Ada Lovelace Institute and Nuffield Council on Bioethics

Invitation to tender:

Deliberative mini-public on AI and genomic health prediction

Summary

Working title: Deliberative mini-public on genomic health prediction

Commissioning bodies: The Ada Lovelace Institute and the Nuffield Council on Bioethics (NCOB)

Aim: To understand the view of an informed mini-public regarding the governance of genomic health prediction.

Timescales and key dates

Deadline for submissions: 11 a.m. Wednesday 22 March 2023
Provider appointment: Early/ Mid-April 2023
Execution of engagement workshops: June 2023
Project completion date: Late July 2023

Cost: Tenders invited in the range of £45,000

Introduction and background

The Ada Lovelace Institute and the Nuffield Council on Bioethics are currently undertaking AI and Genomics Futures – a two-year project that seeks to methodically investigate the ethical, societal and political economic issues arising from the influence of Artificial Intelligence on genomic science.

We have identified genomic health prediction as a likely development in AI powered genomics with potentially far-reaching societal consequences, and have selected it as the principal focus of the project. A key component of AI and Genomics Futures will be a deliberative public engagement exercise, aimed at understanding the views of an informed mini-public regarding the governance of genomic health prediction, given the rapid development and possible implications of the technology.

We are seeking an external partner to carry out this deliberative public engagement exercise, which will need to be completed by the end of July 2023.

About the commissioners

The Ada Lovelace Institute is an independent research institute with a mission to ensure that data and AI work for people and society.

Ada was established by the Nuffield Foundation in early 2018, in collaboration with the Alan Turing Institute, the Royal Society, the British Academy, the Royal Statistical Society, the Wellcome Trust, Luminate, techUK and the Nuffield Council on Bioethics.

We believe that a world where data and AI work for people and society is a world in which the opportunities, benefits and privileges generated by data and AI are justly and equitably distributed and experienced. We recognise the power asymmetries that exist in ethical and legal debates around the development of data-driven technologies, and will represent people in those conversations. We focus not on the types of technologies we want to build, but on the types of societies we want to build.

Through research, policy and practice, we aim to ensure that the transformative power of data and AI is used and harnessed in ways that maximise social wellbeing and put technology at the service of humanity.

The Nuffield Council on Bioethics is a leading independent policy and research centre, and the foremost bioethics body in the UK. The NCOB identifies, analyses, and advises on ethical issues in biomedicine and health so that decisions in these areas benefit people and society.

About the wider project – AI and Genomics Futures

The deliberative mini-public will form a critical part of AI and Genomics Futures, a joint project between the Ada Lovelace Institute and the Nuffield Council on Bioethics. The project seeks to investigate the ethical, societal and political economic issues arising from the influence of artificial intelligence on genomic science and to make recommendations to policymakers on how these might be managed.

The scope and focus of the project

AI and Genomics Futures is concerned with the societal implications of:

- AI and genomics together, rather than separately

- how AI is influencing genomics – rather than how genomics is influencing AI

- how AI is influencing genomic analysis (understanding genomic material (and related datasets) and its implications for physical and behavioral traits) – and not genome editing (changing and modifying genetic material)

- the AI powered analysis of the human genome and genomes – and not the genomes of pathogens, plants and non-human animals

- how AI might influence the analysis of the human genome and genomes over a 5-10 year time horizon

- AI and genomics globally, though in practice some of the more detailed research, exploration and analysis may have to have a regional focus. The deliberative mini-public will be based in the UK, and will have a UK focus – even if many of the discussions will be generalizable to other parts of the world.

Over the course of 2023, AI and Genomics Futures will be devoted to investigating the ethical, societal, political economic consequences of genomic health prediction, and how decision makers should respond to the challenges it presents.

Aims and objectives of the engagement exercise

Research completed so far during this project has identified genomic health prediction as the principal topic of investigation for AI and Genomics Futures over the course of 2023.

We will be conducting a scenario mapping exercise this spring to identify four different possible futures of genomic health prediction, each setting out a different way the technology might be developed, adopted and deployed and the different societal impacts it might have as a result.

Using these possible futures of genomic health prediction as a starting point, **we want to use the deliberative public engagement exercise to understand the attitudes and preferences of an informed mini-public regarding the governance, regulation and cultivation of tools of genomic health prediction**.

Specifically, we want to understand what this mini-public believe should be done (through regulation, governance and other policy levers) to shape the development and future uses of genomic prediction, given the radically different ways that the technology might be deployed, and the different ways it might impact on people and society – as well as understanding the reasoning behind the mini-public's recommendations.

Specifications for the deliberative public engagement

The specifications for the deliberative public engagement are:

- **40-50 people in total should be engaged** in the deliberative mini-public.

- **The engagement should take place in, and draw participants from, two separate locations in England** (ideally outside of London).

- The deliberative engagement should **take place mostly or completely in person**. As a minimum, we would expect critical stages of the deliberation to take place in person.

- **The engagement should be framed around a clear, overarching question**. We suggest framing the deliberative exercise around an overarching question, such as: 'How should the UK government manage, regulate and direct the use and analysis of genomes for the purposes of health prediction?' We are open to amending or reformulating this question in the engagement design processes.

- **The exercise should culminate with participants producing clear, concrete recommendations for policymakers** on how genomic health prediction should be managed, governed and steered

- **The exercise should factor in time and a mechanism for participants to develop an understanding of the nature of AI and genomics individually** and the significance of the two technologies in interaction with one another.

- **Participants should be provided with briefing materials** on the salient features of AI and genomics, how the two fields interact and some of the ethical and societal challenges associated with them.

- **The exercise should involve engagement between participants and expert witnesses**, who would be brought in to introduce participants to the salient features of AI and genomics, how the two fields interact and some of the ethical and societal challenges associated with them – as well as to answer participants questions on these matters.

- **Discussions should be informed by and in response to the possible futures of genomic health prediction** and deliberative exercise should introduce participants to the possible futures of genomic health prediction generated by the project's scenario mapping exercise. These 'futures' should be used to illustrate to participants the different ways that genomic health prediction might be deployed and the different affects it might have on society as a result. This will be vital context for participants in thinking about how present-day decision makers should respond to the rise of genomic health prediction.

- **The engagement should include time and a mechanism for a representative from the Ada Lovelace Institute and the NCOB to explain and take questions on the possible futures of genomic health prediction** and the methodology used to produce the futures should be factored in.

- **The engagement should be captured and recorded in sufficient detail to enable the Ada Lovelace Institute and the NCOB to conduct analysis and write up an analytical report of the exercise**. In addition to these materials, the external partner would also be expected to provide a write-up of the engagement methodology and copies of all resources provided to and used to engage with participants.

Who we want to engage

We would like our mini-public to be as representative as possible of the broader UK population, although we recognise that a fully statistically representative sample is not possible due to the size of the mini-public.

To this end, we encourage potential providers to set out what mechanisms they might use to recruit members of demographic groups that might be less likely to respond to conventional sortition recruitment should this prove necessary.

We do not want to adjust participant recruitment to over or underrepresent particular demographics or members of particular groups.

In the first instance, we would like to avoid hosting either of our deliberative engagement sessions in London, but are willing to do so if there is a sufficiently strong case.

The role of the external partner

Below is an outline of the role of the external partner:

- **Co-designing the deliberative engagement process** in close consultation with the Ada Lovelace Institute and the Nuffield Council on Bioethics

- **Arranging the engagement process,** including participant identification, recruitment and orientation, including arrangements to ensure participation is inclusive for everyone, venue identification and hire and the composition of the majority of briefing material for participants. We would also expect the external partner to assist with the identification and recruitment of external 'expert witnesses'.

- **Running and facilitating the engagement process**, providing expert facilitators.

- **Capturing and recording participants' discussions where appropriate.** Subject to participants' consent, we would expect the partner to provide transcripts from any online sessions and from in person small group discussions. We are open to discussing some of the other means by which participants' discussions are captured over the interview process and in the course of the process design. Some potential outputs might include short audio and video clips of participants expressing their views or feeding back aspects of their discussions.

Budget and timescales

Projects should be within a budget of £40,000 to £50,000, inclusive of VAT.

Date	Activity/milestone
11 a.m. Wednesday 22 March 2023	Deadline for submissions
	Shortlisting
Late March/ early April	Interviews
Early Mid/ April	Appoint provider
Mid April	Kick off meeting
Mid April – early May	Ada and Nuffield work with provider to develop methodology
May	Identification and recruitment of expert witnesses, development of briefing materials, identification of venue and participant recruitment
June	Execution of engagement workshops
Mid-late July	Records of participant discussions delivered by provider

How to submit a tender

Email a project proposal to hfarmer@adalovelaceinstitute.org by 11 a.m. on 22 March 2023 with the subject line 'AI and Genomics Futures – Deliberative public engagement IIT response'.

This should be no more than 2,000 words, clearly set out your proposed approach to delivering this work, how you would address associated risks and difficulties and include:

- a Gantt chart setting out timescales for key components of the project
- an itemised breakdown of costs
- details of the staff who would be involved with carrying out the work.

If you have any questions about this process, our requirements or the nature of this work, please email Harry Farmer at hfarmer@adalovelaceinstitute.org.

How we will assess bids

- 40% – Proposed methodology, including provisions for inclusion, ethics and data protection

- 40% – Experience of providing similar deliberative public engagement exercises, including the profiles and experience of the proposed delivery team

- 20% – Cost/value for money