CLIMATE AND HEALTH INTERDISCIPLINARY AWARDS (CHI)

Letter of intent deadline:

August 31, 2023 (3:00 pm EST)

Invited full proposal deadline:

November 1, 2023 (3:00 pm EST)



TABLE OF CONTENTS

Key Dates	2
Program Background	3
Selection Process	5
Instructions on How to Prepare and Submit a Complete Proposal	6
Terms of Grant / Use of Funds	10

KEY DATES

Letter of Intent due	August 31, 2023 by 3:00pm EST
Invitation to submit a full proposal	September 15, 2023
Full proposal due	November 1, 2023 by 3:00pm EST
Notice of award	February 28, 2024
Award start date	April 1, 2024
Award end date	March 31, 2027

PROGRAM BACKGROUND

The Burroughs Wellcome Fund Climate and Health Interdisciplinary Award provides support for collaborative exploratory work that opens new ground for comprehensively assessing or mitigating the impacts of climate change on human health. This program will support both individual scientists and multi-investigator teams. Early career faculty and postdoctoral fellows nearing their transition to independence are especially encouraged to apply, whether individually or within teams.

Our goal is to prime new discovery in areas that are difficult to reach through discipline-specific, silo-driven approaches. Through this program we will provide flexible funding for conceiving and piloting work that will grow into productive and informative collaborations among researchers approaching connected questions from fields that usually do not interact.

These awards will support research and research coordination to unravel the relationships of climate change and human health. The awards are meant to stimulate development of interdisciplinary and transdisciplinary approaches to problems with interconnected and potentially cumulative impacts on human health in general, and vulnerable populations, specifically.

Climate change impacts the social determinants of health, environmental influences on health, infection biology, and more. Projects must have a significant climate-focused scholarly component: simply stating that climate change influences a chosen aspect of health is insufficient. This does not mean that projects are limited to ones demonstrating the extent to which climate impacts an aspect of health, but rather than the involvement of climate-focused thinking must be substantially greater than stating some aspect of climate change will impact health.

Stimulating and supporting interdisciplinarity beyond frequently-connected disciplines is a key element of this grant program. For example, climate insights might make predictions that biological or epidemiological work might test, or geological thinking might lead to testable predictions about biology or public health.

This program is interested in climate—the complex and long-term group of atmospheric conditions characteristic of a place, and not in weather—the atmosphere's ongoing variation, which can be extreme even in the absence of climate change. Disasters including fires; floods; and damaging weather are health-impacting problems even in the absence of climate change, as are extremes of heat and cold.

All proposed work, including projects focusing on problems like PM2.5 exposure, heat stress, migration after flooding, etc. must include substantial insights about climate change, not simply begin with the assumption that climate change will increase a problem's occurrence. Climate change is a dynamic process: proposed work should not address health impacts as though the climate in which they occur is static.

Projects must draw on the basic or applied biomedical sciences-disciplines ranging from biochemistry to population health, including public health research focused on social justice and equity-collaborating with disciplines beyond biomedicine, for example planetary and earth sciences, architecture, engineering, mathematics, law, public policy, other applied social sciences, communications, field ecology, agricultural sciences, or other disciplines appropriate to the research proposed. We view biomedicine as including veterinary medicine and other clinical disciplines, biology, physiology, development of in vitro and/or organismal models and more.

Proposals should be driven by broad questions that present significant potential for evidence-based discovery. Work that includes consideration of social justice in addition to evidence-based discovery is welcome. Proposed aims must be measurable, well-articulated, substantial, achievable, and must include not only planning activities but also scholarly research findings. Projects in environmental health, health disparities, and One Health are competitive for this program when climate change is addressed as a core element. Solutions and insights from both global and hyperlocal viewpoints are of interest.

PROGRAM BACKGROUND - CONTINUED

Examples of projects might include but are not limited to the following:

- The role of climate change in exacerbating vector borne-, and non-communicable diseases (NCDs)
- Using "big data" to predictively model aspects of health impacted by climate change
- Engineering or architectural approaches to alleviating climate related health risks
- Developing new research tools at the interface of health and climate-informed disciplines

Proposals must be submitted by a single US or Canadian institution, which will serve as the sole payee. Proposed

teams may include researchers from beyond the US and Canada, including those from Low- and Middle-income countries (LMICs).

BWF values diversity, equity, and inclusion both in researchers and in the places research is conducted. We encourage proposals from minority serving institutions and from small, medium, or large organizations in rural, urban, or other settings.

Award recipients will be expected to participate in BWF network development activities and interdisciplinary research career development activities associated with this award.



SELECTION PROCESS

The CHI program uses a three stage application process that begins with a brief pre-proposal. After BWF staff review, a fraction of those submitting pre-proposals will be invited to submit full proposals. Selection will be based on the potential of the proposed project to establish sustainable collaborations that will find new ways to cope with, mitigate, or change the human health impacts of temperature change, ecological changes, or population changes associated with shifts in climate.

A scientific advisory committee with members drawn from multiple interdisciplinary fields will review full proposals.

After review of full proposals, a group of finalists will be chosen. Finalists will be invited to describe their work in an interview with the committee, after which the committee will make recommendations for funding. Up to three awards will be made annually. See Key Dates on Page 3 for important grant deadline dates. BWF does not provide critiques of unfunded proposals.

Selection criteria include:

- Significance
- Feasibility
- Innovation and scientific risk
- Potential impact if successful
- Background and accomplishments of the investigator or investigators proposing the research
- Strength of the collaborative plan
- Institutional environment and institutional commitment
- Relevance to program goals
- Evaluation plan

Postdoctoral fellows and early career faculty applicants should demonstrate that they are in an environment that appreciates the challenges of interdisciplinary work and the extra effort required to build relationships across multiple fields, as documented by a letter of support submitted by each institution.

Applications may be submitted by teams or individuals. Teams must designate one member as a representative who will speak should the proposal make it to the program's final interview stage.

INSTRUCTIONS ON HOW TO PREPARE AND SUBMIT A COMPLETE PROPOSAL

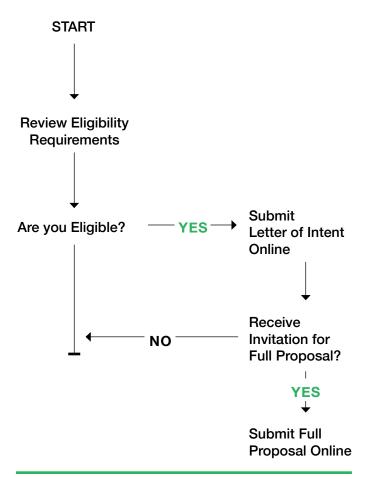
Application Process

Applying for this award is a two-stage process:

- 1. Letter of Intent (LOI). Interested candidates who meet the eligibility criteria will need to submit an online LOI through BWF's Grant Application System by August 31, 2023, 3:00 pm EST. Though the LOI is short, it should be well thought out and prepared with care: only a fraction of those submitting LOIs will be invited to submit a full proposal.
- 2. Full proposals. Submission of full proposals will be by invitation only after review of LOIs. By September 15, 2023, a selected group of applicants will be invited to submit a full application. Instructions on how to prepare a full research proposal (elements listed below) will be provided by email with the invitation to participate. Full proposals will be due November 1, 2023 by 3:00 pm EST. All communications, including the invitation to submit a full proposal and declinations, will be made through email or through the grantee portal. BWF does not provide critiques or written comments of unfunded proposals.

Full application instructions can be found here.

Application Process Workflow



Letter of Intent Elements and Checklist

A complete LOI consists of data entry fields completed in the online application plus several required PDF attachments. The detailed components of the complete LOI are shown below.

Online LOI Proposal Elements

- Proposal Information
- Applicant Information
- Applicant Demographics
- Institutional Information
- Partner Information (if applicable)
- Five Critical Questions
 - 1. What is your proposed research question? (Up to 50 words/~250 characters)
 - 2. How will your interdisciplinary approach shed new light on the question? (*Up to 200 words*)
 - 3. How is the proposed work important for mitigating the impact of climate change on human health? (*Up to 200 words*/~1000 characters)
 - What about your outlooks/backgrounds/training gives you great insight into your research question? (Solo applicants should describe how they will bring in interdisciplinary viewpoints.)
 (Up to 100 words/~500 characters)
 - 5. If the proposed work is successful, how will it change future research and our understanding of how to mitigate the impacts of climate change? (Up to 100 words/~500 characters)
- Signature of Institution's Signing Official

PDF Attachments

A. Biosketch

Use NIH biosketch format. A Biosketch should be submitted for the applicant and the partner (if applicable).

B. Partner's biosketch (if applicable)

Use the NIH biosketch format.

C. IRS Determination Letter

Upload your institution's US IRS letter of determination showing non-profit status.

Note to Applicants

LOIs will not be accepted after 3:00 pm Eastern Time on August 31, 2023. The online application system shuts down automatically at the deadline and the SUBMIT button will no longer be available.

- Plan to submit your application well in advance of the grant deadline to allow adequate time to troubleshoot any issues.
- Out of fairness to all applicants, late submissions will not be accepted. No exceptions or extensions will be granted.
- After the deadline, applicants with incomplete proposals and those not adhering to instructions will be disqualified without prior notice.
- Only proposals submitted through BWF online application website will be accepted.

How to Submit an Online Full Proposal Application

An email will be sent to the invited candidate with a link to the full proposal application.

Full Proposal Elements and Checklist

A complete full proposal consists of data entry fields completed in the online application plus several required PDF attachments. The detailed components of the complete full proposal are shown below.

Online full proposal elements

- Applicant Information
- Applicant Demographics
- Institutional Information
- Partner Information (if applicable)
- Proposal Information
- Budget and Budget Justification
- Signature of Institution's Signing Official

Proposal Attachments

A. Institutional Letter of Support

Institutional Letters of Support are required by the primary applicant as well as from all partner institutions. The Institutional Letter of Support should be written on behalf of the applicant's institution by the chair, dean, division director. executive director or other senior official who can best communicate the institution's commitment to the applicant and the applicant's fit within the institution's plans and ambitions. This statement of the institution's investment in and commitment to the applicant's scientific, academic, and personal development is a critical part of a successful application for this award. Letters that lack detail, specificity, or clear enthusiasm for the applicant and the project can undermine an otherwise competitive proposal.

- The letter should describe the focus and direction of the institution's programs that are relevant to the proposed work and discuss how the proposed project fits into the organization. The letter should also describe all program and institutional support that will be provided for the candidate, including such things as salary support, and protection of a portion of the grantee's time for the project.
- The letter must contain a signature and a signature block and be on institutional letterhead.
- The letter should be forwarded to the applicant for inclusion in the online application.

B. Biosketch

Use NIH biosketch format. A Biosketch should be submitted for the applicant and the partner (if applicable).

C. Project Plan

(5-page limit) In no more than five pages (including figures, tables, graphs, and images), describe the Project Plan. It should be a complete, cohesive, and coherent document that is easy to read. In the order listed below, the plan should describe:

- Specific aims.
- Background and significance.
- Details of the proposed project.
- Long-term objectives.
- Use standard 11- or 12-point font for the text, and no smaller than a 9 to 10-point font for figures, legends, and tables. This requirement will be strictly enforced. Text must be single-spaced, with one-half inch or larger margins on all sides. Number the pages of the research plan. Do not include a table of contents or appendices.

D. Timeline and Plan for Proposed Project (2 page limit)

In no more than two pages, describe the timeline for the proposed project. Use standard 11- or 12-point font. Text must be single-spaced, with one-half inch or larger margins on all sides.

E. Reprints (optional)

Provide up to three publications or manuscripts submitted for publication that demonstrate the applicant's capabilities and relevant research accomplishments.

F. IRS Determination Letter

Upload your institution's US IRS letter of determination showing non-profit status.

Note to Applicants

Full proposals will not be accepted after 3:00 pm Eastern Time on November 1, 2023. The online application system shuts down automatically at the deadline and the SUBMIT button will no longer be available.

- Plan to submit your application well in advance of the grant deadline to allow adequate time to troubleshoot any issues.
- Out of fairness to all applicants, late submissions will not be accepted. No exceptions or extensions will be granted.
- After the deadline, applicants with incomplete proposals and those not adhering to instructions will be disqualified without prior notice.
- Only proposals submitted through BWF online application website will be accepted.

Questions?

Eligibility inquiries should be directed in advance to BWF program staff by contacting:

Victoria McGovern, Ph.D., Senior Program Officer vmcgovern@bwfund.org, 919-991-5112

Darcy Lewandowski, Program Associate dlewandowski@bwfund.org, 919-991-5132

TERMS OF GRANT / USE OF FUNDS

Awards will be for a **total of \$375,000** to be distributed over **3 years**. Three rounds of grants are planned. Approximately three awards will be made in each round.

The Burroughs Wellcome Fund does not provide institutional overhead and indirect costs may not be charged against this award. Administrative support for teams' work and benefits for salaries paid by the award are allowable as direct costs. This award can be used to buy out investigators' and collaborators' time as well as for traditional project-related costs.

BWF makes awards to public or private non-profit organizations in the United States and Canada, including degree-granting academic institutions, research institutes, teaching hospitals, scientific societies, and other non-profits on behalf of the principal investigator. The payee institution is responsible for disbursing funds and for maintaining adequate supporting records and receipts of expenditures. Payee institutions may budget to support collaboration with researchers in LMICs.

The support allocated for research is under the control of the principal investigator and may be used flexibly for items such as equipment, consumable supplies, meetings of the collaborative team, publication costs and travel to scientific meetings. Awards may have up to three co-Pls, but the award will be paid to a single institutional unit. Postdoctoral fellows may serve as co-Pls. Prior approval by BWF is required when, within an award year, purchases of equipment exceed \$20,000 or travel costs exceed \$8,000.

During the award period, unused research funds may be carried over to the succeeding year. The principal investigator may receive a no-cost extension; requests explaining why an extension is needed must be submitted in writing at least two months prior to the end of the award. At the termination of the grant period, grant balances of \$500 or less may be retained by the institution.

For grant recipients in the U.S., the administrative fee is intended to cover the cost of medical insurance and other benefits, such as retirement. For grant recipients in Canada, the administrative fee is to be used as a contribution to the employer's benefit plan.

Award recipients may not hold concurrent BWF awards.