



## Request for Proposal (RFP) for Biomedical and Biotechnical innovations in Climate Change and Human Health

### 1. RFP Background & Objectives

Wellcome supports science to solve the urgent health challenges facing everyone. We are taking on three worldwide health challenges: climate and health, infectious disease, and mental health as well as supporting people and places to undertake curiosity-driven research in our Discovery Research Portfolio.

Under any plausible scenarios we are heading for a much warmer world. Global mean temperatures have already increased by 1.1°C since 1900 and are expected to increase by more than 2.4°C before the end of the century based on current green-house gas emission reduction policies and practices. While the direct and indirect effects of increasing heat on human health are wide-ranging, causal mechanisms are often poorly understood and under-researched. The limited evidence available suggests relationships may be non-linear and complex.

Given growing awareness of the negative impacts of extreme heat on human physical and mental health we have initiated funding to help increase knowledge on these impacts ([see here](#)) and evaluate potential solutions ([see here](#)). However there remains gaps in our knowledge on **when and why** heat is so detrimental to human health and this knowledge could help us improve current interventions and identify new ones. Biomedical and biotechnical scientists (including immunologists, geneticists, engineers, biometeorologists, data scientists and others) are starting to develop innovative solutions to the impacts of extreme heat on human health but these entrepreneurial efforts are nascent and scattered.

Wellcome is interested to learn where investment opportunities may lie for further innovation at this intersection. Ultimately, we are seeking to identify opportunities for protecting communities from extreme heat through biomedical and biotechnical innovation – e.g. risk indicators, diagnostics and protective measures.

The objectives of this RFP will be to:

- Identify the nascent biomedical/biotechnological research that will enable researchers to formulate new hypotheses and address new fundamental questions to protect human health from the negative impacts of extreme heat events and increases in ambient heat.
- Identify key researchers, institutes, private companies and funding partners who are actively working in biomedicine and biotechnology to understand the effects of extreme heat events and increases in ambient heat. We are particularly interested in Asia so this may include identifying which geographies within Asia are receiving the largest investments both in terms of numbers of research grants and/or total value of such research.
- Identify where there are gaps in research and in available funding.
- Ascertain capacity in Asia for upstream/basic research that could have the potential to underpin current more applied research in this space.
- Suggest deliverable research questions or topics that could have short term impact.
- Asia is one of the regions most affected by extreme heat. It is also an emerging leading geography in the biomedical and biotechnological space. While we're interested in a high level, global landscape review, for the purpose of this report most of the focus should be on Asia.



## 2. RFP Specification

Wellcome's portfolio includes £66.5 million in investments on Heat-Health research. This is primarily in downstream research on maternal and child health, adaptation interventions and translating evidence into policy. The biological association between heat and health risk is understudied and we seek to learn how Wellcome can have the biggest impact in this important area. To further articulate our strategy we need to understand the type of work that is already being done, the major individuals/organisations involved, the areas for greatest potential growth, and the the areas where the greatest opportunity for impact lies.

### **Expectations:**

We are seeking a provider who can answer the below questions in a report for Wellcome. The approach will be finalised after discussion with the consultants, but we welcome any approach that is most suited to address the objectives as set out in this RFP. Given the need to probe both depth of research and breadth of audience, we anticipate it will be a mixed methods report including but not limited to literature research, interviews with key leaders in the field and surveys with the wider research community.

Core questions to be addressed in the report (we are requesting a global-level report but with a particular focus on Asia):

- What research is currently being conducted to investigate the biological association between heat and human health?
- What areas have been identified as needing further investigation? And which of these would have short term impact?
- What additions to current research could this area provide? I.e. what biomedical knowledge are we lacking that could help support downstream research that is currently being carried out?
- Who is already carrying out biomedical research that is investigating the effects of heat on human health, in both the public sector and the private sector?
- Who is already carrying out biotechnological research or developing new biotechnologies that could lead to improvements in protecting human health from the effects of heat?
- Who is funding this research and what level of funding is available?
- What institutes or organisations in Asia have the infrastructure and knowledge to expand into this area of research?
- What would you suggest as research questions or topics that Wellcome could pursue to have the greatest short-term impact in?

We expect that there will be monthly check points with Wellcome staff over the duration of the project, a final report with slide decks outlining the findings and an external facing report that can be shared publicly. We anticipate that the programme of work will be delivered between the months of May and July 2024 however, there is an essence of flexibility which can be refined during the inception meeting.

This report on [Heat, health and human genetics](#) released by the PHG Foundation details the landscape of current evidence on heat-related health risks and human genetics specifically. It highlights some under researched areas so will be a useful resource for anyone wanting to undertake this review.

### **Boundaries of this review:**

For the purposes of this review, Wellcome specifically want to learn about research and innovations that consider the direct effect of heat and direct benefits for human health. We are initially focusing the scope of this review to Asia. We recognise that there will be opportunities outside of Asia and would like an initial section on high-level review of work globally, but to enable a deeper dive we have chosen to focus the majority of the review on one geographic area of interest. Following this we hope to use our learnings from this review to expand our understanding of the wider landscape.



Our long-term objective is to be able to invest in critical scientific areas that support our applied research. Some examples of possible research questions that could interest Wellcome in the future are below. **The examples provided are only indicative and the selected supplier will be encouraged to prioritise research opportunities, including areas not mentioned here, based on their findings.**

Possible questions:

- Are there particular genetic variants that are responsible for differing susceptibility to heat exposure and do these variants show any geographic distribution?
- What are the underlying genetic mechanisms of thermoregulation?
- What genetic biomarkers could be used to indicate heat stress or evaluate the severity of heat stroke?
- Can we identify how heat-sensitive organ systems are affected by epigenetic programming and over what different time frames and exposure paradigms? Is there inter-individual variation? Does this create vulnerable sub-populations?
- How will increases in heat affect the human gut microbiome?
- Are there temperature sensitive vaccines that are at risk of becoming inefficient as temperatures rise?
- Are there new statistical innovations, like the adverse outcome pathways concept, that could be used to assess the impacts of heat on human biomarkers?
- Where is there the greatest opportunity for advancements in biotechnology that will lead to the development of novel biosensors and biomonitoring tools for accurate, cost-effective data collection on the impacts on health outcomes of extreme heat exposure?
- Can existing tools/ equipment be made temperature resilient for field work?

This section sets out the specification of services for this RFP exercise. Suppliers should use this section to fully understand Wellcome's requirements and to inform their response. Wellcome will be guided by the supplier as to what is a reasonable budget for this activity as we do not want limit ambition or innovation.

### 3. RFP Timetable

#	Activity	Responsibility	Date
1	RFP issued on <a href="#">Contract Opportunities</a> webpage	Wellcome	18 January 2024
2	Submission of Expression of Interest and Supplier Q&A	Supplier	1 February 2024
3	Return of Supplier Q&A to Suppliers	Wellcome	12 February 2024
4	Submission of RFP Response (in line with requirements set out in section 5)	Supplier	19 February 2024
5	RFP Evaluation Period	Wellcome	19 February – 1 March 2024
6	Supplier Presentations	Supplier	4 March – 15 March 2024
7	Notification of Contract Award	Wellcome	20 March 2024



8	Contract Negotiation	Wellcome & Supplier	March –April 2024
9	Contract Start Date	Wellcome & Supplier	May 2024

#### 4. Response Format

The following headers support the timetable by providing further detail of the key steps.

##### Expression of Interest and Supplier Q&A

Suppliers are asked to submit a short expression of interest by e-mail to the Wellcome contact in accordance with the RFP timetable, which should contain the following information:

- Confirming whether you are / aren't intending on submitting a full proposal
- Ask any questions you have relating to this RFP
- Confirming whether you are submitting a proposal as a registered company or an individual
- If an organisation please provide registered name, address, and registration number
- A non-binding cost estimate as a single figure in GBP

Submitting an EOI is not a binding commitment to submit a full proposal should your organisational priorities change, you will not then be penalised for future opportunities.

Prior to the submission of your full proposal to the RFP, Suppliers are provided the opportunity to submit any questions they have about the exercise and the activity. All questions will be collated, anonymised, answered and returned to all Suppliers who have submitted an expression of interest in the RFP process. Please make sure you ask all questions at this stage. Once Wellcome have responded to all questions if you have any additional questions after this deadline these will not be answered to ensure that this is a fair and equitable process.

#### 5. RFP Response

Suppliers submitting a full proposal should cover the following areas in their response:

##### RFP Questions

Suppliers are asked to respond to the following questions as part of their RFP Response:

#	Question	Max Words
1	Provide a short proposal outlining how you would approach the work and the proposed methodology (e.g. how you will ensure that a broad range	750 words max.



	of researchers, private companies and implementation partners participate).  Please include communication plan with the Wellcome Team.	
2	Outline your approach to equity, diversity, and inclusion (EDI) both in relation to your proposed methodology for the project, and within your team. For more information on EDI, see: <a href="https://www.inclusionhub.com/articles/what-is-dei">https://www.inclusionhub.com/articles/what-is-dei</a>	250 words max.
3	Provide a proposed delivery plan outlining the project deliverables and timelines.	Gantt chart
4	What makes you best placed to fulfil the requirements outlined in this RFP? This could include networks and previous experience, including experience of working with people with lived experience. Please feel free to include any relevant case studies.	250 words max.
5	Outline any major risks and challenges you foresee with meeting Wellcome's requirements. Please include your mitigation strategies for these risk and challenges.	250 words max.
6	Provide a detailed budget including breakdown justifying the proposed costs to meet Wellcome's requirements.  Please note that we do not provide maximum budget estimates, suppliers are encouraged to come in with a budget required for this work to be delivered effectively while also demonstrating value for money.	Table

### Contract Feedback

This section allows Suppliers to provide specific feedback to the contractual agreement which will be used should their proposal be successful. Wellcome will not consider any requests that are raised after this point. Please ensure you engage with a relevant professional to support your feedback if required. Include your contract feedback in your proposal as an annex in the following format;

Clause #	Issue	Proposed Solution/Comment

Suppliers submitting proposals as a registered company should review Wellcome's Standard terms and Conditions [document](#).

Individuals submitting proposals as a sole trader (not registered) should review this [document](#).

Individuals submitting proposals through their own personal services company please highlight this to the Wellcome contact immediately (see point 8 below).

### Information Governance



Wellcome is committed to upholding data protection principles and protecting your information. The [Wellcome privacy webpage](#) explains how, and on what legal basis, we collect, store, and use personal information about you. This includes any information you provide in relation to this proposal.

Under GDPR/Data Protection law, Wellcome must keep a record of all personal information it is processing (i.e., collecting, using, and sharing). This record will be made available to the Information Commissioner's Office upon request. This is Wellcome's record of data processing activities which meets [GDPR article 30](#) requirements.

Suppliers are asked to complete the [TPSRA2](#) assessment before the RFP submission deadline for Wellcome to assess how you handle data.

## 6. Evaluation Criteria

During the RFP evaluation period the evaluation panel will independently evaluate your proposal against the criteria outlined below. All scores will be collated, discussed and a decision will be agreed on who progresses to the next stage of the procurement exercise.

Criteria	Detail	%
Methodology	<i>Coverage:</i> How well are the desired focus areas (as outlined in the specification) covered in the proposed methodology address? <i>Quality:</i> Is the proposed methodology aligned with our needs? <i>Utility:</i> Will the proposed methodology deliver the desired, credible, and useful results? <i>EDI:</i> Has appropriate attention been given to equity, diversity, and inclusion considerations in the proposed methodology? Do you have EDI policies and are these being put into practice in the proposal?	40%
Experience	<i>Skills and Experience:</i> Does the supplier have the relevant skills, experience, and contextual understanding to deliver this work?	25%
Delivery & Outputs	<i>Communication:</i> Is there a good plan for communicating with the Wellcome team? <i>Delivery plan:</i> Is the proposed delivery plan appropriate and achievable? <i>Feasibility:</i> How feasible is the delivery plan? Are there significant risks associated with the proposed timelines, and how well are they mitigated?	25%
Budget	<i>Value for Money:</i> Is the proposed work within your budget and good value for money?	10%
<b>Total:</b>		<b>100%</b>

## 7. About Wellcome



Wellcome is a global charitable foundation established in 1936. Through our work we support science to solve the urgent health issues facing everyone. We fund [curiosity-driven research](#), and we're taking on three of the biggest health challenges facing humanity – [climate change](#), [infectious disease](#) and [mental health](#). We also work with policy makers, run advocacy campaigns, and form partnerships with other organisations to ensure everyone, everywhere benefits from advances in health science. Find out more about Wellcome and our work at: [wellcome.org](http://wellcome.org).

## **8. Prospective Suppliers Personnel - IR35 and Off Payroll Working Rules**

Before the RFP response deadline, Prospective Suppliers must make the Wellcome Contact aware if they are intending to submit a proposal where the services will be provided by any individuals who are engaged by the Prospective Supplier via an intermediary i.e.

- Where the Prospective Supplier is an individual contracting through their own personal services company; or
- The Prospective Supplier is providing individuals engaged through intermediaries, for the purposes of the IR35 off-payroll working rules.

## **9. Equity, Diversity and Inclusion**

Embracing equity, [diversity and inclusion](#) is fundamental to delivering our mission to improve health, and we are committed to cultivating a fair and healthy environment for the people who work here and those we work with. We want to cultivate an inclusive and diverse culture, and as we learn more about barriers that disadvantage certain groups from progressing in our workplace, we will remove them.

Wellcome takes equity, diversity and inclusion seriously, and we want to partner with suppliers who share our commitment. We may ask you questions related to D&I as part of our RFP processes.

## **10. Disability Confident**

The Wellcome Trust is proud to be a Disability Confident Employer (DC Level 2) and we encourage all our partners and suppliers to do the same. More information about this can be found on the government website [Disability Confident employer scheme and guidance - GOV.UK \(www.gov.uk\)](#). Disability Confident is creating a movement of change, encouraging employers to think differently about disability and take action to improve how they recruit, retain and develop disabled people.

## **11. Accessibility**

Wellcome is committed to ensuring that our RFP exercises are accessible to everyone. If you have a disability or a long term health condition, we can offer adjustments to the response format e.g. submitting your response in an alternate format. For support during the RFP exercise, contact the Wellcome Contact.



If, within the proposed outputs of this RFP exercise, specific adjustments are required by you or your team which incur additional cost then outline them clearly within your commercial response. Wellcome is committed to evaluating all proposals fairly and will ensure any proposed adjustment costs sit outside the commercial evaluation.

All our content should be WCAG 2.2. AAA compliant. Any documents being provided to Wellcome must pass accessibility requirements. If you are unable to produce accessible documents, budget must be set aside to employ a suitable agency to do this work.

## **12. Independent Proposal**

By submission of a proposal, prospective Suppliers warrant that the prices in the proposal have been arrived at independently, without consultation, communication, agreement or understanding for the purpose of restricting competition, as to any matter relating to such prices, with any other potential supplier or with any competitor.

## **13. Funding**

For the avoidance of doubt, the output of this RFP exercise will be funded as a **Contract** and not as a Grant.

## **14. Costs Incurred by Prospective Suppliers**

It should be noted that this document relates to a Request for Proposal only and not a firm commitment from Wellcome to enter into a contractual agreement. In addition, Wellcome will not be held responsible for any costs associated with the production of a response to this Request for Proposal.

## **15. Sustainability**

Wellcome is committed to procuring sustainable, ethical and responsibly sourced materials, goods and services. This means Wellcome seeks to purchase goods and services that minimise negative and enhance positive impacts on the environment and society locally, regionally and globally. To ensure Wellcome's business is conducted ethically and sustainably, we expect our suppliers, and their supply chains, to adhere to these principles in a responsible manner.

## **16. Wellcome Contact Details**

The point of contact for this RFP exercise is indicated below:

Name: Hardip Dhaliwal  
Pronouns: She/her





Role: Procurement Officer  
Email: RFP@wellcome.org