

Funding opportunity

Centre in climate change and health

Opportunity status:	Closed	
Funders:	Economic and Social Research Council (ESRC), Arts and Humanities Research Council (AHRC), Biotechnology and Biological Sciences Research Council (BBSRC), Medical Research Council (MRC), Natural Environment Research Council (NERC), Engineering and Physical Sciences Research Council (EPSRC), UK Research and Innovation	
Funding type:	Grant	
Total fund:	£9,700,000	-
Award range:	£5,000,000 - £9,700,000	-
Publication date:	3 February 2023	-
Opening date:	1 February 2023	-
Closing date:	17 May 2023 4:00pm UK time	

Apply for funding to establish a centre in climate change and health.

This centre will be a world-leading centre of excellence that carries out interdisciplinary, cutting-edge and impactful research to address major challenges at the interface of climate and health research.

You must be based at a UK research organisation eligible for UK Research and Innovation (UKRI) funding.

This centre will be jointly supported by the funders involved, and ESRC will lead the commissioning process on their behalf.

The full economic cost (FEC) of your project can be between £5 million and £9.7 million. UKRI will fund 80% of the FEC.

Funding is available for up to 5 years.

Who can apply

The principal investigator for this funding opportunity can be from any discipline but must be based at an organisation eligible for UKRI funding for the duration of the grant.

Eligible organisations are:

- UK higher education institutions (HEI)
- research council institutes
- UKRI-approved independent research organisations
- public sector research establishments
- NHS bodies with research capacity

Check if your institution is eligible for funding.

This funding opportunity is being administered by ESRC on behalf of UKRI.

Standard ESRC eligibility rules for co-investigators apply.

It is likely that successful applications will be led by experienced researchers who are internationally recognised, with proven ability to deliver a large-scale project successfully and lead an investment of this nature.

The amount of time committed to the grant by the principal investigator and coinvestigators must be costed into the proposal, but very small fractions of coinvestigator time should be avoided.

Our standard research funding rules apply for staff engaged in more than 1 grant (see the **<u>ESRC research funding guide</u>**).

Co-investigators and collaborators

International co-investigators can be included in proposals.

Academic researchers (at PhD or equivalent status) must be from established overseas research organisations of comparable standing to UKRI-eligible UK research organisations to be listed as international co-investigators under this funding opportunity.

Applicants should note **ESRC's policy on the inclusion of international coinvestigators** on proposals.

International collaboration is not limited to co-investigators but may also involve partnerships to:

- develop international datasets
- promote knowledge exchange and international impact
- enhance research development on an international scale

We welcome inter-institutional applications and strongly encourage collaboration to fulfil the aims of the centre.

Partnerships are encouraged with non-HEI organisations and across third sector, business and the public sector, either as project partners or as co-investigators.

We will fund all justified costs associated with international co-investigators and coinvestigators from UK business, civil society or government bodies at 100% FEC. However, these combined costs must not exceed 30% of the full 100% FEC cost of the grant.

Demand management

Applications to the centre in climate change and health will not be counted in the demand management measures in place for ESRC's open centres funding opportunity.

Please note that proposals for this centre cannot also be submitted through ESRC's open centres funding opportunity. Applicants submitting the same or a similar proposal to this funding opportunity and the open competition will be withdrawn from the open funding opportunity.

What we're looking for

About the centre

We are looking for a centre that will find solutions to address the challenges that climate change poses to population health, in a way that enhances both environmental and health outcomes.

The centre will bring together the right people, disciplines, institutions, and infrastructure to deliver impact within a 5-year timeframe. The centre will form part of a portfolio of investments under the UKRI securing better health, ageing and wellbeing strategic theme, as set out in the <u>UKRI strategy 2022 to 2027</u>.

Disruptions to Earth's natural systems, caused by human activity, are already having a detrimental impact on our health and wellbeing. Climate change has wide ranging impacts on the environment including:

- biodiversity and habitat loss
- disruption to food systems
- water scarcity
- flooding
- extremes of temperature

These in turn are having direct and indirect effects on aspects of human health, including nutrition, mental health, and diseases (both infectious and non-communicable).

Climate change and human health do not exist in a vacuum and are part of broader complex systems and relationships. This is central to the concept of planetary health, which describes how the health of humans and other living organisms are inextricably linked and how these in turn depend on Earth systems that sustain life. The issue of intergenerational justice is pertinent here as well: that is, what we owe to future generations.

The centre will accelerate understanding of the links between climate change and human health across the life course. It will form an evidence base and develop solutions which will propel decision makers towards sustainable, transformational action within the lifespan of the award and beyond.

We know that adaptation, decarbonisation and mitigation strategies designed to address climate change can impact human health in various ways. Moreover, health interventions can have positive or negative impacts on environmental quality.

This centre will take account of co-effects when targeting solutions to climate change and health challenges. For example, the potential for climate change mitigation and adaptation strategies to have positive and detrimental impacts on health or the environment. A key focus of the centre should be on interventions to address upstream determinants (including mitigation, adaptation, and resilience), rather than down-stream individual-level factors.

The drivers of climate change and human health are embedded in complex systems, relationships, and boundaries. The centre will identify how these oftenintersecting drivers affect both climate and health (for example, environmental factors such as biodiversity loss or land use change, culture, economic, technological, legal, and political systems).

The centre should apply systems thinking and methods, to ensure that solutions are developed and delivered with a deep understanding of the mosaic of factors at play.

This approach calls for input from a variety of disciplinary backgrounds. We encourage applications that integrate perspectives from across the disciplinary remits of the research councils involved in this funding opportunity, to bring different partners and sectors together to co-develop solutions. There should be meaningful links to policy makers and end-users.

Areas in scope

In your proposal you should describe the challenge your centre would address. The centre should identify a range of questions relevant to an overarching challenge, rather than narrowly focusing on 1 specific topic. You should describe how the centre would adopt interdisciplinary and whole systems approaches.

We provide some broad examples of areas in scope below, but they are not exhaustive, and we encourage applicants to think creatively about potential challenges and the impacts that could be achieved. Vulnerability to the effects of climate change on health including understanding biological mechanisms is in scope. For this centre we are interested in population-level variation in these impacts, for example, increased vulnerabilities to the effects of climate change in particular population groups, and how mitigations might have a protective effect. Those most at risk may include, but are not exclusive to, individuals and groups at vulnerable stages of the life course, with established disease or those disadvantaged by inequalities. Effects on animals are only eligible for inclusion where relevant to human health (for example, on nutrition).

Also in scope are the wider factors that influence individual and group health behaviours, and how these are influenced by the social, physical, technological, political and economic environment. How can we use this understanding to shape ethical solutions to mitigate climate change impacts on health and to support resilient communities? This could include a consideration of legal frameworks, the built environment, and of cultural, heritage and environmental assets (for example, museums, historic monuments, rivers, parks).

Proposals may consider new ways to use data, machine learning and technology to improve our understanding of climate change and its risks to health, and novel technology solutions to address these risks. This could include challenges for technology integration and may incorporate a consideration of how best to reengineer complex healthcare systems challenges to deliver early intervention for climate-related health risks.

The centre could include a focus on food and nutrition, providing links are made through to impacts on both human health and the environment. This could include developing a better understanding of the impact of climate change on nutrition security across the food system. It might also encompass an exploration of the link between climate change and the health and nutrition of soils, crops, and livestock as well as the health of consumers (including access to quality food).

As the impacts of climate change are not experienced equally across society, the centre should include health, social and environmental inequality as a cross-cutting theme. Meaningful co-creation with affected communities across the research lifecycle is strongly encouraged, and relevant costs to support this should be included. The centre will work in partnership with a variety of stakeholders to ensure the research outputs drive forward and deliver benefits to both the environment and health.

The centre should be primarily focused on the UK. A place-based approach may be acceptable, for example with a focus on a geographically defined community, if justified by the research proposed. Where this approach is taken, potential for wider scale up and applicability must be demonstrated.

Proposals can include an international element where justified, including learning from international approaches and demonstrating leadership through applying UK learning elsewhere, but proposals focused entirely outside the UK are out of scope. International co-investigators are eligible.

We expect to fund a single centre through this funding opportunity.

The research will address a gap that is not being addressed elsewhere that can be delivered within a 5-year timeframe.

Research challenges

You must demonstrate that your centre will deliver:

Research

High-quality, interdisciplinary, internationally recognised research findings to address unanswered questions about a defined challenge to our society or economy.

In this case, the centre will need to clearly articulate how the proposed programme of interdisciplinary research addresses challenges climate change poses to health in a way that promises co-benefits to both the environment and health.

You should include details of any innovative research methods that you intend to develop and use, including in evaluating the impact of potential solutions.

Impact

Significant economic and societal impact, demonstrating that the centre is responding to its specified challenge.

Impact should be a major consideration throughout the scoping of a proposal, and during and beyond the lifetime of a centre.

Impact should be multisectoral, with evidence of user engagement from inception throughout all stages of the planned timeframe for the award.

Centres should consider other investments in terms of adding value to their centres, for example maximising opportunities through impact acceleration accounts.

You must include a logic model in your case for support demonstrating the changes the centre will bring about to respond to the challenge, and how and why your programme of research will bring about those changes.

Further resources to support the development of a logic model can be found under 'Supporting Documents' in the 'Additional information' section.

Capability

The resources needed to become a centre of excellence that adds value to the wider community. This includes developing the people, producing the data and creating the infrastructure needed to respond to their specified challenge.

Career and skills development

You should clearly articulate your plans for career development.

UKRI is a signatory to the Concordat to Support the Career Development of Researchers, and the Technician Commitment. Through these, UKRI commits to

support the professional and career development of researchers and technicians through its funding opportunities. You are encouraged to consider both leadership development and capacity building in your plans.

Leadership development skills should be considered at all career stages to equip researchers in the centre with the leadership skills needed to be able to design, lead and deliver large and complex or interdisciplinary projects and teams.

Research leadership should go beyond project management to include a capacity to enthuse, ignite and sustain an intellectual vision that is inclusive, flexible and open to challenge. The ESRC-commissioned report <u>fit for the future: research</u> <u>leadership matters</u> gives insight into the skills related to research leadership at different career stages and some preliminary suggestions for how those skills might be supported across the career life-course.

You should also demonstrate how you plan to build capacity, for example through the development of both academic and non-academic skills for research staff and technicians at all career levels, from PHD students to early and mid-career academics to established professors.

Up to 3 associated studentships may also be included in this application, for those Doctoral Training Partnerships eligible to receive studentships from 2024.

Data

There is a significant opportunity to better integrate health and environment data to explore the intersection and develop interventions.

Centres should maximise the use of relevant existing data resources in the first instance, as well as (where appropriate) producing data that responds to their proposed challenge and is of value to the wider community.

Data collection and management should be in accordance with the **ESRC** <u>research data policy</u>. UKRI funds a range of data infrastructures that are available and free to use for all bona fide researchers (subject to appropriate data sharing considerations).

Management and structure

You should consider the structure of your proposed centre to ensure it can successfully deliver the objectives of the funding opportunity, whether through a consortium approach or single institution.

The centre should span a range of distinct disciplines and we also encourage the inclusion of different organisations within each proposal. Partnerships with non-higher education institution organisations across government, industry and civil society are also encouraged, where appropriate.

You should consider existing funded research, including from UKRI, to ensure that the centres' research objectives are novel. The centre will be required to collaborate and engage with a wide range of stakeholders, including existing relevant research activity. This should evolve over time, but might include the

transforming UK food systems programme, clean air programme, mobilising community assets to tackle health inequalities and the UK Prevention Research Partnership. Your proposal should not duplicate current and previously funded research.

We encourage applications from individuals with diverse backgrounds and experiences, either as principal investigators or co-investigators.

You must include a brief management plan in your case for support, demonstrating:

- how you will provide leadership across the collaborators
- how the management of the centre and its activities will be carried out, including details of project management and administration resource

You should also include details of the advisory group that will be appointed to oversee the development of the centre.

You are also expected to indicate your plans for monitoring your progress against your logic model, and any plans for self-evaluation throughout the lifetime of your award.

The successful centre will be allocated an ESRC investment manager who will work with their centre to agree a monitoring and evaluation plan in the starting phase of the award.

You may propose a title for this centre.

Institutional support

We will be looking for evidence of long-term strategic and financial institutional commitment to the proposed centre, above the required 20% (as UKRI funds at 80% FEC). This should be through the provision of grant-associated parallel activities. Examples include but are not limited to:

- studentships
- summer schools
- refurbishment of facilities for the centre
- provision of equipment
- administration
- new lectureships

Outline proposals must include an institutional letter of support from the pro-vice chancellor of research (or equivalent role) from the lead organisation that confirms the research organisation's commitment to the centre application. If the application is from an existing UKRI investment then this should be noted in the letter of support.

Research ethics

You must ensure that the proposed research will be carried out to a high ethical standard.

You must clearly state how any potential ethical, safeguarding and health and safety issues have been considered and will be addressed, ensuring that all necessary ethical approval is in place and all risks are minimised before the award commences.

All proposals, including those involving animal and human participants, must comply with relevant UKRI policies and the **ESRC framework for research ethics**.

Equality, diversity and inclusion (EDI)

Promoting EDI is an integral part of UKRI's vision to deliver new knowledge and an enriched, healthier, more sustainable and resilient society and culture, and to contribute to a more prosperous economy.

You are expected to demonstrate throughout your proposals how you will consider EDI during the centres' lifetime.

Environmental sustainability

UKRI recognises that we must embed sustainability in everything we do.

You are expected to consider the environmental impact of the centre's activities and to put in place actions that encourage sustainability and mitigate any risk of environmental harm.

How to apply

Outline proposals must be submitted to the Joint Electronic Submission (Je-S) system by 17 May 2023 at 4:00pm UK time.

Electronic acknowledgements will be sent to the principal investigator and submitting organisation.

All proposals must be submitted in English, costed in pounds sterling using the Je-S system.

Proposals can only be accepted by electronic submission through the Je-S system.

The proposal has 2 elements:

- an online form requesting key information
- a series of mandatory attachments, including:
 - case for support
 - justification of resources
 - institutional letter of support
 - list of key publications
 - CVs for all named individuals

All attachments should be completed offline and uploaded as attachments in Je-S. We recommend uploading attachments as PDF documents.

Generic guidance on the completion of the structured boxes and sections of the form is available from the Je-S help screens, which can be found at the top right-hand corner of each Je-S screen.

You must ensure that you have read and complied with:

- the funding opportunity specific guidance set out in the <u>Je-S guidance (PDF</u>, <u>251KB)</u>
- the assessment criteria set out in this funding opportunity specification

Where funding opportunity-specific guidance provided in these documents differs from generic Je-S help, the funding opportunity-specific guidance should always be followed. Care and attention must be given to completing the proposal correctly and complying with all technical requirements. Proposals that are not completed correctly may be rejected by the office.

The final submission process is the responsibility of the host institution, and we cannot accept responsibility for any delays which may occur. It is recommended that applicants submit in good time before the funding opportunity deadline.

We strongly advise applicants to confirm with their relevant administrator that the proposal has been submitted successfully.

How we will assess your application

Assessment process

The assessment of applications will be a 2-stage process:

- outline proposal stage
- full proposal stage

Outline proposals will be assessed and shortlisted by an interdisciplinary assessment panel. Shortlisted applicants will subsequently be invited to submit applications to the full proposal stage.

Full proposals will be subject to external peer review and assessed by an interdisciplinary commissioning panel. Shortlisted proposals will be invited to interview. Funders across UKRI will be involved in selecting panel members and peer reviewers.

Assessment criteria: outline stage

Scientific excellence with impact is the primary criterion and is an essential requirement of all proposals.

All outline proposals will be scored according to ESRC's <u>scoring scale for panel</u> <u>introducers</u> (page 3).

Proposals which demonstrate that they meet the following criteria are most likely to likely to be invited to apply for the full stage:

- alignment of research programme to the aims and objectives of the funding opportunity
- an innovative, interdisciplinary research agenda which responds to a defined challenge and paves the way for the centre to become world-leading in its area of research, making an original and significant contribution to theory, methods and knowledge to improve human health across the life course and environmental quality
- plans for impact generation throughout the lifetime of the centre, with evidence of user engagement, backed up by a clear logic model
- clearly articulated plans for people development at all career levels
- demonstration of how the centre will add value to the wider community, for example by addressing research gaps, through data collection and reuse, or collaboration with existing relevant UKRI investments
- justification for the geographical focus of the research, whether local or national
- a robust management structure with a nominated director or directors and clear arrangements for coordination and management of the strategic direction of the centre
- strong institutional commitment with financial support and practical contributions to hosting and sustaining a centre
- evidence that issues relating to equality, diversity, inclusion, risk, ethics and environmental sustainability have been considered throughout the proposal

Contact details

Get help with developing your proposal

For help and advice on costings and writing your proposal please contact your research office in the first instance, allowing sufficient time for your organisation's submission process.

Ask about this funding opportunity

ESRC centres team

Email: esrc.centres@esrc.ukri.org

Additional info

By working collectively and leveraging new and existing investment and activity, we are harnessing the full power of the UK's research and innovation system to tackle large-scale, complex challenges.

This award falls under the umbrella of the UKRI securing better health, ageing and wellbeing strategic theme, one of 5 UKRI strategic themes identified through our 5-year strategy transforming tomorrow together 2022 to 2027.

The Funding Service

The full proposal stage of this funding opportunity is likely to run on <u>our new</u> <u>funding platform, the UKRI Funding Service</u>, our new funding platform, rather than via the Joint Electronic Submission (Je-S) system.

Set up an account on the Funding Service.

If successful at the outline stage, you will be invited to submit a full application, and will receive guidance at that point.

The Funding Service has a digital form-based format with sections addressing application questions which are the assessment criteria for the funding opportunity.

Supporting documents

Je-S guidance (PDF, 251KB)

Equality impact assessment (PDF, 345KB)

Logic model guidance (PDF, 101KB)

Timeline

1 February 2023 Outline opening date

17 May 2023 4:00pm Outline closing date

July 2023 Full stage opening date

November 2023 Full stage closing date

April 2024

Interviews

October 2024

Awards commence

Guidance on good research

Good research resource hub

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https://www.ukri.org/opportunity/centre-in-climate-change-and-health