
**UK Departments of Health: The Future of the Healthcare Science Workforce
Modernising Scientific Careers: The Next Steps****Response by the Wellcome Trust**

March 2009

1. The Wellcome Trust is the largest charity in the UK. It funds innovative biomedical research, in the UK and internationally, spending over £600 million each year to support the brightest scientists with the best ideas. The Wellcome Trust supports public debate about biomedical research and its impact on health and wellbeing.
2. Healthcare scientists are a unique and crucial sector within the NHS workforce, and have the potential to become leaders in medical research and innovation. However the training and career pathways for this workforce has become unduly complex over time, which could make a career in healthcare science less appealing. Roles are not structured to encourage an interest in research, and access to the resources and time needed to perform research is often limited. We therefore welcome the opportunity to comment on the future career and training and career pathway for healthcare scientists, many of which the Trust supports within the NHS. We have focused our response on four key messages.

The need to ensure that research and innovation is a core principle underpinning the healthcare scientist training and career pathway

3. The Trust welcomes the recognition by government of the importance of fostering a culture of research and innovation within the NHS. Lord Drayson recently said that “The National Health Service is an amazing resource for fostering research and innovation in patient care, drug discovery, medical devices and services, that we have only just begun to realise”¹ – in order for healthcare scientists within the NHS to foster such a culture, they need to be supported by an enabling training and career pathway.
4. We are pleased that the vision for the healthcare science workforce identifies that they should have a “greater involvement in research and development, innovation and service improvement”. However the Trust recommends that “leading and embracing research development and innovation” should become a core principle underpinning the healthcare science training and career pathway - in order to fully acknowledge the vision, and to ensure that this is a specific outcome that will be evaluated during implementation of the programme.

The Healthcare Science workforce must remain up to date and responsive to technological change

5. The operational workforce needs to be given dedicated time and resources to expand their knowledge of the latest research and technology, to enable them to incorporate this into research practice and therefore improve their service.

¹ http://www.dius.gov.uk/speeches/drayson_FST_lecture_05-02-09.html

6. Increasing technological innovation will inevitably have an impact on the design of services and delivery models and therefore must also be taken account of in workforce planning.

The importance of integrating academic training with clinical training to foster translational research and innovation

7. Integrating academic training with clinical training to foster translational research and innovation was identified in the NHS Next Stage Review² as one of the factors that would create a “flexible, responsive, sustainable, scientific and technical” Healthcare Science workforce. To foster and embed translational research and innovation within the healthcare science workforce requires the creation of a circular flow of information that moves from the research bench to the patient bedside, and then back again to inform and improve further research. Crucially it is this feedback loop from bench to bedside that often presents barriers for researchers. To overcome these barriers healthcare scientists need to have the facilities, time and money to perform the required research; be fully trained to perform basic research; and be able to address the cultural issues between academics and clinicians by creating an open dialogue that will foster bi-directional communication.
8. The proposed higher specialist scientist training programme goes some way to integrate academic and clinical training. The consultation outlines that a higher specialist scientist will provide consultant level advice and substantial management responsibilities, as well as initiating and leading research – but does not give an idea of time spent on, or degree of flexibility around, these activities. The consultation vision states that the healthcare science workforce will “lead research and development and the management of evidence, continually evaluate clinical practice and care delivery models” – we are concerned whether this higher specialist scientist will have enough time to cultivate the research relationships, and to undertake the formal research activities that are needed to fulfil this vision statement.

Recognise the need to create the environment that talented healthcare scientists need to become research leaders.

9. Early identification of talented healthcare scientists that have the potential to become research leaders and providing these individuals with the support of career advice and mentorship for them to develop is crucial. Creating the correct environment for these research leaders to develop a research strategy is key. They need available resources and facilities to perform research; the time to cultivate research collaborations; and exposure to different environments outside the NHS, for example within industry. All these things will help to make a career in healthcare science more attractive.
10. One example of a place where healthcare scientists can gain exposure to a translational research environment is through the Clinical Research Facilities. These offer the opportunity for healthcare researchers to participate in high quality studies, providing valuable experience.
11. There is also a current and very welcome move between universities and the NHS to integrate teaching and research with the health service to form Academic Health Science Centres (AHSC). For example ‘UCL partners’ was set up in 2008, between the University College London (UCL), Great Ormond Street Hospital for Children, Moorfields Eye Hospital and University College London Hospitals. These AHSCs could create the integrated academic and clinical environment and positions that research leaders need to foster translational research innovation for service improvement.
12. An example of a recently created academic and clinical integrated position is Dr Simon Heales, a consultant biochemist, who will soon take up a new position as Professor of clinical chemistry

² NHS Next Stage Review: A High Quality Workforce, Department of Health, June 2008

at The UCL Institute of Child Health and Great Ormond Street hospital for children. This new role will provide Dr Heales with the opportunity to instigate research collaborations and develop a research strategy as well as establish a number of diagnostic services.

13. Funding opportunities exist outside the NHS. The Trust has in the past provided funding for Healthcare Scientists like Dr Heales, and Healthcare Scientists with an interest in research are still encouraged to apply for grants within our core basic funding schemes.