

CORE TRAINING FOR DOCTORS

WHAT THEY DON'T TEACH YOU IN MEDICAL SCHOOL

Opportunities in postgraduate medical education via clinical academic training

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Opportunities in postgraduate medical education via clinical academic training

Introduction

This article outlines the postgraduate opportunities available to trainee clinicians interested in medical education. It focuses on the integrated clinical academic training pathway for medical trainees and identifies some tips for securing an academic clinical fellowship. It describes what life as a junior clinical academic in medical education entails and identifies the alternative route into postgraduate medical education for trainees – the clinical teaching fellowships. It concludes by looking at how the shape of training review into specialist training may impact on future opportunities in postgraduate medical education.

Background

There are many reasons for developing and sustaining a strong academic training programme. The General Medical Council's (2013) *Good medical practice* guidelines acknowledge that doctors must be competent in all aspects of work, including research activities and the General Medical Council generic standards for training indicate that: 'trainees who recognise that their particular skills and aptitude are well-suited to an academic career should be encouraged and guided in that endeavour' (General Medical Council, 2010).

Thus, following the wide realization that the number of clinical academics was in free fall at the turn of the century (Forum on Academic Medicine, 2004), the UK Clinical Research Collaboration was established in 2004 to sustain the

training and employment of a new breed of medically qualified academic clinician. One of its achievements has been setting up an integrated pathway (Figure 1) for clinical academic training (Walport, 2005). The foundation academic posts aim to provide an introduction to academic medicine alongside clinical training, whereas the academic clinical fellowship and academic clinical lectureship posts aim to provide research experience to academically gifted medical trainees, while allowing them to continue their clinical training. The academic programmes are aligned with the NHS strategy to put innovation at the heart of NHS care and deliver on the QIPP priorities (Quality, Innovation Productivity and Prevention). Their importance is reflected in the gold guide for specialty training (Conference of Postgraduate Medical Deans of the United Kingdom, 2010).

Educational research has certainly benefitted from the implementation of the clinical academic training structure as junior doctors are now able to develop educational research skills without compromising their clinical competencies. The clinical academic pathway provides numerous entrance and exit points for the clinical educational researcher of tomorrow. Academic clinical fellowships are aimed at medical and dental professionals who are still early in their specialty training, and have nonetheless demonstrated research interest and potential. Funding is available for 3 years, after which the trainee is expected to apply for a training fellowship for a higher degree or return to clinical training if unsuccessful.

Securing an academic clinical fellowship in medical education

The person specification for academic clinical fellowship posts specifies a requirement to show an interest in education and education research. This can be addressed in a number of ways.

At medical school, students can opt for an intercalated degree in medical education or take up student-selected compo-

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nents in education and publish their work or present at conferences. There are journals dedicated to publishing medical education research such as *Academic Medicine*, *Clinical Teacher*, *Medical Education* and *Medical Teacher* among others; and mainstream journals also often publish educational research. As an undergraduate, there are many opportunities to get involved in peer teaching (Ten Cate and Durning, 2007), and these can form a springboard to an academic career in medical education. Involvement in such activities demonstrates commitment to medical education, and allows development of the team-working and leadership skills required to be successful as an educational academic.

Entry into the academic foundation programme used to be run locally but has now been embedded into the centrally-run

national application system. A post as an academic foundation year 2 doctor in medical education provides dedicated time for teaching and some research. Academic foundation year 2 doctors are often involved in both small and large group teaching through anatomy demonstration, problem-based-learning facilitation and clinical skills teaching (UK Foundation Programme, 2013; University of Sheffield, 2013). Increasingly, foundation schools are funding postgraduate certificates in medical education for their academic foundation year 2 doctors. Organizations such as the Association for the Study of Medical Education and the Association for Medical Education in Europe run numerous workshops where trainees can bolster their teaching skills, and yearly conferences where their work can be showcased.

The importance of a mentor cannot be emphasized enough, and educationalists will be more than willing to advise and guide if a trainee shows enthusiasm and dedication. Good networking skills are definitely one of the foremost requirements of a successful budding academic in medical education. A number of organizations have been formed to provide a platform to that end, such as Trainees in the Association for the Study of Medical Education or the Academy of Medical Educators, where medical students and junior doctors with a common passion for teaching and educational research can share ideas and experiences.

Recruitment into academic clinical fellowship programmes starts before the national recruitment for core specialties. The intake for August 2014 started in October 2013 with offers out by the end of January 2014. Posts may be advertised for entry at any level between ST1 and ST4. It is not uncommon for there to be candidates from different specialties, and at different levels, all being eligible to apply for the same academic clinical fellowship in medical education.

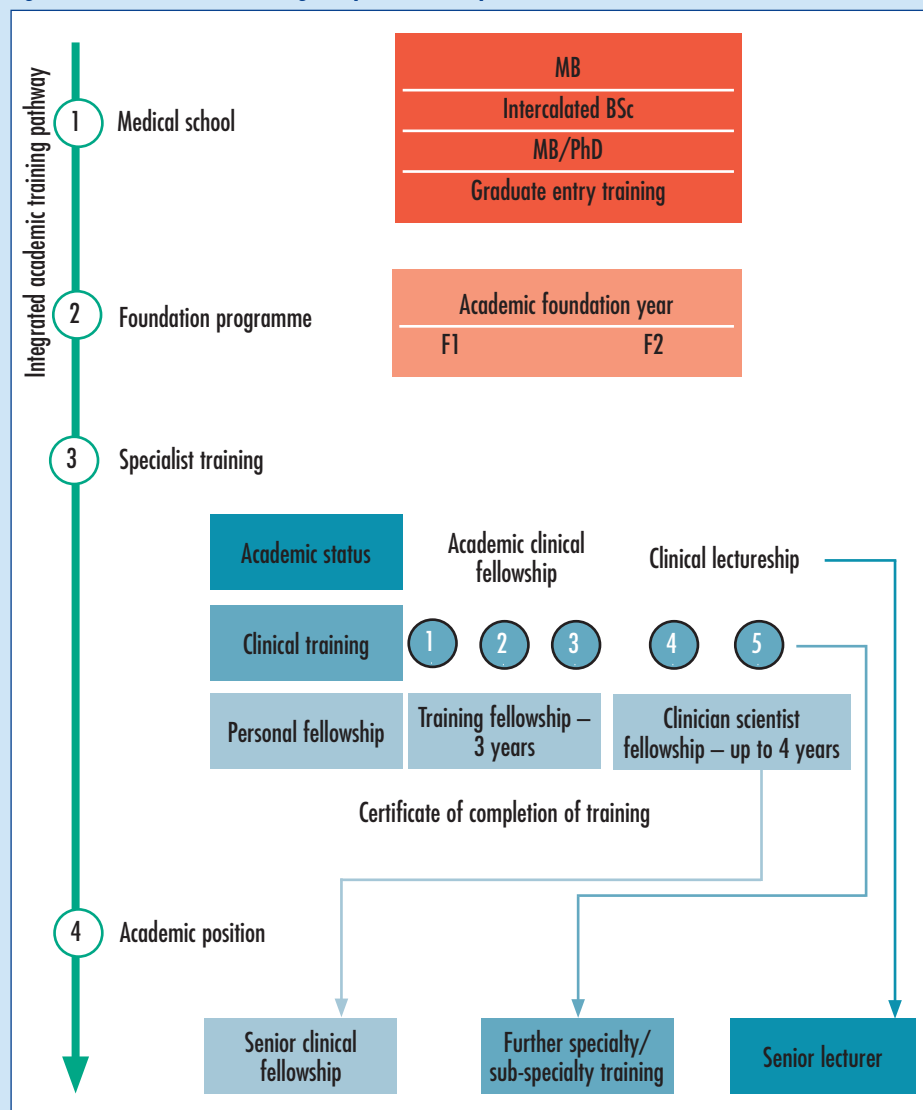
Most academic clinical fellowships are funded by the National Institute of Health Research but some local education and training boards also offer locally funded ones which are National Institute of Health Research branded (i.e. subject to the same terms, conditions and opportunities as the National Institute of Health Research posts).

Recruitment is still run locally by the local education and training boards. Academic clinical fellowship posts are few and far between, however, and are even fewer in medical education. There were only four National Institute of Health Research-funded academic clinical fellowship posts (excluding locally funded ones) in medical education advertised in round 1 of the 2014 intake (NIHR Trainees Coordinating Centre, 2013) (Table 1).

Life as an academic clinical fellow

The first year goes mostly into trying to achieve what may first feel like the impossible: attain most of the core specialty training competencies, pass the membership exams (for surgical and medical train-

Figure 1. Clinical academic training. Adapted from Walport (2005), NHS Medical Careers (2013).



ees) and complete the first year of a funded Masters in medical education. The Masters course provides a solid theoretical basis for an academic career in medical education. Modules vary according to programmes but most trainees have to do some core modules and some elective ones.

Dedicated research time accounts for 25% of the 3 years. This may be taken in blocks of a few months at a time or as release days every week. Taking a block of 9 months out straight may be advantageous in that it provides enough momentum to liaise with key stakeholders, devise the study protocol and obtain key pilot data for higher degree grant applications. Many universities run short courses on systematic reviews, scientific writing, quantitative and qualitative research methodologies, all of which equip trainees with a compendium necessary to construct dissertation projects and future grant applications.

The academic clinical fellowship is linked to a formal taught research training programme delivered by the local university. In most instances, this is part of a Masters level qualification (e.g. MmedSci, MRes, Mmed) which the trainee completes over the course of the 3 years. The research-heavy nature of the fellowship makes these academic taught programmes an essential part of the development of the trainee, in preparation for an application for a higher degree grant.

The academic clinical fellowship in medical education also provides a unique inter-

face between educational policy makers at the local education and training board level, educational theorists at the university and clinicians delivering hands-on teaching. A productive fellowship is not possible without the right research supervisor. The first author's projects were supervised by a professor in medical education (the second author) who encouraged him to develop his own research interests and linked him with key advisers. An open door policy was agreed upon, allowing smooth running of the projects.

The academic clinical fellowship comes with a yearly £1000 bursary which can be used to attend national and international conferences. Trainees are given the opportunity to participate in the yearly National Institute of Health Research trainees meeting which is an ideal platform to network with peers and other researchers with similar interests.

Beyond the academic clinical fellowship years

Perhaps one of the biggest appeals of an academic clinical fellowship in medical education is that it is linked to a General Medical Council-recognized specialty, into which the trainee will run-through after the end of the academic clinical fellowship or after taking time out for a higher degree. This means that even though medical education is not a recognized medical specialty, trainees can still run-through the higher specialty the fellowship was linked

to when the trainee applied originally. While this may give the trainee job security and provide time to concentrate on research rather than higher specialty training applications, it also highlights the need to commit to a specialty early on. If a trainee wants to change specialty, he/she will have to re-apply in open competition. Moreover, this may also limit the number of trainees applying to academic clinical fellowships as those interested in pursuing a specialty in which the medical education academic clinical fellowship is not linked to may not apply.

The logical progression from an academic clinical fellowship in medical education is to an MD or a PhD. Securing funding is the key and the latter months of the fellowship are often spent trying to achieve this. Unfortunately educational research grants are less easily available than those in biomedical or clinical research and the key is to be persistent, savvy and flexible. The first author's research focuses on the link between education and patient safety, and this two-pronged approach increases the avenues for future grant applications. The higher degree may lead onto an academic clinical lectureship which may last for up to 4 years. The academic clinical lectureship comprises a 50:50 split between clinical and academic duties, and trainees at this stage are expected to be able to lead their own independent research programmes. Once the trainee has achieved his/her certificate of completion of training and completed the academic clinical lectureship, he/she may apply for senior lectureship posts as a consultant. These are funded by a combination of the employing NHS trust, the university and the research organization.

What other routes are there into postgraduate medical education?

Unfortunately, the small number of medical education academic clinical fellowships available makes this route less accessible to most trainees interested in education or educational research. Another more common path into educational academia taken by junior doctors is through clinical teaching fellowships. Between January and September 2013, there were 27 posts advertised on *BMJ Careers* (Furmedge et al, 2013), making it less competitive than academic clinical

Table 1. National Institute of Health Research-funded academic clinical fellowships in 2011 and 2014

2011 intake	Local educational training board	Medical school (one post each)
	East Midlands	Leicester
	London	University College London
	South West	Peninsula
	Yorkshire and Humber	Leeds
	Hull York	
	North West	Manchester
	West Midlands	Warwick
2014 intake	East Midlands	Leicester
	North, Central and East London	Queen Mary University London
	South West	Plymouth
	Yorkshire and Humber	Leeds

From NIHR Trainees Coordinating Centre (2013)

fellowships. These posts are usually taken as out of programme experience for 1–2 years.

Unlike academic clinical fellowships, clinical teaching fellowships tend to vary considerably in structure and content. Some are more focused on the delivery of education while others are more research-centred. A survey has shown that less than a fifth of clinical teaching fellows are actively involved in educational research (Wilson et al, 2008). They can be funded by trusts, universities, local education and training boards or often, a combination of all three. Clinical teaching fellowships can also be linked to a formal taught educational course (PgCert/PgDip or even a Masters). The varying nature of individual clinical teaching fellowships makes knowing the job description even more important before applying (Furmedge et al, 2013). However, there is often a gamble associated with these posts as previous research has shown wide variation in training, supervision and workload associated with clinical teaching fellowships (Wilson et al, 2008).

Clinical teaching fellowships are not linked to a higher specialty training programme, and trainees who are already within a training programme need to apply for out of programme time to take up the post. Hence, training programme directors need due notice (often up to a year in advance) before trainees are able to take time out of their training to take up a clinical teaching fellowship post.

Shape of training

The *Shape of Training* review (Greenaway, 2013) outlines the future proposed structure of postgraduate medical education in the UK. While the focus of the report was on designing a framework that will produce doctors able to provide more generalist care, it also recognized the need for the maintenance of clinical academic training programmes. Time spent in academia within such programmes will still count towards training and there are indications that the structure will be more flexible, allowing trainees to consider moving into an academic career at different points in their training. The review goes further by proposing the embedment of an additional optional year in postgraduate training where trainees can work in an area of their

own interest, which may include education. Recognizing such 'fellowship' years as part of training may make it easier for trainees to access such opportunities without the need to break their training years with out of programme applications (Greenaway, 2013).

Conclusions

The main purpose of medical education is to create clinicians able to provide high standards of care. It thus makes sense to have a growing breed of clinicians proficient in the design, delivery and evaluation of evidence-based educational practices. The challenging academic clinical fellowship route certainly provides trainees with a solid knowledge of educational theory and practice to lead future educational research projects. Nonetheless there is also a growing need to increase teaching capacity for more doctors at different levels – and while clinical teaching fellowships may address this need, improving access to such opportunities lies in integrating such fellowship years into postgraduate training. **BJHM**

Conflict of interest: Dr MF Peerally is an academic clinical fellow in East Midlands (south) and a MmedSci student in medical education at the University of Nottingham; Professor S Carr was the associate postgraduate dean responsible for clinical academic training in East Midlands (south) between 2009 and 2011.

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KEY POINTS

- There are currently a number of set entrance and exit points into clinical academic training in medical education.
- The academic clinical fellowship in medical education provides trainees with a key set of generic skills to apply for higher educational grants, which may lead to academic clinical lectureships.
- Successful entrance into an academic clinical fellowship is competitive and requires advance planning.
- Educational research as a clinician in training involves a lot of networking with educational theorists, policy makers, fellow clinicians and students.
- Clinical teaching fellowships might provide a more accessible route into postgraduate medical education for most trainees.
- The Shape of Training review into the future of postgraduate medical training proposes an additional year for all trainees to further their interest in a particular domain, which may include education; and recognizes the importance of a flexible clinical academic training pathway.