Job description and person specification

Post:	Chief Scientist, BHF Data Science Centre
Location:	Flexible. Primary base could be anywhere in the UK, but must be willing and able to travel to London and elsewhere (mainly UK) in connection with the role
Salary:	This post would be suitable as a secondment
Duration:	To December 2030 (2 days per week)
Reporting to:	Executive Director, BHF Data Science Centre

About Health Data Research UK

Health Data Research UK (HDR UK) is accelerating trustworthy use of health data to enable discoveries that improve people's lives. We are the national institute for health data science. Our vision is for large-scale data to benefit every interaction with patients, every clinical trial and every biomedical discovery, and to transform public health.

The UK is in a unique position to realise the potential of health data, thanks to the NHS and its cradle-to-grave records for a population of over 65 million people. Safe and secure use of this data could improve treatments, deliver better health care and save lives. It could help tackle some of the biggest health challenges worldwide, including cancer, diabetes and cardiovascular disease.

However, access to this data for researchers is often a lengthy, fragmented process, meaning the potential for improving healthcare is far from being realised in full.

We work in partnership with the NHS, industry, charities and universities to realise the potential of the UK's health data in life-changing research. Patients and the public are actively involved in shaping HDR UK's work and ensuring it delivers public benefit.

Further information on HDR UK can be found at the end of this document.

BHF Data Science Centre

The British Heart Foundation (BHF) Data Science Centre, embedded within HDR UK, launched in January 2020. It has built on a £10m initial investment from the BHF to deliver the data and data science needed to address some of the most pressing challenges in heart and circulatory health research. In 2025 the BHF committed another £10m for the Centre to continue its work for five more years.

The Centre works in partnership with patients, the public, the NHS, charity partners, researchers and clinicians. These collaborations facilitate and enable the safe, ethical and scientifically robust use of data for research into the causes, prevention and treatment of all diseases of the heart and circulation and closely related conditions (including heart attacks, heart failure, heart rhythm disorders, stroke, peripheral vascular disease, vascular dementia, diabetes, and kidney disease).

The BHF Data Science Centre does not hold data itself. Instead, the Centre works with data custodians to access data in secure data and trusted research environments. The Centre team helps researchers from the NHS, academia and industry find, access, understand, connect and analyse the UK's unique cardiovascular 'big data', distributed across national registries, NHS electronic medical records and other datasets.

Further information on the BHF Data Science Centre can be found at the end of this document and on the website.

Purpose of the post

We are seeking an exceptional and internationally respected cardiometabolic clinician-scientist to provide senior scientific and clinical leadership for the BHF Data Science Centre. The successful candidate will bring an outstanding reputation, extensive networks across the UK and international cardiometabolic clinical and research communities, and the strategic insight and relationship-building expertise required to shape the Centre's direction in developing and delivering key data products and services.

Working closely with the Centre's leadership team, the Chief Scientist will guide the development and delivery of data products, services and capabilities that enable the cardiometabolic research community to undertake cutting-edge, data-enabled research. They will ensure that the Centre's activities are informed by the needs of researchers, clinicians, industry, patients and the public, and are focused on accelerating research that improves clinical practice, patient outcomes and public health.

The role will be pivotal in engaging cardiometabolic and data science communities and funders to identify the most important priorities, opportunities and challenges in cardiometabolic research. The postholder will work collaboratively with the Centre team and its partners to translate these needs into practical, sustainable solutions. In doing so, they will help build enduring capability across the UK and support the development of a flourishing, inclusive and internationally connected cardiometabolic health data research ecosystem.

The Chief Scientist will be an inspirational and collaborative leader, with the credibility and authenticity to influence senior stakeholders and unite diverse communities around a shared vision. They will foster interdisciplinary collaboration across clinical research, data science, statistics, biomedical science, public health and clinical trials, creating connections that enable ambitious research at scale.

With a comprehensive understanding of the UK and international cardiometabolic data science landscape, including emerging capabilities, partnerships, technologies and strategic initiatives, the postholder will play a leading role in strengthening collaboration across academia, healthcare, industry, charities and the wider research community.

Through their leadership, the Chief Scientist will ensure that the Centre remains at the forefront of cardiometabolic health data science. They will champion innovation and scientific excellence, guide the provision of high-quality and responsive data products and services, and help establish the partnerships and capabilities needed to deliver impactful research that transforms cardiometabolic clinical care and improves outcomes for patients and the public.

Main responsibilities

- Provide visible, authoritative and inclusive cardiometabolic scientific and clinical leadership, contributing as a member of the Centre's leadership team to strategy, decision-making and collective accountability.
- Build trusted relationships across cardiometabolic clinical, research and data science communities, convening interdisciplinary expertise from academia, healthcare, industry and the wider healthcare sector.
- Lead engagement with the cardiometabolic clinical, research and data science communities to identify priority research questions, unmet needs and opportunities for collaborative action.
- Influence, build consensus and translate community and user needs into clear strategic priorities for the development of data products, services, infrastructure and analytical capabilities. Ensure that patient and public perspectives inform decisions about research priorities, data products, services and capabilities.
- Provide senior scientific and clinical expertise and context to the Centre team throughout the design, development and delivery of the Centre's products and services, ensuring they are user-led, scientifically robust and responsive to evolving research needs.
- Maintain oversight of developments in cardiometabolic science, clinical practice, health data research, artificial intelligence, statistics and data-enabled clinical trials, using this insight to adapt the Centre's priorities and approach in response to new evidence, technologies and community needs.
- Ensure the Centre's portfolio balances immediate research priorities with longer-term capability, building, sustainable infrastructure and a lasting legacy of skills, resources and trusted partnerships.
- Promote the BHF Data Science Centre's role in enabling UK cardiometabolic data science research to the general public and policy makers, to inspire and sustain support for the use of cardiometabolic health data in research.

- Influence and build consensus across clinical, academic, technology, pharmaceutical and life sciences sectors to accelerate data-enabled cardiometabolic research and improve access to high-quality research data.
- Act as a senior ambassador for the Centre at UK and international scientific, clinical and strategic forums, championing its mission, infrastructure, products, services and achievements.
- Identify funding and investment opportunities, providing scientific leadership for major funding applications, strategic business cases and proposals to public, charitable and commercial funders.
- Establish clear objectives, milestones and measures of scientific, clinical and public benefit, monitoring progress and emerging risks and adapting priorities in response to new evidence, technologies and community needs.
- Work with Centre to evaluate and communicate the vision, impact and achievements of the Centre's products and services to its governance bodies, funders, partners and wider communities

Knowledge/Skills/Experience

The successful applicant will have:

- Exceptional clinical cardiometabolic credibility, with the authority to engage and influence leading researchers, clinicians, data scientists, policymakers and strategic partners.
- A substantial record of scientific or clinical achievement and leadership, demonstrated through influential research, clinical impact, innovation, policy contribution or the leadership of major research programmes.
- Excellent communication, negotiation and influencing skills, with the ability to listen and reconcile competing perspectives, build consensus and secure delivery against shared objectives.
- The ability to balance creative and innovative thinking with practical delivery, sustainability and measurable scientific, clinical and public benefit
- Experience of engaging senior stakeholders across academia, healthcare, data science, industry, professional societies, research networks, government and policy communities.
- The ability to provide constructive challenge, make sound strategic judgements and drive delivery while working effectively as part of a multidisciplinary leadership team.
- A commitment and enthusiasm to engaging with patients, the public, and patient and public involvement networks/organisations for cardiometabolic data science research.
- Experience of public communication of science and media relations, especially the critical role of public involvement and engagement in complex issues such as the use and sharing of health and social data for research.
- A strong understanding of the complexities, opportunities and challenges associated with using health data for research, including data quality, representativeness, accessibility, linkage, interoperability, reproducibility, security and governance.
- Experience of engagement with UK and devolved nation governments and policy bodies, and familiarity with UK health data governance model.
- Experience of heading up and delivering large and complex partnership projects.

Eligibility

Candidates must:

• hold a substantive clinician-scientist position at a UK organisation, within the cardiometabolic field

• have a contract of employment at their organisation that extends up to the end of the secondment period or beyond,

• have the written support of their organisation before applying (an organisational supporting letter will be required for the application)

Dimensions

- This role is a secondment for 2 days per week
- Occasional travel may be required for the role as HDR UK activity takes place across the UK

Application Process

How to apply: Unless specified, please apply using our online portal.
Please upload your CV and covering letter of no more than 500 words explaining what you can bring to this role. These will be anonymised and reviewed by the hiring panel.
Please also include a letter of support from your university with your application.
Please contact recruitment@hdruk.ac.uk in the first instance if you have any queries regarding your application.

There will be a three-stage interview process which will include an informal chat at the longlist stage and then a stakeholder panel and separate interview for candidates shortlisted for this role.

Equal Opportunities Policy Statement

Health Data Research UK is an equal opportunities employer, and as such aims to treat all employees, consultants and applicants fairly. It is our policy to provide employment equality to all, irrespective of:

- Gender, including gender reassignment
- Marital or civil partnership status
- Having or not having dependants

- Religion or belief
- Race (including colour, nationality, ethnic or national origins)
- Disability
- Sexual orientation
- Age

We are opposed to all forms of unlawful and unfair discrimination. All job applicants and employees who work for us will be treated fairly and will not be unfairly discriminated against on any of the above grounds. Decisions about recruitment and selection, promotion, training or any other benefit will be made objectively and without unlawful discrimination.

Safeguarding

HDR UK is committed to robust safeguarding policies, we expect everyone who works with us to share our commitment to safeguarding.

Further information about the BHF Data Science Centre and HDR UK

BHF Data Science Centre service focus

The Centre's focus is on four service areas to support researchers:

1. **Data Discovery and Access Services**: to work in partnership to enhance discovery and enable access to cardiovascular relevant data sets.
2. **Information Governance, Trust and Transparency Services**: to advise on and work to streamline complex access arrangements, maintain trust and proportionate information governance.
3. **Data Utility and Linkage Services**: to accelerate the use of data driven research through expert advice of data linkage and use.
4. **Data engineering services**: to deliver research ready data that is interoperable through expert data curation and engineering services.

These services will scale to support research across four major data priorities:

1. **National datasets** relevant to cardiovascular disease.
2. **Consented cardiovascular cohort/trials data**
3. **High-resolution local regional cardiovascular data**
4. Cardiovascular imaging data

HDR UK's strategy

Our five-year objectives are to:

1. Accelerate trustworthy data use by sorting the data

- Make it easier and quicker for researchers to find, access and use high-quality, large-scale data
- Fix the technical challenges needed for swift, safe and secure data use, by assembling innovative infrastructure solutions
- Increase health research efficiency and productivity by accelerating adoption of the FAIR (Findable, Accessible, Interoperable and Reuseable) data principles

2. Improve people's lives by unlocking the power of data

- Deliver cutting-edge research that harnesses large-scale data to change health policy and practice
- Exemplify trustworthy data use to deliver research that was previously impossible
- Test and improve the infrastructure so it serves all researchers

3. Shape the future of health data research

- Connect data, people and organisations to bring about cultural change and realise the UK's potential to be at the forefront of health data innovation
- Develop people and teams with diverse perspectives and skills needed to deliver health data research
- Embed good practice in patient and public engagement and involvement to build confidence in health data research for public benefit by increasing transparency and trustworthiness.

HDR UK impact

The Institute played a major role in the COVID-19 pandemic, working with the NHS and collaborators internationally to link and coordinate the use of large-scale data. With these resources, scientists and doctors could understand more about this new disease, identify which drugs were effective and provide evidence to allow the NHS and policymakers to respond to the challenge.

Our successes include:

- A Trusted Research Environments (TRE) for England was created early in the pandemic with health data covering >54 million people, thanks to a collaboration between NHS Digital and HDR UK through its British Heart Foundation (BHF) Data Science Centre. TREs are highly secure computing environments that provide remote access to health data.
- During the roll out of the Pfizer-BioNTech and Oxford-AstraZeneca vaccines against Covid-19, it was vital to understand how they performed in the population. A team supported by HDR UK through the BREATHE Health Data Research Hub were able to rapidly show the high protection offered by

the vaccines after a single dose, thanks to assembling linked health data for 99% of the Scottish population.

- Nearly half a million people missed out on starting medication to lower their blood pressure during the Covid-19 pandemic, according to research enabled by the BHF Data Science Centre at HDR UK. The research included 1.32 billion records of medications dispensed to 15.8 million people in England, Scotland and Wales between 1 April 2018 and 31 July 2021.
- The Green Algorithms initiative promotes more environmentally sustainable computational science and is run by Loïc Lannelongue and Michael Inouye at HDR UK Cambridge. They have built tools for carbon footprint estimation, raised awareness about the environmental impacts of algorithms and driven change in the computational science community.
- A significant landmark early in 2024 saw the first research study of health records for 67 million people in all four UK nations. It looked at gaps in Covid-19 vaccine coverage and found that between a third and a half of the populations of the four UK nations had not had the recommended number of vaccinations and boosters by summer 2022. The approach could be extended to many other areas of medicine with great potential for new discoveries in the understanding and treatment of disease.

HDR UK is a virtual institute, with staff and partners in all four nations of the UK and an office in central London. We are an independent, registered charity with five years of core funding from nine of the UK's leading medical research funders, including UK Research and Innovation, the Department of Health and Social Care in England and equivalents in Northern Ireland, Wales and Scotland, and leading medical research charities.

At Health Data Research UK, we employ talented individuals who bring their own unique skills and experience to support the Institute's vision and benefit the whole team. Our values of transparency, optimism, respect, courage and humility guide how we work together within HDR UK, with our partners and other stakeholders.