Request for Quotes (RFQ) to produce a landscaping report on the state-of-the-art of detection and attribution of climate change impacts on human health

1. Background

[The Wellcome Trust climate and health programme](#) seeks, amongst other things, to significantly increase our understanding of the effects of climate change on human health. This project aims are two-fold. First, we want to understand capacity and challenges in data, methods, and tools currently used to attribute climate change impacts on human health. Second, we aim to identify opportunities to use data science to help address the identified challenges.

The project should focus primarily on human health, but we are aware that not much has been done on the space over the past decade and so the Supplier will likely need to explore what has been done on other relevant fields such as veterinary medicine, ecology, and food security and articulate what and how data, methods, and tools used in these fields could be used (if applicable) to attribute climate change impacts on human health. We welcome and encourage the inclusion of material from any setting that is relevant to this RFQ and ask potential Suppliers to specify their geographical area(s) of focus and languages that they will cover.

The project will comprise two main activities:

1. **Activity 1:** Global landscaping exercise
2. **Activity 2:** Engagement with relevant researchers in the climate and health, and related fields

2. Specification

Activity 1: Global landscaping

Conduct a comprehensive review of the state-of-the-art of detection and attribution studies on the impacts of climate change on human health and related fields such as veterinary medicine, ecology, agriculture, and food security, highlighting:

- Data, methods, and related digital tools (e.g., databases, guidelines, methodological standards, open-source software packages or libraries) used for detecting and attributing climate change impacts.

- Objective criteria (e.g., geography, scale, magnitude, timing, return times) used for the selection of the health impacts analysed.
- Methods used for the representation of uncertainty on the estimates of attributable risk.
- The definition of a counter-factual world that characterises the probability, magnitude, and circumstances in the absence of human influence on the climate system.

This activity may involve a combination of desk (i.e., literature review) and field-based research, including directly communicating and engaging with relevant researchers involved in detection and attribution studies for climate and health and relevant fields such as veterinary medicine, ecology, and food security as appropriate.

Here, we use the term Digital Tools broadly encompassing for example, datasets, software packages, consensus of methodological standards, and software libraries.

Activity 2: Engagement with relevant researchers in the climate and health, and related fields
Consult a list of experts jointly agreed with Wellcome to further understand the technical and methodological challenges and opportunities for conducting climate change detection and attribution studies on health. A non-exhaustive list of questions (experimentation is welcome) we expect the Supplier to address includes:

- What datasets are readily available to attribute climate change impacts on health? What are their advantages and disadvantages for undertaking this type of research? What are the challenges and opportunities in this space?
- What health impacts are particularly well-suited for conducting climate change attribution studies and what health impacts are not suited for this type of research?
- What methods work and what methods do not work for attributing climate change impacts on health and other relevant disciplines?
- Have any of these methods been packaged as open-source, robust, scalable, generalizable, and/or interoperable tools? What are the strengths and weaknesses of these tools?
- Are there any existing digital tools that could be integrated or harmonised to allow for standardized, robust, and reproducible policy-relevant attribution modelling in climate and health?
- What are the barriers (e.g., technical, governance, or resource related) and opportunities for conducting research on climate change attribution on health?
- How could data science help remove barriers and address opportunities?
- What should the climate and health community aim to achieve regarding climate change attribution on health?
- What are the health impacts Wellcome should focus their attention on?

This activity could be conducted in a number of different ways including, but not restricted to semi-structured interviews, Delphi technique, or focus groups. We expect relevant stakeholders to include scientists and research teams from different disciplines including, but not restricted to, climate (e.g., climate change attribution, tipping points, extreme event attribution), health (e.g., infectious diseases, climate-sensitive diseases, heat-related mortality, mental health), data science (e.g., causal inference methods, software development), veterinary medicine, food systems, and ecology.

Wellcome expects you to be able to demonstrate how any proposed recruitment strategy for the relevant stakeholders complies with GDPR. This activity should be conducted in an equitable manner. For example, the selected researchers should represent a diversity of geographical contexts, backgrounds, and genders.

3. Expected output

Deliverables for this package of activities should at a minimum include:

- A written report (in PDF format) of appropriate length, accessible to a multidisciplinary readership, and formatted to a professional standard that comprehensively documents and unpacks:

  - A non-technical summary of findings and recommendations.
  - A description of what are the data and methods currently used for detecting and attributing climate change impacts on health and other related fields, that clearly distinguishes the anthropogenic forcing from climate variability. In addition to a description and analysis in the report, a summary of the available data and methods should be presented in a spreadsheet in an Excel Annex.
  - The nature of the data used, the context (settings), and the collection of digital tools available for these studies.
  - An analysis of the criteria (e.g., geography, scale, magnitude, timing, return times) used by researchers for the selection of health impacts analysed in the reviewed studies.
  - A description of the methods used for articulating how uncertainty is represented on estimates of attributable risk providing recommendations for appropriate representation.
  - An analysis of how counter-factual conditions characterising the probability, magnitude, and circumstances in the absence of human influence on the climate system have been represented in attribution studies.
  - An analysis of the strengths and limitations of the identified methods for attributing climate change impacts on health with an identification of best practices providing an indication of lessons learnt.
  - Recommendations of how the identified methods can be scaled for their application to different types of health impacts and different geographical contexts.
  - An analysis of existing digital tools (e.g., datasets, software packages, consensus of methodological standards, and software libraries) that are or could be integrated or harmonised to allow for standardized, robust, and reproducible policy-relevant attribution modelling in climate and health.
  - An analysis of barriers (e.g., technical, governance, or resource related) and opportunities for conducting research on climate change attribution on health providing insights as to how data science could help remove barriers and address opportunities
  - Documentation of interviews and discussions held with stakeholders engaged throughout the landscaping process.

- An Appendix with an up-to-date list of researchers currently working on climate change detection and attribution studies from fields relevant to the health sector including their field of expertise, institution, contact details, and geographical location. An indication of the logic for inclusion is required. The list should also be presented in an Excel spreadsheet.

- Presentation of key findings and recommendations to Wellcome

4. Timings and Budget

#	Activity	Responsibility	Date*
1	Submission of RFP Response	Supplier	**23rd November 2022**
2	Presentations (selected suppliers may be asked to present to Wellcome)	Supplier & WT	W/c 28th November 2022
3	Notification of Contract Award	WT	Early December 2022
4	Contract Start Date	WT & Supplier	January 2023
5	Contract end date	WT & Supplier	July 20223

*estimated timelines

Budget

We do not want your proposal to be limited in scope and ambition. Wellcome ask that the supplier provide their best detailed costed price for this activity.

5. Response Format

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

A proposal for undertaking the work should be **no more than five A4 pages** (with margins no smaller than 2cm and font no smaller than 10pt). Suppliers are required to submit proposals which respond to the following sections:

#	Question
1	Outline your approach and provide details of the methodology and recruitment approach through which you will conduct the work. This outline should be inclusive of your research strategy and reflect on how you will work with Wellcome to produce deliverables to a high standard.
2	Outline any amendments or additions to the work proposed in the RFQ, including any (reasonable) proposed adjustments to timelines. A final timeline will be agreed prior to finalising the contract. There can be some flexibility, however, limited as we are working to a fixed timeline.
3	Include key milestones and deliverables aligning with the proposed timeline presented above.
4	Outline why you are best placed to deliver the work laid out in the RFQ, which may include technical knowledge in relation to climate change attribution, climate and health, relevant networks, previous experience, and other relevant information for the delivery of this proposed piece of work.
5	Outline what the anticipated deliverables, including interim deliverables, will be and in what format you'll present these findings.

6	Provide a cost proposal with a detailed breakdown of costs excluding VAT which details and justifies the proposed costs to meet our requirements. Seemingly costly aspects of your proposal will require further explanation.
7	Highlight any risks you may foresee with meeting our requirements and explain your approach to mitigating them.
8	Summarize any GDPR risks and how you will mitigate against them.
9	Briefly outline your approach to diversity, equity, and inclusion in your proposed methodology and within your organisation.

Proposals will be assessed against the following criteria:

Methodology 30 %	• **Coverage:** How well are the desired focus areas (as outlined in the specification) covered in the proposed methodology address? • **Quality:** Is the proposed methodology aligned with our needs? • **Utility:** Will the proposed methodology deliver the desired, credible, and useful results?
Experience 30 %	• **Skills and Experience:** Does the supplier have the relevant skills, experience, and contextual understanding to deliver this work?
Delivery & Outputs 25 %	• **Communication:** Is there a good plan for communicating with the Wellcome team? • **Delivery plan:** Is the proposed delivery plan appropriate and achievable? • **Feasibility:** How feasible is the delivery plan? Are there significant risks associated with the proposed timelines, and how well are they mitigated?
Budget 15 %	• **Value for Money:** Is the proposed work within budget and good value for money?

Suppliers submitting proposals as a registered company should review Wellcome's terms and conditions.

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 6 below).

6. Costs Incurred by Prospective Suppliers

It should be noted that this document relates to a Request for Quotes 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 Quote.

7. Diversity and Inclusion

Diversity and Inclusion - Embracing [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. As we learn more about barriers that disadvantage certain groups from progressing in our workplace, we will remove them.

Wellcome takes 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 procurement processes.

8. 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.

We would be grateful for your response to this enquiry by **23rd November 2022**. Please send your proposal and any questions to **Lindsey Atkins-Tamblin** at RFP@Wellcome.org