UKRI policy fellowships 2027

Fellowship position

Fellowship title:

UKHSA AI enabled analysis in public health governance, open science and responsible practice fellowship

Fellowship type:

Core policy fellowship

Host organisation:

UK Health Security Agency (UKHSA)

Host team:

Analytical Innovation Unit

Academic discipline/s:

Artificial intelligence, statistics, health humanities, public health, behavioural science

Summary:

Examining the responsible adoption of AI across public health analysis, modelling, surveillance and research, while developing governance, guidance and best practice to strengthen quality, transparency, reproducibility and public trust as AI becomes embedded in analytical practice.

Policy topic:

Aligning with the Digital and Technologies IS-8 sector and supporting the NHS Fit for the Future mission by strengthening trustworthy public health intelligence, while addressing how UKHSA can take advantage of AI to improve its analysis while maintaining robust evidence, human oversight, accountability and public trust.

Research career stage:

Open to early and mid-career researchers

Fellowship structure

The fellowship is scheduled to begin on 1 October 2027 subject to security clearance requirements. The fellowship will have three phases:

- inception: duration is 3 months at 0.4 FTE
- main placement: duration is 12 months at 0.6-1 FTE
- knowledge exchange: duration is 3 months at 0.4 FTE

Work arrangements

Location requirements:

The Analytical Innovation Unit is geographically dispersed, with colleagues working remotely or attending UKHSA's headquarters in Canary Wharf usually on a hybrid basis. The team primarily collaborates through online meetings and other digital tools. The fellow is likely to work with stakeholders in other teams who are based in different UKHSA offices or work entirely remotely. Reflecting these working arrangements, the fellowship can be undertaken on either a hybrid or primarily remote basis, subject to the in-person attendance requirements outlined below. The fellow may work from UKHSA's offices in Liverpool, Leeds or Birmingham, as well as its headquarters in Canary Wharf, subject to local space and access arrangements.

Hybrid working:

Much of the fellowship will involve desk-based research and remote collaboration, and there is no requirement to attend an office for a specified number of days each week. A laptop will be provided, enabling the fellow to work from home or an agreed UKHSA office and access the systems required for the role. In-person collaboration will be encouraged where it adds value, particularly for co-designing the research, engaging with stakeholders and sharing emerging findings.

During the inception phase, the fellow should expect to attend at least one in-person meeting in London to work with the host team and relevant stakeholders to agree the fellowship's scope, research priorities and intended outputs. During the placement phase, travel to London will be required approximately once a month. This may include team meetings, stakeholder workshops, conferences, training and away days. These are most likely to take place in London, although some activities may be held at other UKHSA offices.

Security clearance and nationality eligibility criteria:

Basic Personnel Security Standard (BPSS) is required, which usually takes around six weeks. We would expect the successful applicant to start the security clearance application process, with support from the host team, as soon as their fellowship has been confirmed by UKRI. Inception phase can begin before the security clearance process is completed but will be required for the main placement phase. The civil service also has nationality requirements that candidates would need to meet in order to take up the post. Please see civil service recruitment nationality rules for further information. Candidates should check these requirements before applying to ensure they meet the eligibility criteria

Fellowship position description

Overview

The fellowship will explore how AI can be adopted responsibly across public health surveillance, analysis, modelling and official statistics while maintaining robust standards of evidence, meaningful human oversight and public confidence.

UKHSA is introducing enterprise AI tools that can help more staff analyse public health data and draw insights from a wider range of sources in delivering the agency's core functions. These tools could improve efficiency and make analytical methods more accessible, but they also create risks relating to analytical quality, transparency, accountability, provenance and the maintenance of professional expertise.

The fellowship will examine how responsible AI, open science, quality assurance, reproducible analysis and peer review can help manage these risks. It will also consider how use of AI could release time for higher-value activities such as improving data quality, engaging with subject matter experts and communicating uncertainty.

Co-design and collaboration

The fellow will be embedded within UKHSA's Analytical Innovation Unit, a team of primarily data scientists. They will collaborate with analysts across the Analysis and Intelligence Directorate, as well as epidemiologists, bioinformaticians and other scientists across the agency. Co-design will begin during the inception phase, with the fellow helping to shape the research questions, methods and outputs in partnership with the host team and relevant stakeholders.

The fellow may use interviews, surveys, workshops and case studies to understand current practice and evaluate emerging approaches. They will also have opportunities to engage with cross-government networks, including the Government Statistical Service.

Potential areas of research

The research programme may consider:

- how AI and agentic coding are being adopted across analytical and scientific workflows
- transparency, provenance and reproducibility across analytical workflows
- risks to the quality and robustness of AI assisted outputs
- implications for open and "inner" (organisation wide) source code and methods
- public trust in AI assisted analysis, modelling and statistics
- effects on analytical skills, expertise and professional development

Potential outputs

Outputs could include:

- practical recommendations on the governance and assurance of AI assisted analysis
- case studies evaluating AI use within UKHSA analytical workflows
- guidance or frameworks supporting responsible AI assisted analysis
- reusable templates, exemplars or reference implementations demonstrating good practice

Benefits for the fellow:

Through their placement in the Analytical Innovation Unit, the fellow will engage directly with analysts, scientists, policy professionals and senior decision-makers. UKHSA will provide line management, appropriate IT equipment, access to office space and relevant internal systems and processes, subject to necessary security and mandatory training requirements.

The fellowship will provide an opportunity to influence policy and practice within UKHSA and across wider government in an emerging area of analytical practice. The fellow will gain insight into how evidence is produced and used in a public health policy environment and develop networks across government, public health and academia through professional communities and knowledge-exchange activities. They will also be supported to produce and publish research, subject to appropriate security, confidentiality and publication clearance requirements.

Person specification

Applications will be assessed by UKRI panel assessment against the following essential opportunity-specific requirements in addition to the generic eligibility and call criteria.

Essential criteria:

- experience applying or understanding of reproducibility, quality assurance and good practice within analytical, data science or software development workflows
- experience of using qualitative and mixed research methods, such as interviews, surveys and case studies, to develop evidence-based recommendations
- ability to engage effectively with technical and non-technical stakeholders and communicate findings clearly to inform decision-making

Applicants shortlisted from the panel assessment will be invited to a host led interview. At this stage the host will also take into account the following desirable fellowship-specific requirements.

Desirable criteria:

- experience of collaborating across disciplines or working in multidisciplinary teams
- experience of studying technology adoption, innovation or organisational change
- experience of working in public health, government or another evidence-led policy environment

Processing personal data

If applicants are shortlisted by the UKRI assessment panel UKRI will need to share the application and any personal information that it contains with the host for the host led interview selection process.

Your personal data will be handled in line with UK data protection legislation and managed securely. If you would like to know more, including how to exercise your Rights, please see the UKRI privacy notice.

Please see the UKHSA privacy notice and they will delete your data at the end of the selection process unless you are successful, in which case we will retain your data as an independent data controller.