



Research Fund

Health impacts of climate change: assessment and new approaches for adaptation

Call for proposals

April 2022

Health impacts of climate change: assessment and new approaches for adaptation

The World Health Organization (WHO) warns **that climate change is the single biggest health threat facing humanity. Nearly 150,000 deaths are caused directly by climate hazards every year, a number that is expected to double by 2030¹**. In addition, climate risks are contributing to **a growing number of adverse physical health effects and emerging environmental outbreaks**, among which are included² **respiratory illnesses** (such as asthma and cardio-respiratory diseases) **due to climate extremes, allergic respiratory diseases given earlier spring pollen seasons**, and **exacerbation of several vector-borne diseases and zoonoses** (including malaria, dengue, and other insect-borne infections) **due to temperature rise**. The trauma associated with these extreme weather conditions, is also negatively impacting peoples' mental health³.

According to the IPCC⁴, **if global greenhouse emissions remain at their current level, global warming will exceed 2°C above pre-industrial levels by 2050 with huge consequences on human health** such as severe dehydration, respiratory diseases, acute cerebrovascular accidents and thrombogenesis⁵.

The European Centre for Disease Prevention and Control (ECDC) ranks **climate change among the most frequently implicated “drivers” of infectious disease threats⁶ while biodiversity loss, associated with climate change in many ways, is putting the lives of over 88 million people⁷ at risk** by exposing them to **malnutrition** due to **food and water insecurity and intestinal infections⁸**, especially in the Global South – which confirms the latest IPCC findings⁹ underlying that increased warming, heatwaves and droughts are hindering efforts to achieve the UN goals of ‘zero hunger’ and ‘water for all’¹⁰ and worsening inequalities between and within countries across the world.

Air pollution, which is associated with climate change as both cause and consequence, is also a major hazard to health. According to the WHO **over 90% of the population is breathing unhealthy levels of air pollution mainly because of burning fossil fuels¹¹**, which are inducing climate change and increasing the risk of developing several chronic diseases (stroke, respiratory and cardiovascular diseases, and lung cancer)¹² while incurring economic costs.

Climate change is increasingly visible worldwide and results in more frequent extreme weather conditions such as heatwaves and droughts, wildfires, high rainfall, and more violent storms. It is also contributing to rapidly melting ice and sea level rise. **Combined, these factors cause biodiversity loss and food-systems disruption and undermine access to safe water resources, pure air, and nutritious food supply**, thereby **creating new health risks** given the **significant impact on human lives**. The IPCC latest's assessment report¹³, which points out these facts, also emphasizes the growing threat climate change is representing to essential

¹ [The Health Effects Of Global Warming: Developing Countries Are The Most Vulnerable | United Nations](#)

² [WG2AR6_FD_Ch07_Final\(ipcc.ch\)](#)

³ [Climate change and health \(who.int\)](#)

⁴ [Climate change widespread, rapid, and intensifying – IPCC – IPCC](#)

⁵ [Heatwaves \(who.int\)](#)

⁶ [Tracking infectious diseases in a warming world | The BMJ](#)

⁷ [Already Up 20 Per Cent, Acute Hunger Driven by Conflict, Instability Risks Increasing Further Due to Climate Change, COVID-19, - Rechercher](#)

⁸ [Climate change: fires, floods, and infectious diseases - The Lancet Microbe](#)

⁹ Ibid

¹⁰ [Sustainable Development Goals \(SDG 2\) | United Nations Western Europe \(unric.org\)](#)

¹¹ [fast-facts-on-climate-and-health.pdf \(who.int\)](#)

¹² [Air pollution: how it affects our health — European Environment Agency \(europa.eu\)](#)

¹³ Ibid

services' access such as healthcare, energy, and transport systems, mainly in urban areas - including informal settlements.

While there is solid evidence of the significant impacts climate change has on human health, **more scientific knowledge on these interrelated links is urgently required to accelerate awareness and to develop effective adaptation and mitigation strategies to preserve planetary and human health.**

In this context, the AXA Research Fund is seeking to support post-doctoral research geared towards assessing, identifying, quantifying, and understanding the impact climate change has on human health and exploring solutions to mitigate these new health risks.

We will look for innovative and transdisciplinary research projects, at local, regional, or global scale, in urban or rural contexts, which will focus on the following areas:

- **Climate change's impact¹⁴ on infectious** (dengue, malaria, zoonoses...) **and other communicable diseases**
- **Climate change's impact¹⁵ on non-communicable** (such as chronic) **diseases**
- Innovative modeling methods and tools for **assessing climate change's risks and impacts on health considering regional differences in exposure and vulnerability**
- Novel approaches aimed at **sustaining adequate supply of safe food and water in the wake of climate change and biodiversity loss**
- Transformative approaches **to make cities healthier and more sustainable** – notably through air quality, housing, energy, water, sanitation, and transportation systems as well as nature-based solutions – **under climate and environmental impacts**
- Innovative responses **to help health systems cope with the impacts** of infectious diseases, heat stress and other **climate-related risks** as well as the trauma associated with extreme events

¹⁴ Including environmental factors such as air quality, heat, and weather patterns

¹⁵ Including environmental factors such as air quality, heat, and weather patterns

AXA Fellowships Guidelines

AXA Research Fund

The AXA Research Fund's mission is to support outstanding researchers and it is committed to improving peoples' lives through innovative research in areas of Climate & Environment, Health, and Socioeconomics.

AXA Fellowships aim at supporting promising early-career researchers, **defined as no more than five years past the completion of their PhD**,¹⁶ on a topic aligned with AXA's priorities and societal challenges. The support of the AXA Research Fund should be transformative for the researcher and the advancement of their field. To apply for a grant, **researchers must not have a permanent (tenured or tenure-track) position.**

Duration

An AXA Postdoctoral Fellowship is awarded for a period of **2 years**.

Institution Eligibility

The project calls are global. However, the AXA Research Fund partners with academic institutions only; thus, NGOs, governmental bodies, foundations, independent research centers, cultural institutions (such as museums), and hospitals are not eligible.

Each institution can present at most ONE CANDIDATE (for the entire institution, *not* one per department, faculty, or laboratory). **In case of several Expressions of Interest submitted from a single institution, all applications would be disqualified.**

Institutions hosting an AXA Chair cannot request an extra Post-Doctoral fellowship for a researcher working on the AXA Chairholder's team.

Researcher

Candidates should be of the highest caliber and have demonstrated outstanding research achievements, as evidenced by the usual indicators for assessing academic excellence such as research outputs (e.g., publications, citations), research activities (e.g., organizing networks, being involved in communities) and research impact (e.g., policy reports, specific recognition through awards, etc.).

AXA Fellowships aim at supporting promising early-career researchers who have been holding a PhD no longer than five years.¹⁷ **Candidates must be awarded their PhD before they submit their Expression of Interest. Candidates must have already defended their PhD certification before applying.**

Research Program

The research program should demonstrate its scientific originality and innovative nature and have the potential to contribute to a step change in the considered field. It is the applicant's responsibility to demonstrate the relevance of the proposed research topic to the AXA Research Fund.

Engagement and Obligations

Researchers are required to be proactive in engaging science with society when supported by the AXA Research Fund and use an open-data framework when applicable. Our researchers commit to sharing their project and communicating their research to a broad audience, supported by the AXA Research Fund. In addition, funded researchers agree to provide both an annual and a final project report, as well as committing to sharing their research through speaking engagements in collaboration with the AXA Research Fund. Annual and final financial reports will be requested as well.

¹⁶ There is a flexibility of 6 months regarding PhD date (i.e., PhD max 5 full years + 6 months), at the Expression of Interest date (i.e., April 28, 2022) i.e., PhD defended after **October 28, 2016**

¹⁷ There is a **flexibility for maternity/paternity leave: 6 months per child**. (For example, a candidate who has three children can consider 18 months).

AXA Support for Dissemination and Career Development

The AXA Research Fund will provide support through proposed training sessions related to science communication, media, finance, and management. Furthermore, attention will be given to the opportunity for the grant to deliver a significant step-change in the career of the grantee.

Diversity

Diversity will be an important criterion in the selection process, as applied to the research topic, gender and geography.

Budget and Grant Allocation

An AXA Fellowship is awarded for a maximum amount of **125,000€ in total, to be spent over the two years**. It is the applicant's responsibility to submit a carefully calibrated budget, appropriate for the ambition of the research program and justified in a detailed and coherent manner. The budget will help cover:

- Annual salary of the researcher (based on institution internal policy)
- Equipment/resources (databases, survey costs, consumables, etc.), academic activities (conferences, workshops, fieldwork, etc.)
- Outreach activities (beyond academic audiences).

Any other type of costs not listed above should be justified in the application template. **No overhead costs are eligible**. No additional budget will be granted. Budget reallocation during an ongoing project must be strongly justified.

Host institutions will be expected to participate in the AXA Fellowship's general funding with studentships, PhD support and material resources related to the research program. There is no minimum requirement on the institution's contribution. However, a larger contribution naturally makes the proposal more attractive. The institution's participation should be detailed in the budget section of the application form. Grants should not substitute for the host institution's responsibilities vis-à-vis its researchers. As a result, the grant cannot be used to procure basic laboratory equipment.

The AXA Research Fund will formalize its support through a **sponsorship agreement to be signed with the host institution**.

Ethics

The AXA Research Fund places extremely high importance on the ethics of the work it supports. Programs are required to comply fully with all relevant ethical review processes and for this compliance to be evidenced. Cases of scientific misconduct (such as fabrication, falsification, plagiarism or inappropriate behavior towards staff or other parties) will be considered as breaches of the AXA ethical principles¹⁸ and will be excluded from funding.

Intellectual Property

The researcher and the host institution remain fully independent to conduct the research project. AXA will not claim any right to the ownership or use of the results.

¹⁸ AXA Group Compliance and Ethics Code, 2019: [Compliance and Ethics Code | AXA](#)

Timeline & Application process

The AXA Research Fund's evaluation process has been designed to assess scientific excellence. The evaluations are monitored to ensure transparency, fairness, and impartiality in the treatment of proposals.

The AXA Research Fund partners with independent external providers to carry out the peer review process in accordance with criteria defined by the AXA Research Fund, the results of which are submitted to the Scientific Board for final selection. Please note that:

- The complete application must be submitted in English, on time, and online. It must respect the template structure and the page limit.
- The research topic must fall within the scope of the eligible topic focus.
- The candidate must submit a free-standing independent research project involving full-time work for the duration of the fellowship (with the possible exception of up to 20% time dedicated to teaching).

Timeline

Host institutions phase	Step 1 - Registration <i>Only if your institution is not already registered on the AXA Research Fund's online platform.</i> <i>Registrations must be submitted at least 4 days before the Expression of Interest's deadline (see below)</i>	April 5th, 2022 – April 22nd, 2022 4 PM Paris time
	Step 2 - Expression of interest <i>On the AXARF platform</i>	April 5th, 2022 – April 28th, 2022 4 PM Paris time <i>Please note that our office will be closed on April 18th due to public holiday.</i>
Researcher's phase	Step 3 - Research proposal submission <i>On the ESF platform, our partner organization (online link to be provided on due time)</i>	May 6th, 2022 – June 3rd, 2022 4 PM Paris time
	Step 4 - Rebuttal <i>On the ESF platform</i>	September 16th, 2022 - September 22nd, 2022 Noon Paris time
AXA Research Fund	Results announcement by email to the candidates and published on our website: AXA Research Fund (axa-research.org)	December 2022

Projects selected for funding are expected to start between December 2022 and September 2023.

Application process

Step 1 – Registering

To apply for the AXA Fellowship grants, academic institutions must be registered on our platform: <https://institution.axa-research.org/>. You can check if your Institution is already registered in the database via the above link. **If your institution is already on our database, you can skip the registration and your Institution’s operational contact can log in directly using the login details they defined.**

Institutions should appoint a single point of contact (“Operational Contact”) who will handle relations with the AXA Research Fund and be responsible for candidate’s application.

Step 2 – Expression of Interest **ON OUR ONLINE APPLICATION PLATFORM**

Only host institutions can apply, applications cannot be directly submitted by individual researchers.

To submit an online Expression of Interest, host institutions need to follow the steps below:

1. **Log onto our online application platform:** <https://institution.axa-research.org/>
2. **Go to the “Application” tab and click the “Post-doc” link to go to the “Expression of Interest” page**
3. **Click “New” and fill in the online Expression of Interest form. Attach a short CV (3 pages maximum)**
4. **Click “Submit”**

At the stage of Expression of Interest, you will be requested to provide the following information:

- About the candidate
 - Name
 - Birth date
 - PhD defense date
 - Current university the candidate is affiliated with
 - Short CV (3 pages maximum)
- About the research program
 - Project’s description: 3000 characters including spaces

You will receive an email confirming that your Expression of Interest has been submitted. If you don’t receive the email, please check your spam folder, and, if needed, contact fellowships@axa.com

You will be able to edit your Expression of Interest as long as you have not clicked on “Submit”. Once submitted, your Expression of Interest can no longer be edited. The Expression of Interest will be reviewed by the AXA Research Fund. You will be informed of the decision pertaining to your Expression of Interest by email.

Expressions of Interest received after the deadline, by email, or incomplete will not be considered.

Step 3 – Full Application

Academic institutions will be given access to the dedicated ESF platform to nominate their candidates by entering their name & email address online. Nominated candidates will be invited to submit their research proposals and will be provided with the necessary information to access the application form. Eligibility criteria of the application call will be screened by our partner organization.

Candidates will have 4 weeks to submit their proposals through the ESF platform. Please note that if the host institution doesn’t nominate the candidate on the ESF platform, the candidate won’t have access to the platform.

Applications received after the deadline, by email, or incomplete will not be considered.

Step 4 – Scientific Assessment

The evaluation of the scientific quality of research proposals is carried out in a fully independent manner by our partner peer-review organization.

Each application is reviewed by two relevant experts who will assess the candidate's excellence and the research program's scientific quality.

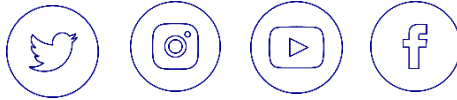
Step 5 – Rebuttal

Candidates will have the opportunity to respond online to peer review experts' comments before their applications are reviewed by the AXA Research Fund. The main purpose of the rebuttal is to provide applicants with the possibility to comment on any potential misinterpretations or misunderstandings that may have been made by the experts while initially assessing their proposals.

Step 6 – Selection & Results Publication

The Scientific Board of the AXA Research Fund selects to fund applications based on strength of the scientific case, peer review assessments, the potential of the project, candidate profile and of the institution and overall impact. The AXA Research Fund informs the candidates of the decisions by email. Results will also be made available on the AXA Research Fund's website ([AXA Research Fund\(AXA-research.org\)](http://AXA Research Fund(AXA-research.org))).

The Scientific Board's decision is final and cannot be appealed. It can neither be disputed nor subject to explanations or justifications. Participation in the call for applications implies acceptance of the above-mentioned rules.



AXA Research Fund – 25 avenue Matignon, 75008 Paris