

Academic medicine and clinical practice

The celebration of 60 years of the NHS highlighted that whilst the principles underpinning the provision of healthcare for all remain, day-to-day practice has been revolutionised by recent scientific discoveries. For example, the availability of effective treatments for cardiovascular disease (beta blockers; ACE inhibitors; statins), advances in imaging technology (ultrasound; MRI scans) and developments in assisted conception and regenerative medicine have transformed healthcare in the late 20th and 21st centuries. A career in clinical academic medicine could provide you with the opportunity to have an impact on the lives of many through education and research.



For those who wish to combine clinical practice with research, education and international travel, clinical academic medicine offers exciting prospects. Clinical academics make up five to ten per cent of the medical workforce. Most are university employees but, in addition to academic activities, they have honorary contracts with the NHS and spend about half of their week as practising doctors. Clinical academics are responsible for the undergraduate curriculum, inspiring and educating the next generation, and they contribute substantially to postgraduate medical training. Importantly, clinical academics play a leading role in basic, translational and clinical research, bridging between bench and bedside and providing a key interface with Industry and policy-makers.

There has never been a more exciting time to enter academic medicine. The pace of scientific discovery in pharmacogenetics with the prospect of individualised therapy, links between medicine and the physical sciences leading to novel approaches in bioengineering, and the application of modern computing to 'telecare' will further transform clinical practice in the next decade. Recent years have seen an unprecedented explosion in the support for basic and clinical research in the UK, including the creation of the National Institute for Health Research (NIHR) and stimulation of links between the NHS, universities and the pharmaceutical sector. In parallel, there is now a clear training pathway for the future leaders in clinical academic medicine.

A career in clinical academic medicine

For some, a career in clinical academic medicine begins as an undergraduate, perhaps by choosing a student-selected module or by opting to take an intercalated honours degree. Whilst a Bachelor of Medical Sciences (or equivalent) is not essential, it provides an introduction to research methodology and can become the foundation upon which to build an academic career. For the small number of students who might wish to continue their scientific training as undergraduates, studying for a PhD can also be considered (some UK universities offer formal MB PhD programmes; others will consider this on a case-by-case basis).

The current approach to clinical academic training arose from the 2005 Report of the Academic Careers Sub-Committee of Modernising Medical Careers and the UK Clinical Research Collaboration, chaired by Sir Mark Walport¹. However, it should be emphasised that there is flexibility to allow movement into academic training programmes at all levels. An academic attachment during the Foundation Years provides the opportunity to spend four months in an academic unit. The next step is to consider applying for an Academic Clinical Fellowship, a three year training position to acquire discipline-specific clinical skills and devote 25% of time to academic studies, to gather pilot data to apply for a Doctoral Training Fellowship. For those who wish to proceed along an academic route, there then follows three years of research training to obtain a PhD (usually supported by the MRC, the Wellcome Trust or one of the other major medical charities). Successful candidates will then move to a Clinical Lecturer post for about four years to complete clinical specialist requirements and undergo post-doctoral training. Next will usually be a five year Clinician Scientist appointment or Senior Lectureship (each with honorary consultant status). Once again, flexibility can be built into all of these positions, for example, by integrating training fellowships outside the UK or in collaboration with Industry. Whilst many clinical academics will take the research route, others will focus on education, which has become increasingly important with a strengthened transition between undergraduate and postgraduate medical education.



For further details...

To learn more about a career in academic medicine, speak to local academic colleagues or contact the Dean or Head of your medical school. Further details can be found by visiting the web sites of the Academy of Medical Sciences (www.acmedsci.ac.uk) and the Medical Schools Council (www.medschools.ac.uk), which also lists current vacancies (www.clinicalacademicjobs.org). If you are looking for a challenging, rewarding and flexible career, with the opportunity to practise medicine but at the same time travel the world and play a leading role in research or education, you should certainly consider a career as a clinical academic.

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Reference

1. Medically - and dentally - qualified academic staff: recommendations for training the researchers and educators of the future. Report of the Academic Careers Sub-Committee of Modernising Medical Careers and the UK Clinical Research Collaboration, 2005.