES administrative staff for consultation and planning purposes.



Submission Guidelines

Application Style

- Margins must be no smaller than 0.5" at all points.
- Use an Arial, Calibri, Georgia, Helvetica, or Palatino Linotype typeface, a black font color, and a font size of 11 points or larger. (A Symbol font may be used to insert Greek letters or special characters; the font size requirement still applies).
- Type density, including characters and spaces, must be no more than 15 characters per inch. Type may be no more than six lines per inch.
- Each page should provide the applicant's name in the upper right hand corner.
- The application should be numbered consecutively in the center bottom.

Letter of Intent (LOI)

Letters of Intent will be solicited from UK faculty and community partners. The LOIs will be reviewed and a subset of meritorious LOIs will be selected and applicants will be invited to submit full applications. Community partners will need to submit via a UK faculty member due to restricted access to the online submission tool. Late or incomplete LOIs will be returned to the investigator and will not be considered for the funding opportunity.

LOI submission link: REDCap LOI Link

The LOI is limited to 2 pages including all the following:

- Project title (full project title required)
- Describe the science driving the translational effort. Provide concise, clear statements regarding anticipated outcomes of the proposed research and how it will add to existing knowledge or create value, and relevance to environmental health.
- Brief background and preliminary data (if available)
- Hypothesis, Specific Aims
- A paragraph describing study design, methodology, statistics and outcomes. If a community partner is involved, the role of the community partner in the project.
- Project milestones and timeline
- Describe how the pilot grant would facilitate a future external grant
- Describe the UK-CARES Core(s) that will be used in the project
- Required items that are not included in the 2-page limit:
 - o References
 - Key personnel



Full Application Submission Process

If the LOI is meritorious and recommended for submission as a full application, the full application REDCap submission survey will be provided to PIs in the email they receive acknowledging their meritorious LOI. Investigators are encouraged to contact Joel Thompson (joel.thompson@uky.edu) to schedule a meeting to review the basis of your submission, to learn how the UK-CARES Pilot Research Program operates, to learn which UK-CARES services you might utilize for your study, and to devise a budget for your protocol. Full Application page content and page order are defined below.

We also suggest that you consult with the following as you develop your study protocol:

- For Community Engagement consultation and development: Stacy Stanifer, PhD, APRN, AOCNS (srecke0@uky.edu)
- For consultation on analysis of environmental and/or biological samples: Jason Unrine, PhD (jason.unrine@uky.edu)
- For guidance, assistance, and operational support for multi-directional translational and clinical research development of the pilot proposal: John Bauer, PhD (john.bauer@uky.edu).

Full Application Required Components

Cover Page(s)

- Title of the Project and Total Amount Requested
- Grant Category
- Applicant's information for Principal Investigators and Co-Investigators:
 - o Name
 - Degree (s)
 - o Rank, Title (s)
 - College
 - Department / Division
 - o ERA Commons Username
 - Campus Address
 - Contact Information including e-mail and telephone number
 - Please indicate if you are an NIH new investigator or Early Stage Investigator (not having a previous R01)
 - Please indicate clinical privileges
- Mentor's information (Applicable only for Early Stage Investigators): Name, Degree(s) and Rank,
 Campus Address, and Contact Information
- Applicant's Chair Information for each collaborator: Name, Campus Address, and Contact Information



Budget and Budget Justification

Detailed budget and budget justification in NIH format must be provided. See NIH budget templates in the appendix, direct and indirect costs must be included.

Allowable Expenses

- Equipment essential for the conduct of the study
- Data analysis costs
- Research subject incentive costs
- Research assistant and/or citizen scientist salary support
- Project specific specimen collection/analysis or testing
- Chemistry and biological lab supplies
- Purchase of cell lines, culture reagents etc.
- Animal purchase and housing costs
- Specimen or environmental exposure data collection/analysis or testing

Budget must be <u>reviewed</u> by College Grants Officer (CGO) in the applicant's college/department BEFORE submission. Applicants must account for fringe benefit costs for all personnel. 53% indirect cost which was the rate at the time of the parent award from NIEHS are assignable through this mechanism. The indirect cost is in addition to the awarded amount.

For NIH budget templates, please see the RFA Appendix.

Body of the Proposal

The body of the proposal is limited to 6 pages (not including the cover page) including Specific Aims and Research Strategy. The format of the application will follow NIH guidelines as outlined below.

Specific Aims (limited to 1 page)

- State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved.
- List succinctly the specific objectives of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology.



Research Strategy (limited to 5 pages)

Organize the Research Strategy in the specified order using the instructions provided below. Start each section with the appropriate section heading: Significance, Innovation, and Approach. Cite published experimental details in the Research Strategy section and provide the full reference in the Bibliography section. Given the length of the application, investigators should strive to provide a relevant, although not exhaustive bibliographic review (described below).

Significance

- Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
- Explain how the proposed project will improve scientific knowledge, environmental health in Appalachia, technical capability, and/or clinical practice in one or more broad fields.
- Describe how the concepts, methods, technologies, treatments, services, or prevention interventions that drive this field will be changed if the proposed aims are achieved.

Innovation

- Explain how the application challenges and seeks to shift current research or clinical practice paradigms.
- Describe any novel theoretical concepts, approaches or methodologies, instrumentation, environmental exposure data collection or intervention(s) to be developed or used, and any advantage over existing methodologies, instrumentation or intervention(s).
- Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation or interventions.

Approach

- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted as well as any resource sharing plans as appropriate.
- Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.
- If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high risk aspects of the proposed work, including engaging with the community.
- Clearly describe how each partner including citizen scientists will be engaged in the development and/or implementation of the pilot study.
- As applicable, also include the following information as part of the Research Strategy, keeping within the three sections listed above: Significance, Innovation, and Approach.



- Include information on Preliminary Studies. Discuss the Pl's preliminary studies, data, and/or experience pertinent to this application. Preliminary data can be an essential part of a research grant application and help to establish the likelihood of success of the proposed project.
- Address how the completion of the pilot will lead to the development of extramural environmental science grant applications, such as RO3, R21, or RO1 or a Foundation application.

Outreach/Dissemination Plan (if appropriate)

- Clearly describe how the project will facilitate new understandings of environmental factors and their community impacts.
- Include a specific communication plan for how the research team will disseminate findings to address environmental health community concerns, as appropriate. Strategies for disseminating findings may include, but are not limited to: community events (e.g., public presentations, forums, workshops, lunch & learn sessions, science cafes), media advocacy (e.g., radio talk shows, opinion editorials, blogs), social media (e.g., Facebook; X (formerly Twitter)), written materials/website (e.g., fact sheets).

Appendix

- Biosketch in NIH format (current NIH Biosketch template) for PI, Co-PI, and Co-I(s)
- Protection of human subjects section and animal assurances (if applicable)
- Statement of inclusion of women and minorities:
 - Describe the planned distribution of subjects by sex/gender, race, and ethnicity.
 - Describe the rationale for selection of sex/gender, racial, and ethnic group members in terms of the scientific objectives and proposed study design. The description may include, but is not limited to, information on the population characteristics of the disease or condition under study.
 - Describe proposed outreach programs for recruiting sex/gender, racial, and ethnic group members.
 - Inclusion and Excluded Groups: Provide a reason for limiting inclusion of any group by sex/gender, race, and/or ethnicity. In general, the cost of recruiting certain groups and/or geographic location alone are not acceptable reasons for exclusion of particular groups. See the <u>Inclusion of Women and Minorities as Participants in Research Involving</u> <u>Human Subjects - Policy Implementation Page</u> for more information.
- References- Authors, year, title and journal information is expected for each citation. Given the length of the application, investigators should strive to provide a relevant, although not exhaustive review. (Not more than 2-3 pages)
- The required endorsement letter from the primary mentor for early investigators (see below), as well as letters from key personnel and citizen scientists must be included.
- Relevant assessment materials may be included if they are of reasonable length and significantly enhance the review of the application.



• DO NOT submit published manuals, materials in the public domain or similar materials. This is NOT a means of extending the length of the proposal.

Review Process and Criteria

Incomplete applications will not be reviewed. The application will be reviewed by UK-CARES members with expertise in fields relevant to the science in the proposal. These reviewers will be asked to disclose any relationships to the grant applicant. Full proposals will be subject to a standard NIH-type study section assessment. The reviewers will then provide written feedback addressing the merits of the application. All applications will be scored based upon the written reviews, relevance to the Priorities and Scope outlined above, and the overall relevance to the long-termgoals of UK-CARES. You will be notified of the outcome.



The general criteria for review include:

Overall Impact	 What is the project's likelihood to have a sustained, powerful influence on the research field(s) involved?
Significance	 Is the study relevant to goals and the research mission of UK-CARES? Does the study support new and novel areas of investigation in promising transdisciplinary and community-engaged areas of environmental health sciences and environmental medicine?
Innovation	 Are the aims original and concepts novel? Are novel methodologies proposed?
Approach	 Do the specific aims test the hypotheses? Are statistical considerations provided? Is the risk/benefit ratio acceptable? If the project is community focused, is the outreach and dissemination plan appropriate to the aims and feasible given the scope of the project?
Investigators	 Does the investigative team have training, expertise, and experience to conduct the proposed study? As appropriate, are citizen scientists or community organizations involved in and/or supportive of the project? Is this a new investigator? If so, a mentorship team must be identified. The qualification and experience of the mentor, and their plan for career development for the new investigator, will be an important aspect of review.
Environment	 Is the environment strong? Do the investigators take advantage of available expertise? Is there a transdisciplinary team including citizen scientists, as appropriate involved in the study?
Feasibility	 Is the study feasible from the perspective of recruitment and availability of resources?
Potential	 Will the pilot study generate new knowledge that can be published? Will completion of the study lead to external funding or development of a novel or translational methodology? Is there commercial potential? Is there potential to grow community engagement in environmental science? Importantly, will the completion of the pilot lead to the development of an

R01?

extramural environmental science grant application such as R03, R21, or



Awardee Responsibilities

- Once your protocol is fully approved and funding awarded, you should contact Amy Thomas, (323-7395, amy.thomas17@uky.edu) to schedule a working meeting with the UK-CARES units involved with your protocol.
- Successful applicants will be required to provide semi-annually progress reports and a final written report describing project accomplishments must be submitted within 60 days of the project end date.
- Grantees will be expected to apply for membership in UK-CARES, if not a current member.
- Grantees will be expected to submit an abstract to present at the annual UK-CARES retreat.
- Grantees will be expected to present an update of their research progress during the monthly UK-CARES Research Group meeting.
- Grantees who are awarded a community-engaged award must complete UK-CARES' Community Engaged Research Training Module prior to funding being released; more information found at: https://www.research.uky.edu/uk-cares/community-engaged-research.
- UK-CARES is evaluated by the NIH on its effectiveness in stimulating new research findings and publications. The following support acknowledgment should be included on all publications that result from UK-CARES support:
 - "This publication or project was supported by UK-CARES through Grant P30 ES026529.
 The contents are solely the responsibility of the authors and do not necessarily represent the official views of the NIEHS."

Release of Funds

Funding for successful applications will be released upon receipt of IRB/IACUC approval, if applicable. If required IRB/IACUC approval is not provided within a period of 90 days after the announcement of the award, THE FUNDS WILL BE SUBJECT TO CANCELLATION.

RFA Appendix

- NIH budget template (detailed budget for initial budget period)
 - https://grants.nih.gov/grants/funding/phs398/fp4.pdf
- NIH budget template (budget for the entire budget period)
 - o https://grants.nih.gov/grants/funding/phs398/fp5.pdf
- UK Fringe Benefit guidelines
 - https://www.research.uky.edu/office-sponsored-projects-administration/frequentlyneeded-information#fringe-benefits
- NIH Biosketch guidelines (Non-fellowship)
 - https://grants.nih.gov/grants/forms/biosketch.htm



Full Application Checklist

	Cover Page
	Budget (use NIH PHS 398 Form)
	Budget Justification
	Proposal
	□ Specific Aims (limited to one page)
	□ Research Strategy (limited to five pages)
	□ Significance
	□ Innovation
	□ Approach
	 Outreach and Dissemination Plan (if appropriate)
	□ Appendix
	Mentoring and Career Development Plan (early investigators only)
	Mentor Endorsement (early investigators only)
	Letter from Supervisor or Department Chair
Note	es e