

Funding opportunity

Research and partnership hubs for health technologies

Closed
Engineering and Physical Sciences Research Council (EPSRC)
Grant
£40,000,000
£10,000,000
28 March 2023
28 March 2023 12:00pm UK time
25 July 2023 4:00pm UK time

Last updated: 2 June 2023 - see all updates

Timeline

Opening date

O 25 July 2023 4:00pm Closing date

Outline panel

O Early September 2023

Apply for funding to establish a large-scale, multidisciplinary research hub in an area of importance to the delivery of <u>EPSRC's strategy for health</u> <u>technologies</u> with a focus of research and partnership working.

Proposals should address strategic, long-term research challenges and plans for partnership working to maximise the impact from this investment.

We will fund four hubs with a possibility of additional funding depending on the response to the funding opportunity.

EPSRC will fund 80% of the full economic cost of each project up to £10 million.

Funding for each project will be awarded over six years.

Full proposal opening date

- O 11 weeks after invitation Full proposal closing date
- April 2024 Interview panel

Guidance on good research

Good research resource hub

Who can apply

You will be limited to one hub application as principal investigator.

Standard EPSRC eligibility rules apply. Research grants are open to:

- UK higher education institutions
- research council institutes
- UK Research and Innovation-approved independent research organisations
- eligible public sector research establishments
- eligible research and technology organisations
- NHS bodies with research capacity

Check if your institution is eligible for funding.

You can apply if you are a resident in the UK and meet at least one of the conditions:

- are employed at the submitting research organisation at a level equivalent to lecturer or above
- hold a fixed-term contract that extends beyond the duration of the proposed project, and the host research organisation is prepared to give you all the support normal for a permanent employee
- hold an EPSRC, Royal Society or Royal Academy of Engineering fellowship aimed at later career stages
- hold fellowships under other schemes (please contact EPSRC to check eligibility, which is considered on a case-by-case basis)

Holders of postdoctoral level fellowships are not eligible to apply for an EPSRC grant.

What we're looking for

Scope

This funding opportunity is to establish a number of large-scale, multidisciplinary research hubs, drawing on expertise across the engineering and physical sciences and health research community to build and develop strategic research capabilities of importance to one or more of the following health challenges:

- improving population health and prevention
- transforming prediction and early diagnosis

discovering and accelerating the development of new interventions

These challenges are described in more detail in the <u>new health</u> <u>technologies strategy</u>.

The hubs will support partnerships across the wider research and health landscape, bringing together complementary expertise to co-deliver advancement in their strategic research area.

A strategic research capability is that which builds on UK research strengths in areas of computational, engineering, mathematical or physical sciences in order to maintain and advance research capacity for future health technologies. It is your responsibility to advocate for how the research and partnership activities will help build important new capabilities needed to meet one or more of the health technology challenges.

Funded hubs will be expected to undertake the following:

World leading research programme in a health technologies strategic research capability

The hub research programmes should focus on advancement and development of novel engineering and physical sciences research to advance the strategic research capabilities underpinning the future healthcare technologies portfolio. Hub applications should address at least one of the three health technologies challenges.

It is expected that the initial submission will contain a core leadership team, key collaborators and plans for the initial research programmes, which may evolve over time.

Public and patient involvement and engagement (PPIE) and partnership working

PPIE is a key cross cutting theme of the new EPSRC health technologies strategy. We expect all hubs to integrate PPIE at all stages of the research and innovation process.

To ensure we support high quality research where research outcomes can benefit users, industry and have maximum impact in the health sector, we are looking for clear evidence of genuine, substantiative partnerships with cocreation, co-delivery and embedded engagement with patients, people with lived experience and health professionals throughout all hub projects and activities.

Proposals will be required to provide a PPIE and partnership working plan as part of their submission.

Translation

As leaders in the community, hubs will be expected to develop a clear plan for translation and maximising impacts from the research outputs, products and technologies developed throughout their lifetime.

Leadership

Hubs will have a strong vision and be leaders within the landscape, driving forward the research agenda in their area and connecting with other players in the community, including:

- patients
- industry
- health professionals
- policymakers
- other public investments

The hub is expected to deliver added value (be more than the sum of its parts) by demonstrating strong connectivity between all hub partners and where appropriate the wider UK community and offering additional facilities, training and development than that which is already provided by individual institutions.

Hub partnerships and impact should span all scales, building on the successes of previous similar investments to deliver impact in regional economies while also playing a national role in an international context. Hubs should bring together the right people and organisations from places across the UK, to tackle the challenges relevant to their chosen research area.

Skills development

Hubs will provide supportive and inclusive environments with a strong ethos of skills development for hub members.

What is a hub?

A typical hub will include the following:

- a physical or virtual centre, comprising multiple institutions but based around a lead institution
- a hub director (academic) with a proven track record of managing large investments and excellence within their discipline or sector
- a wider leadership team from across relevant disciplines and sectors with a track record of excellence within their field
- a management team including a hub manager and administrative team as required to ensure efficient running of the hub
- a named lead for each of PPIE and partnership working and translation and impact
- research staff distributed across the project. Funding cannot be requested from these grants for PhD studentships or related funding. However,

students funded from other sources can be incorporated into the broader project plan, provided that PhD students' work is not part of the critical path of the hub's research

 appropriate advisory and governance structures including an independent advisory board

It is expected that management of hubs will require more investigator time (whether for the principal investigator or distributed across the team) than standard UK Research and Innovation grants.

Funding opportunity objectives

The hubs will:

- deliver a programme of high quality, multidisciplinary research of importance to one or more of the challenges outlined in the EPSRC health technologies strategy
- create a critical mass of research capacity in a particular area, driving forward the national research agenda to actively build a wider research and innovation ecosystem
- act as UK leaders in the field on behalf of the wider research landscape. Hubs will be expected to engage with relevant research partners throughout their lifetime
- embed PPIE throughout the hub aims, objectives and operations, considering the context of each hub's specific research area.
- engage with a diverse range of relevant partners to ensure research is cocreated and co-delivered with users
- ensure a clear route to translation for research outcomes by developing a translation and impact action plan which considers the specific translation context and challenges within the hub's research area and community

Due to the scale of these awards, significant collaboration and leverage (cash or in-kind) will be expected from project partners (for example, business, public sector, third sector).

Challenge areas

The aim of this funding opportunity is to fund a portfolio of health research and partnership hubs that collectively will make a significant contribution to the three high level challenges identified in the EPSRC strategy for health technologies.

Applications may cover more than one challenge area however you should indicate the primary challenge you wish to apply against. It is envisaged that not all hubs supported will be in a single research or geographic area and EPSRC will look to support a balanced portfolio from the highest quality proposals received.

Improving population health and prevention

This challenge focuses on the need for novel techniques that optimise health, eliminate and prevent disease. Prevention includes promoting wellbeing in a population, addressing the determinants of health as well as the causes of disease and enabling people to have a better quality of life.

Transforming prediction and early diagnosis

Addressing all aspects of health from physical, mental and environmental, this challenge focuses on the need for novel techniques that optimise patientspecific illness prediction, early and accurate diagnosis.

The aim includes reducing the incidence of disease, intervening before full symptoms develop, as well as reducing the impacts of multiple long-term illness and strengthening the ability to take exactly the right steps to combat disease at precisely the right time. Scientific, mathematical, and other techniques, from biomarker identification, research into medical imaging and risk stratification to predictive modelling and real-time, evidence-based decision-making, will all play a role.

Discovering and accelerating the development of new interventions

This challenge focuses on the need to produce safer, more targeted treatments and interventions fit for the future. This challenge includes therapies, for example advanced therapies, as well as physical interventions such as provision of prostheses to surgery and radiotherapy, which is fundamental to tackling impairment by restoring function, repairing damage, and eliminating disease.

Developing novel treatments and therapies which could be personalised and designed for the setting in which they are being delivered for example, home, community or acute care is of key importance.

We will not fund

Proposals must lie primarily within the remit of EPSRC and be within the scope of this funding opportunity. Any proposals that EPSRC deems out of remit or out of scope may be rejected without reference to peer review.

While EPSRC does not fund clinical trials, that is, studies that involve large numbers of animals or patients, costs may be requested for proof of concept (PoC) studies where initial data from a small number of tests is being gathered to validate and inform the continual development of the technology developed as part of the project.

Read about PoC studies in healthcare.

Funding available

The total EPSRC funding available for this funding opportunity will be £40 million with the possibility of additional funding from EPSRC depending upon the response. We expect to fund four hubs with a possibility of further support. Funding for each hub will be up to £10 million, awarded over six years.

Grants are expected to be awarded with an earliest start date of 1 September 2024. We will award 80% of the full economic cost of the project, and your organisation must agree to find the balance.

This funding opportunity is intended to be the first in a series of planned funding opportunities for health technologies hubs over the coming years.

Equipment costing £10,000 to £400,000 in value inclusive of value added tax (VAT) is available through this funding opportunity. Smaller items of equipment (individually under £10,000) should be in the 'Directly Incurred – Other Costs' heading.

EPSRC approach to equipment funding.

Responsible innovation

You are expected to work within the **EPSRC framework for responsible innovation**.

International collaboration

Applicants planning to include international collaborators on their proposal should visit Trusted Research for <u>guidance on getting the most out of</u> <u>international collaboration while protecting intellectual property</u>, <u>sensitive research and personal information</u>

How to apply

Please note that the outline stage of this funding opportunity will be submitted via the Joint Electronic Submission (Je-S) system. The full proposal stage of this funding opportunity is likely to run on the **UKRI Funding Service**, our new funding platform, rather than via Je-S.

The Funding Service has a digital form-based format. This means that the exact application requirements and assessment criteria may alter from what is currently published. Further information will be published in the full proposal opportunity.

Outline application via Joint Electronic Submission (Je-S)

You can find advice on completing your application in:

- the Je-S handbook
- EPSRC guidance for applicants

We recommend you start your application early.

Your host organisation will also be able to provide advice and guidance.

Submitting your application

Before starting an application, you will need to log in or create an account in Je-S.

When applying:

1. Select 'documents', then 'new document'.

- 2. Select 'call search'.
- 3. To find the opportunity, search for: Health Research and Partnership Hubs Outline.

This will populate:

- council: EPSRC
- document type: outline proposal
- scheme:outline
- Health Research and Partnership Hubs Outline

Once you have completed your application, make sure you 'submit document'.

You can save completed details in Je-S at any time and return to continue your application later.

Deadline

EPSRC must receive your application by 25 July 2023 at 4:00pm UK time.

You will not be able to apply after this time. Please leave enough time for your proposal to pass through your organisation's Je-S submission route before this date.

You should ensure you are aware of and follow any internal institutional deadlines that may be in place.

Attachments: outline stage

Your application must also include the following attachments:

case for support outline document (four pages)

- public and patient involvement and engagement (PPIE) plan (two pages)
- cover letter (optional attachment, no page limit, not seen by peer review)

You should attach your documents as PDFs to avoid errors. They should be completed in single-spaced Arial 11 font or similar-sized sans serif typeface. EPSRC will not accept any other attachment types under this opportunity.

Read our advice on writing proposals for EPSRC funding.

PPIE plan

Your application must include a PPIE plan (uploaded as a two-page additional attachment) that should describe:

- how co-creation and co-delivery will be prioritised with a range of partners from relevant health sector (including patients, professionals and those with lived experience)
- what PPIE activities will be conducted throughout the lifespan of the hub and why these are the most appropriate to support a patient or user-needs focused delivery to hubs activities
- foster genuine and committed engagement with appropriate partners, developing strong relationships with the hub

Feedback will be provided on the PPIE plan at the outline stage. This will allow time for development of the PPIE plan and assessment at the full proposal stage.

Documentation: full proposal stage

The invited full proposal stage of this opportunity is likely to run on the Funding Service our new funding platform, rather than via Je-S.

The Funding Service has a digital form-based format. This means that the exact application requirements and assessment criteria may alter from what is currently published. Further information will be published in the full proposal opportunity.

Please note that the following documents will be required to be submitted at full proposal stage:

- PPIE plan (two pages)
- translation and impact action plan (two pages)

Ethical information

EPSRC will not fund a project if it believes that there are ethical concerns that have been overlooked or not appropriately accounted for. All relevant parts of the 'ethical information' section must be completed.

Guidance on completing ethical information on the Je-S form.

EPSRC guidance can be found under 'Additional information'.

How we will assess your application

Assessment process

This will be a two-stage assessment process and this outline opportunity is stage one.

At stage one, we are looking for applications that are a good fit for the funding opportunity. Any outline proposals outside the scope of the funding opportunity or not primarily within the remit of the EPSRC healthcare

technologies theme will be rejected prior to assessment. Outline proposals that meet the scope will be assessed by an outline panel.

If you are successful at stage one you will be invited to submit full proposals to stage two. At stage two, full proposals will be assessed by postal peer review, followed by an interview panel.

At both assessment stages EPSRC will draw on expert advice on the desirable balance of hubs across the portfolio taking into consideration the distribution over:

- the funding opportunity challenge areas (detailed in the scope)
- potential of the proposal to contribute to the ambitions of local and regional stakeholders as well as meeting EPSRC's aims to develop and maintain scientific capabilities that are competitive on a UK and international level
- other landscape diversity, if needed, such as university

In the event of this funding opportunity being substantially oversubscribed as to be unmanageable, EPSRC reserves the right to modify the assessment process.

Assessment criteria

Stage one assessment criteria (outlines)

Fit to scope

This part of the assessment is based on the alignment of the hub to the aims and objectives of the funding opportunity. We are looking for:

 the demonstration of appropriate mechanisms to create a critical mass of research capacity in a particular area of strategic capability for UK healthcare technologies

- the ability to act as UK leaders in the field on behalf of the wider research landscape
- embedding public and patient involvement and engagement (PPIE) throughout the hub aims, objectives and operations, considering the context of each hub's specific research area
- engagement with a diverse range of relevant partners to ensure research is co-created and co-delivered with users
- alignment to one or more of the health technology strategy challenges

Ability to establish and manage a hub

The ability of the leadership team to deliver the proposed programme of research and partnership activities referring to:

- track record of the director, including excellence within their disciplines and their ability to manage large interdisciplinary investments for real-world applications
- appropriateness and balance of skills and expertise within the applicant team for the delivery of the proposed programme of activities

Portfolio balance

The outline panel will provide advice on the selection of a balanced portfolio ensuring a balance across the challenges and taking into account geographic diversity. The final decisions on the proposals to the invited to the next stage will be made by EPSRC.

Feedback

The hub should have a plan for engaging with stakeholders, users of the research, and the other successful hubs that are funded through this programme. This should be detailed within the PPIE plan document, including how PPIE will be appropriately integrated at all stages of the research and

innovation process. Where appropriate the panel will provide feedback on the PPIE plan at outline stage. The PPIE plan is an aspect that will be assessed at the full proposal stage

Stage two assessment criteria (full proposal and interview)

Vision

What are you hoping to achieve with your proposed work?

In particular applicants need to demonstrate why the research will help build and develop a strategic capability and is of timely relevance to the UK health systems and other identified stakeholders

Approach

How are you going to deliver your proposed work?

The research should be presented in context of the current state of knowledge and other work under way in the field. Hubs should have a credible translation and impact plan which considers both the immediate and long-term impact needs of the research programme and the range of stakeholders to help ensure the hub achieves impacts across sectors and timescales.

Applicant and team capability to deliver

Detailing you and your team's ability to successfully deliver the proposal.

The hub should bring together a world class team with the appropriate mixture of disciplines and skills and help support the career development of hub members.

Resources and cost justification

What will you need to deliver your proposed work and how much will it cost?

Including any resources requested for activities to either increase impact, for public engagement and PPIE activities or to support responsible innovation.

Ethics and Responsible Research and Innovation (RRI)

What are the ethical or responsible research and innovation considerations of the proposed work?

PPIE and partnership working

How will you embed PPIE throughout all hub activities?

The hub should have a plan for engaging with stakeholders, users of the research, and the other successful hubs that are funded through this programme. The PPIE plan should detail how PPIE will be appropriately integrated at all stages of the research and innovation process.

Feedback

Feedback will not be provided to unsuccessful applications at stage one unless specifically requested by the expert panel. Feedback at stage two will be provided in the form of reviewer comments.

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

Laura Cadman, Senior Portfolio Manager, Healthcare technologies theme

Email: laura.cadman@epsrc.ukri.org

Kate Reading, Portfolio Manager, Healthcare technologies theme

Email: kate.reading@epsrc.ukri.org

Healthcare technologies theme inbox

Healthcare@epsrc.ukri.org

Get help with applying through Je-S

Email

jeshelp@je-s.ukri.org

Telephone

01793 444164

Opening times

Je-S helpdesk opening times

Additional info

Webinar

A recording of the 12 May 2023 webinar about this funding opportunity is available (includes guest speakers and question and answer session).

Watch the webinar recording.

Wider programme or area

Healthcare technologies theme

Patients and the public

Good research resource hub

Co-production in research

Background

EPSRC has published a strategic delivery plan that sets out our strategy, priorities and what we will deliver between 2022 to 2025. This delivery plan is structured around UK Research and Innovation's (UKRI) six <u>strategic</u> <u>objectives</u>.

EPSRC has eight cross cutting priorities, which have been developed to deliver against the UKRI strategy, support research and innovation and address government priorities. These priorities aim to provide a balance across our portfolio, between discovery research, mission-inspired research, and an effective ecosystem to underpin them. Our new health technologies strategy links to many of our EPSRC priorities for example net zero, but specifically aligns to our priority around transforming health and healthcare.

Research delivered through the health technologies theme aims to address the priorities we have identified in consultation with our community and will also contribute to the UKRI strategic themes, ageing and wellbeing and tackling infections.

Engineering and physical sciences research can have a huge impact on health, healthcare, and wellbeing, and can tackle many challenges faced by the health service.

Responsible innovation

EPSRC is fully committed to develop and promote responsible innovation. Research has the ability to not only produce understanding, knowledge and value, but also unintended consequences, questions, ethical dilemmas and, at times, unexpected social transformations.

We recognise that we have a duty of care to promote approaches to responsible innovation that will initiate ongoing reflection about the potential ethical and societal implications of the research that we sponsor and to encourage our research community to do likewise.

Supporting documents

Equality impact assessment (PDF, 223KB)

Updates

2 June 2023

Closing date changed from 18 July 2023 4:00pm UK time to 25 July 2023 4:00pm UK time

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https://www.ukri.org/opportunity/research-and-partnership-hubs-for-health-technologies