

**Request for Proposals for Public Opinion Research on Artificial Intelligence in Public Health Responses**

**DATES:** November 2020 – February 2021

**LOCATION:** Flexible

**OVERVIEW:** The AAAS Center for Public Engagement with Science and Technology seeks a contractor to conduct research with one or more segments of populations disproportionately affected by the COVID-19 pandemic. We seek to explore their understanding of and views about the use of artificial intelligence technologies in the current pandemic, and in public health generally. This work could include focus groups, individual interviews, surveys, and/or other qualitative or quantitative approaches.

**OVERVIEW OF ORGANIZATION/CENTER:**

The American Association for the Advancement of Science (AAAS) is the world's largest general scientific society and publisher of the journal *Science*, as well as *Science Translational Medicine*; *Science Signaling*; a digital, open-access journal, *Science Advances*; *Science Immunology*; and *Science Robotics*. AAAS was founded in 1848 and includes nearly 250 affiliated societies and academies of science, serving 10 million individuals. *Science* has the largest paid circulation of any peer-reviewed general science journal in the world. The nonprofit AAAS is open to all and fulfills its mission to “advance science and serve society” through initiatives in science policy, international programs, science education, public engagement, diversity, equity and inclusion in science, and more. For additional information about AAAS, see [www.aaas.org](http://www.aaas.org).

The AAAS Center for Public Engagement with Science and Technology (the Center) provides scientists with communication resources, and it also facilitates dialogue between scientists and diverse publics about the benefits, limits, and implications of science. Since 2004, the Center has worked to further awareness of science and the scientific process and increase public input into scientific research and policy agendas, encouraging and facilitating dialogue between policymakers, diverse publics, and the scientific community. The Center's vision is to convene and facilitate dialogue between science and society—ongoing conversations in which science and society draw on relevant information and expertise from multiple perspectives. For more information, see [www.aaas.org/pes](http://www.aaas.org/pes).

**DESCRIPTION OF PROJECT: (AI)<sup>2</sup> INITIATIVE**

Artificial intelligence (AI)-based technologies are at the forefront of many efforts by governments to contain, or at least track the spread of, SARS-CoV-2, the coronavirus that causes COVID-19. AI-based algorithms are also being used for resource allocation in hospitals, in vaccine development, and in the analysis of cell-phone data to trace those who have been in contact with or proximate to individuals diagnosed with the disease. While machine learning can help make pandemic response more efficient and expedite progress toward effective treatments, privacy, equity and related human rights concerns also abound.

AAAS hypothesizes that responsible development and deployment of AI, including accounting for the unique characteristics and concerns of marginalized and vulnerable populations, can contribute to a more effective response to public health crises today and into the future.

To explore this hypothesis, this cross-departmental AAAS initiative centers around two central questions:

- What should the responsible development and deployment of AI look like in the context of the current public health response? How does that compare with the current reality? What is needed to bridge the gap?
- What lessons are we learning now that are relevant to future public health crises?

This RFP is part of an initial phase of the project, centered around identifying the various ways AI is being deployed in the context of COVID-19 (*this is being done separately and will be provided*) and **assessing public opinion about the use of these technologies in the pandemic response**. This includes understanding the questions and critiques being raised about those uses and their impacts, particularly among marginalized and vulnerable populations who are also disproportionately impacted by the COVID-19 pandemic (“populations of focus”). AAAS has commissioned a landscape assessment of existing empirical studies to date on this topic, which can be provided upon request.

This work will be used to develop and broadly share a ‘responsibility framework’ to define the socially responsible development and deployment of AI technologies in the context of COVID-19 and other public health situations, including the principles needed to conduct a risk-benefit analysis. AAAS anticipates focusing on uses of AI in triage, surveillance, and resource allocation related to healthcare.

We anticipate working with the populations of focus to discuss the technologies being deployed, their potential, their implications – both personal and societal; what socially responsible development and deployment in the pandemic response context looks like; and opportunities for facilitating individual decision-making in adoption and use of these technologies. AAAS intends to work with a variety of stakeholders to develop and deliver written and digital materials and direct engagement activities that promote conversations between scientific experts and diverse publics. Engagement activities may include online discussion forums, virtual workshops, town halls, webinars, and other appropriate convenings.

## **DESCRIPTION OF TASKS AND DELIVERABLES**

This scope of work is to conduct research that engages one or more segments of the populations of focus regarding their understanding of and views about AI technologies and their use in the current pandemic and in public health generally. This work could include focus groups, individual interviews, surveys, and/or other qualitative or quantitative approaches. We recognize the methodology will need to factor in both health concerns and restrictions on in-person interactions, as well as preferred formats for engagement and access to internet and technology among the populations of focus.

Proposals should:

- Suggest which population(s) or community(ies) to focus on
- Discuss existing relationships with those communities, including partner organizations or institutions who will participate if selected
- Suggest an approach for engaging them in this work, including proposed formats or methods for reaching the target population, and targets for sample size

The contractor will be responsible for developing appropriate language for soliciting information related to:

- Existing understandings of AI and its range of uses
- Reactions to uses of AI technology in pandemic and public health responses, potentially related to (but not limited to) some of the following areas:
  - Views about the implications of using AI in the different phases/stages of pandemic preparedness and response (AAAS is currently most interested in focusing on its use in **surveillance, triage, and resource allocation**).
  - Views about the stages of AI system lifecycle, namely 1) design, data collection, and model building, 2) verification and validation, 3) deployment, and 4) operation and monitoring -- as each of these stages can have unique implications and need for public engagement.
  - How, why, and for and by whom personal health data should be collected and used in AI, as well as the public's trust levels in different agencies and social institutions guiding the development of AI.
  - Gauging the AI digital divide among the U.S. public, including issues of access.
  - Views on how AI might help us *overcome* health disparities.
  - Perceptions about disparate applications and implications for populations of focus.
- Underlying reasons why the respondents feel the way they do about these uses of AI.
- Whether the respondents/populations of focus want to know more, and how they would like to be involved (and expectations or perceptions of what a more ethical approach to developing and rolling out AI tools would look like).

**Project Deliverables and Estimated Timeframes (to be discussed and finalized in coordination with selected contractor):**

- Detailed research plan including identification of partner groups and confirmation of their participation: November 25
- Data management plan: December 11
- Final protocols, instruments, or tools used in research: January 8
- Raw data for internal use and public versions of data files: February 5
- Report including executive summary and a small number of data visualizations usable by a broader, less technical audience: February 26

**BUDGET**

Budget is for approximately \$18-20,000. AAAS requests a realistic assessment of how much it would cost to complete this work and how long it would take.

**MAIN CRITERIA**

- Demonstrated experience in this area of research (e.g., qualitative or a mix of qualitative and quantitative methods to assess public opinion, ideally on artificial intelligence in healthcare, public views of ethical uses of technology, or the digital divide)
- Longstanding good relationships with one or more communities and/or community organizations that fall under our broad definition of "populations of focus," and are planning to engage with research effort if proposal is selected
- Costs are within existing budget constraints

**REQUESTED PROPOSAL FORMAT**

Proposal should include the following:

1. Vendor description

2. Descriptions of 3-5 relevant past projects (ideally demonstrating connections with potential communities or community organizations proposing to engage with for this research)
3. Breakdown/description of tasks and approach, and more detailed timeline if desired
4. Budget and cost breakdown

#### **PROPOSAL DELIVERY INSTRUCTIONS AND CONTACT INFORMATION**

Please email proposal and budget to Emily Cloyd ([ecloyd@aaas.org](mailto:ecloyd@aaas.org)) and Elana Kimbrell ([ekimbrel@aaas.org](mailto:ekimbrel@aaas.org)).

#### **PROPOSAL EVALUATION TIMELINE**

- RFP sent out: September 25
- Deadline for submitting questions via email to [ekimbrel@aaas.org](mailto:ekimbrel@aaas.org) and [ecloyd@aaas.org](mailto:ecloyd@aaas.org): October 2
- Deadline for proposals: October 19
- Selection of contractor: November 2
- Contract actualized: November 6