

An Initiative of the UK Center for Appalachian Research in Environmental Sciences in Response to the Devastating Floods of Eastern Kentucky

with generous funding and support from:



Introduction

The rainfall on July 27^{th,} 2022 in a 12-county area of Eastern Kentucky was an unprecedented meteorological event even for an area that experiences semi-frequent flooding. Climate-related changes in weather patterns are making these events both more frequent and more intense, leaving a path of destruction that goes well beyond property damage. The National Institutes of Health have recently recognized the ways climate-related weather events impact human health across the lifespan. To that end, they have established the <u>Climate Change and Health Initiative</u> with the intent to develop substantial lines of funding to investigate climate's impact on all facets of human health. This includes increases in disease transmission, increases in heat-related injury from rising global temperatures, increases in food insecurity and poorer nutrition resulting from drought and lost crop yields, negative effects on mental health, as well as many other outcomes. All of these issues are exacerbated by the presence of structural racism and discrimination, putting underrepresented communities and individuals at greater risk for climate-related health impacts.

The mission of this UK for KY Rapid Response Pilot Program is to support research across the spectrum of the University of Kentucky's research portfolio from the perspective of how climate may impact your particular area of interest. This RFA is open to any faculty member in any UK college who can ask a research question through the lens of climate change and how it impacts human health, or what tools or technologies can be developed to help those affected by events related to climate change.

Below we have included the six priority areas NIH developed around climate and health as well as an infographic on the interplay between climate and many areas of human research. If you have any questions regarded your field of research and how climate may impact it, please contact Joel Thompson (Joel.thompson@uky.edu).

NIH Climate and Health Priority Areas:

- 1. Innovative Research that Addresses Climate Change and Human Health
- 2. Scientific Infrastructure to Address Human Health and Climate Change
- 3. Research and Community Partnerships to Address Environmental Injustice and Foster Resilience
- 4. Rapid Research Response Capacity to Address Human Health and Climate Change
- 5. Diverse Workforce to Address Human Health and Climate Change
- 6. Translation and Dissemination of Research Findings and Health Protective Strategies

The UK for KY Rapid Response Pilot Program will accept applications on a rolling basis until October 31. Applications must be submitted via <u>WebCAMP</u>.



source: https://www.nih.gov/climateandhealth

Award Description

Rapid Response Pilot. Investigators may request up to \$20,000 in direct research costs. The project period is 12 months. This award is for investigators at all stages of career development; early career, midlevel, and senior investigators, and is intended to stimulate innovation and to support pilot studies that will lead to extramural funding.

Mini-Grants. Mini-grant proposals may request up to \$5,000. The project period is six months. This award is for investigators at all stages of career development (early career, midlevel, and senior investigators) and is intended to stimulate innovation and support pilot studies that will lead to extramural funding.

The UK for KY Rapid Response Pilot Program will accept applications on a rolling basis until October 31. Submissions will be reviewed and awards granted as applications are received; applicants are encouraged to apply as soon as possible because program funds might be depleted. Submit your application in the WebCAMP Submission Portal. If you're new to WebCAMP, instructions are available here.

Required Documents

- Abstract/Project Summary (300-word limit)
- Short research description up to 3 pages for Rapid Response Pilot Projects and 2 pages for Mini-Grant Projects including Significance, Innovation, Approach as described below. The abstract is not included in this page count
- References
- IRB/IACUC approval letter(s) must be in place for the Mini-Grant and is highly recommended for the High Impact Award.
- NIH biosketch or similar document for faculty listed as study personnel
- Budget and budget justification
- The use of the following forms is REQUIRED: PHS 398 Form Page 4 & 5 "Detailed Budget for the Initial Period" and "Budget for entire project period" found here.

*This pilot program is supported by multiple sources, both federal and institutional. If you are selected for funding and supported by a federal source, PI effort will be added to the award. Funding for this RFA is provided jointly by the UK Center for Clinical and Translational Sciences, UK Center for Appalachian Research on Environmental Sciences, Tracy Farmer Institute for Sustainability and the Environment (TFISE), The Center for the Environment and the UK VPR.

Significance

- Explain the importance of the problem or critical barrier to address the impacts of climate change on the environment or human health.
- Explain how the proposed project will improve scientific knowledge of climate change, impact on the health of those living in Kentucky, and/or advancement or development of technology to benefit the citizens of Kentucky in the event of future climate related disasters.
- Include information on Preliminary Studies. Discuss the PI's or Co-I's preliminary studies, data, and/or experience pertinent to this application.

Innovation

- Include the strength of the research team and how expertise is innovatively being applied to climate and health.
- State how the project will advance the field of climate and health
- Explain how the project challenges and seeks to shift current research
- Describe proposed theoretical concepts, approaches or methodologies, instrumentation, or interventions that: a) are novel and have advantage over status quo, or b) will be refined, improved, or applied in new and important ways.

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.
- Address how the completion of the pilot will lead to the submission of extramural grant applications, such as an NIH R21 or R01.

Award Priorities

The two main priorities for funding are to: 1) develop teams of multidisciplinary researchers to address highly relevant issues related to the impacts of climate change on human health; and 2) generate preliminary data needed to develop strong extramural research grants.

Proposals will be reviewed for the following criteria:

- Address at least one of the six NIH Climate and Health Priorities (listed above)
- Significance of the research on climate change and health
- Scientific rigor and novelty of the proposed approach
- Innovation
- Experience and productivity of the multidisciplinary research team.
- Likelihood of extramural proposal submission by the team within 6 months of the end of the award.

Key Dates

- RFA Release Date: September 2, 2022
- Applications will be accepted on a rolling basis until October
 31. Submissions will be reviewed and awards granted as applications are received; applicants are encouraged to apply as soon as possible, because program funds might be depleted.
- Funding announcement: Late October 2022
- Project Start Date: No later than one (1) month from receipt of the Notice of Award.

NOTE: If you do not have an approved IRB/IACUC, the start date could be delayed.

• You will have one year from your intake meeting to complete a Rapid Response pilot project and six months to complete a mini-grant project.

Funding Details

Allowable Direct Costs

- Funds are to be used for the conduct of the project, including supplies, subject payments, assays, etc.
- Equipment can be purchased if it is absolutely necessary for the execution of the project. All equipment purchased is the property of the funders and will be returned at the completion of the project.
- Travel funds needed for study execution are allowed, if essential. No funds will be provided for travel to collaborator sites or conferences.

Non-Allowable Costs

- Costs associated with clinical trials (inpatient, outpatient, research subject compensation, etc.,).
- Other costs deemed non-allowable per federal guidelines.

End of Project Requirements

Successful applicants will be required to provide semi-annual progress reports and a final written report describing project accomplishments must be submitted **within 60 days** of the project end date.

Questions

For questions regarding this funding opportunity, contact Joel Thompson, PhD, CCTS Research Development Director & Pilot Funding Project Manager <u>Joel.thompson@uky.edu</u> (active link).

Please submit your application using the <u>WebCAMP Submission Portal.</u>

If you're new to WebCAMP, instructions are available <u>here</u>.

Required Documents Checklist

Before submitting your proposal online, please ensure all required documents listed below are *combined into a single PDF* in the following order:

- □ Abstract/Project Summary (300-word limit)
- Short research description
 (3-page maximum for Rapid Response projects and 2-page maximum for Mini-Grant projects)
- □ IRB/IACUC approval letter

- □ PI, Co-PI Biosketch (NIH or equivalent format)
- □ Budget (use <u>NIH template PHS 398</u>)
- Budget Justification
- □ Appendix (references)

The format of the application should follow the NIH guidelines outlined below:

- □ Margins must be no smaller than 0.5" at all points.
- Use an Arial, Helvetica, Palatino Linotype, or Georgia 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.