

## Healthcare Science Innovation Fellowships

### Programme Information for Applicants

The Healthcare Science Innovation Fellowships Programme is an opportunity for qualified Healthcare Scientists working within the NHS in England and Wales, with at least 1 year of post-qualification experience.

The programme will provide experience of the innovation process, focusing on digital technologies for diagnosis or monitoring, equipping Fellows with the knowledge, skills and confidence for the development, evaluation and implementation of new technologies, and the ability to initiate and lead their own technology innovation projects in the future.

Host departments of Fellows will be awarded a £15K Innovation Fellows bursary to cover auditable costs associated with the Fellowship, and Fellows will have access to blended project-based and online learning and training resources and mentoring to undertake a technology innovation project relevant to their department.

Fellows will be encouraged to look at projects through the prism of the NHS Long Term Plan, seeing the patient as a partner, and understanding their journey, and considering future health technology possibilities. Device regulation and standards will be introduced as enablers to the safe and effective introduction of new and emerging technologies. Methods for identifying and managing unmet needs will be introduced as a central methodology.

#### **Background**

Technological solutions are a key component to meeting the challenges facing the NHS and the changing society in which we live. Safe and effective technologies together with the adoption of innovative solutions at pace and scale are essential for patient benefit and to keep healthcare operating at the limits of science.

Healthcare Scientists need to be given the “tools to do the job” in terms of healthcare technology management techniques, to lead developing and implementing evolving

technologies and innovative solutions. The Fellowship scheme will build system capacity to increase medical device regulatory and standards expertise and innovation capabilities for the introduction of appropriate technologies.

Partnering the proven innovation expertise of the NIHR Devices for Dignity MedTech Co-operative ([www.devicesfordignity.org.uk/](http://www.devicesfordignity.org.uk/)) with candidates keen to develop their innovation skillset, the Fellowship programme offers an experiential framework where skills are built and real-world examples are tested.

### **Delivery Partners**

This work will be undertaken in collaboration with the Office of the Chief Scientific Officer for NHS England and Improvement (CSO) and the National School of Healthcare Science (NSHCS) and be delivered by NIHR Devices for Dignity MedTech Co-operative (Devices for Dignity), an organisation embedded within the NHS and successfully catalysing medical technology innovation since 2008.

Devices for Dignity work with people living with long-term conditions (across the life course from very young children to older adults) and bring together teams to catalyse technology development in response to unmet needs, which, if addressed, will deliver the most impact for patients, carers and health & social care. Devices for Dignity projects begin with a holistic assessment of functional limitations and challenges that arise from living with long term conditions. Often health conditions are managed in isolation, which is not always effective for patients in identifying the most suitable technology to help them. Devices for Dignity recognise the challenges of overlapping complications of illnesses on quality of life and the ability to live, work and function independently.

### **Programme Criteria & Content**

The full Programme will last up to 12 months, with the departments of Fellows committing to provide an average of 1 day per week protected time to aid study and project completion.

Online learning resources will comprise inter-related elements, introducing the knowledge and methods required to develop a technology from an initial unmet need through the path to commercialisation and wide-scale adoption into the NHS or wider health and social care system.

It is not expected that a Fellow will complete a full technology development project (from concept to commercialisation) as such projects may take many years from initiation. Fellows will experience the key components of the development pathway as an introduction to the range of skills and attributes necessary for successful evolution of an initial idea to a technology that brings patient and system benefits. Fellows will be partnered with appropriate mentors who will be experts in their fields.

Within the application form, applicants will be asked to provide a short summary of a technology innovation project that they would wish to undertake. The project focus must include an aspect that is relevant to delivering benefits through the use of digital technologies for diagnosis or monitoring, helping people to live their lives well, for longer, and ideally synergises with one of D4D's clinical themes (Diabetes, Renal Technology and Long-Term Neurological Conditions) or cross-cutting themes (Assistive Technology & Connected Healthcare, Rehabilitation Technologies, or Human Factors). Applicants, and their departments, will be asked whether they would be open to adaptation or substitution of their submitted project in the event that it is not assessed as being suitable. Applicants are not required to have developed technologies previously, but successful applicants will be expected to have demonstrated passion and aspiration for improving healthcare technology for patient and system benefit.

### **Experience to be gained on the Fellowship**

- Enrichment of innovation leadership skills
- Appreciation of governance & risk management frameworks for medical technologies
- Enhancement of communication skills for respectful, inclusive, meaningful and empathetic conversations with patients
- Experience of redesigning/optimising a clinical pathway and 'hands-on' involvement in a technology development project
- Experience of working in multi-stakeholder teams with external partners
- Appreciation of commercialisation routes and challenges
- Awareness of tools, techniques and partnership approaches to aid technology development and adoption

- Increased knowledge of the medical technology innovation development pathway
- Springboard for participation in other programmes, e.g. Clinical Entrepreneur Programme

### Programme Timeline

The Fellowship will run from the 1 March 2022 until 28 February 2023.

Application Process	Timeline
Flier promoting upcoming launch at CSO Webinar and for social media circulation	29 October 2021
<b>Application process opens and comms promotion starts</b>	3 November 2021
<b>Closing date for applications</b>	14 December 2021
<b>Interviews of shortlisted applicants</b>	14 January 2022
<b>Successful applicants announced</b>	W/C 24 January 2022

### How to apply

The application form will be available to access from **3 November 2021**. This will be available from the NHS Futures platform, National School of Healthcare Science website and NIHR Devices for Dignity MedTech Co-operative website.

[FutureNHS Collaboration Platform](https://future.nhs.uk/) <https://future.nhs.uk/>

[National School of Healthcare Science](https://nshcs.hee.nhs.uk/) <https://nshcs.hee.nhs.uk/>

[www.devicesfordignity.org.uk](http://www.devicesfordignity.org.uk) <http://www.devicesfordignity.org.uk/>

**For more information:**

Checkout the weekly social media updates on twitter handles:

National School: @NSHCS  
HEE: @NHS\_HealthEdEng  
D4D: @Devices4Dignity  
HCS: @WeHCScientists  
Sue Hill: @CSOSue  
Angela Douglas: @Angelafifty  
Berne Ferry: @HeadNSHCS  
Philippa Hedley-Takhar: @piphedley  
Avril McCarthy: @AvrilDMcCarthy  
Wendy Tindale: @WendyT\_99  
Lynn George: @LynnGeo26904702  
Kath Jones @KjonesNewbottle

LinkedIn: Devices for Dignity - <https://www.linkedin.com/company/nhr-devices-for-dignity-mic/>