

Research after a higher degree: The National Clinician Scientist Award Scheme

This article forms part of a collection of invited articles which will be collated and published as a 'Research Handbook in Dermatology'. Dr M Arden-Jones, Dr C Archer, Dr G Ogg.

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I became a National Institute for Health Research (NIHR)/Department of Health Clinician Scientist (CS) in March 2009. Together with my paediatric allergy colleagues at King's College London, I am conducting an interventional birth cohort study to examine whether the early introduction of potentially allergenic foods leads to oral tolerance and consequently less food allergy, eczema, and asthma (<http://www.eatstudy.co.uk>). Most dermatology colleagues I have talked to didn't seem to know what a Clinician Scientist was and how the award fitted into the recently established Integrated Academic Training Pathway.

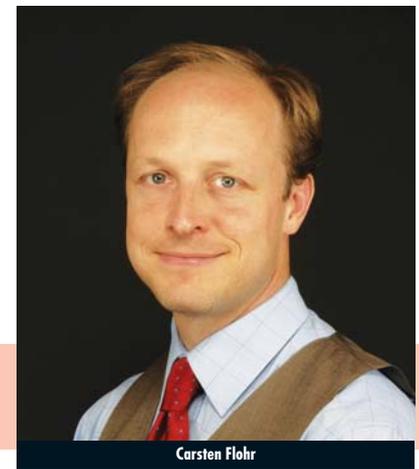
Here is my attempt to clear the mist and to encourage others to follow in my foot steps:

How do the Integrated Academic Training Pathway and the National Clinician Scientist Award Scheme fit together?

Those who are set on a career in academic medicine have a number

of exciting new options within the Integrated Academic Training Pathway. In a nutshell, the most junior posts are the Academic Clinical Fellowships (ACFs; Fig. 1), 3 year posts which provide a protected academic environment (25% of time) alongside a combined period of clinical speciality training to apply for an externally funded Research Training Fellowship (RTF).² If you are successful in applying for a RTF, you will leave the ACF post and eventually with a higher degree in your pocket arrange to return to full-time clinical training in dermatology.

Having successfully completed a MD/PhD and already with some specialty experience in dermatology under your belt, and assuming you are still not fed up with doing research (unlikely to be the case for many!), you would then be eligible to apply for a NIHR Clinical Lecturer (CL) post (Fig. 1). As NIHR CL you can continue your research activities for 50% of your time alongside the rest of your postgraduate clinical training. It is expected that holders of these new NIHR CL posts apply for further external funding, such as Clinician Scientist Awards. The NIHR CL phase ends at Completion of Clinical Training



(CCT), but the usual grace period of 6 months applies. There are currently dermatology CL posts in London, Manchester, Oxford and Newcastle (for full details go to www.nihrtcc.nhs.uk).

Although the CS Award Scheme directly links in with the Integrated Academic Training Pathway and NIHR CL posts, it is a national scheme in its own right, and you do not have to be in a NIHR CL to apply. The aim is to build a cadre of research-led clinical academics capable of leading research in their discipline. Funding up to five years is provided, including personal and research assistant/lab technician salary and research support with access to an academic mentorship programme run by the Academy of Medical Sciences (<http://www.acmedsci.ac.uk>).

The National Clinician Scientist Award Scheme

Most CS Award Schemes select on an annual basis (Table 1). Since inception of the NIHR CS Scheme in 2002, 45 awards have been made across all specialities, i.e. about five awards per annum. My CS Award in 2009 was the first for dermatology. The number of awards per year is

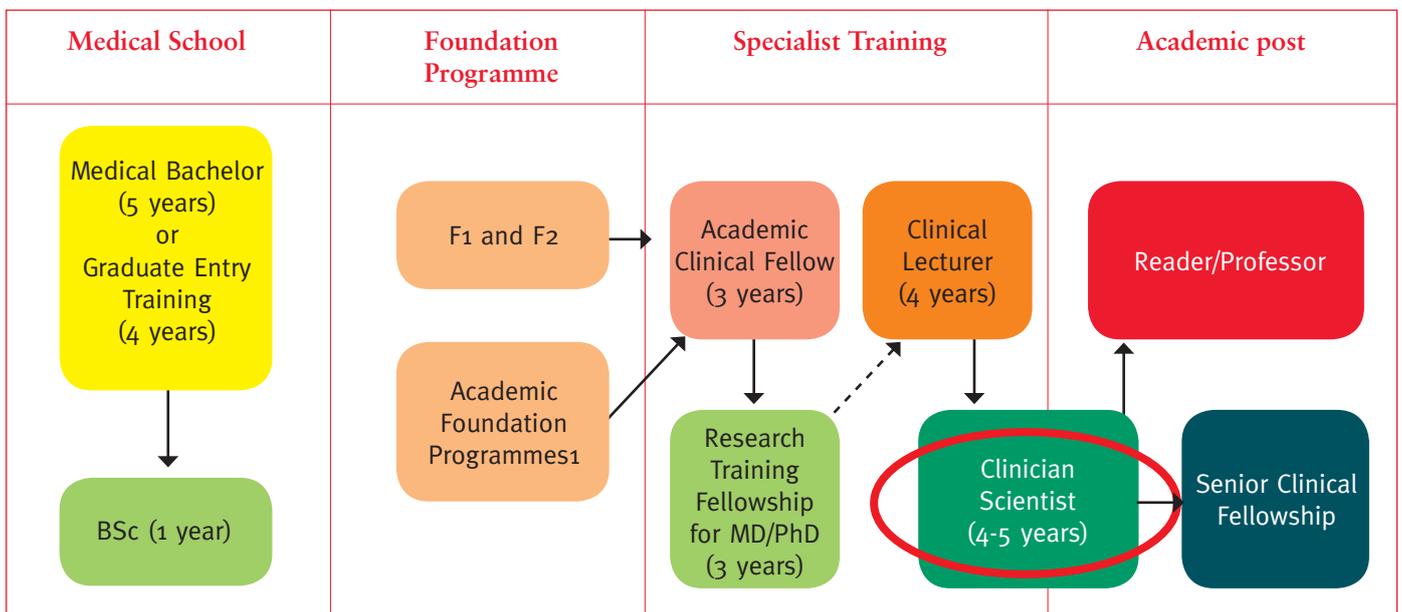


Figure 1. Integrated Clinical Academic Training Pathway. Clinician Scientist Award Scheme marked in red.

not fixed and depends entirely on the potential shown by individual applicants that year. As these are highly competitive national awards open to clinical scientists in any medical speciality, it is essential to find a host institution which provides a research environment that is internationally leading in your field. You do not have to apply through your current university base, and, in fact, you are encouraged to move to different waters to learn new research and clinical skills in a different academic environment, which is what I did by moving from Nottingham to London. The NIHR and Academy of Medical Sciences/Health Foundation also allow you to move on to another university within the award period provided this enhances your development as a researcher.

Your research area will very much determine which funding body to apply to. For instance, the NIHR funds applied patient-led research and health services research. However, that can mean many things as long as there is clear relevance to patients, and the vast majority of NIHR CS Award holders are involved in

lab-based research. For instance, while the main aspect of my project is to conduct a randomized controlled trial, we also collect samples to perform genetic and immunological analyses. The MRC and Wellcome Trust support research into basic medical as well as epidemiology and public health-orientated topics. The main selection criteria are your research track record and potential as an independent investigator, as well as the host institution and the quality of the proposed research. All these areas get equal weight and selection follows rigorous peer review and interview. Apart from your salary, you can ask for substantial amounts of research money and funds to attend courses and conferences, and total awards over more than £1,000,000 are not uncommon. In addition, the NIHR and Academy of Medical Sciences/Health Foundation run Leadership Programmes for their CS Award holders.

If successful, the CS splits their time between research and clinical commitments. The CS Award Schemes recognize the challenges faced by clinicians in combining research training with the demands of a clinical career,

with the extent of the Fellow's clinical commitment negotiable, depending on the specialty and the needs of the research. The great thing about the CS Awards is that applicants can be both pre- and post-CCT. As with ACFs and CLs, applicants in Specialist Registrar posts have the suffix 'A' (for 'Academic') attached to their National Training Number. Post-CCT applicants hold a Senior Lecturer/Honorary Consultant contract with their host institution.

Admittedly, postgraduate medical research funding is a bit of a jungle, and it takes time to understand the complexities of the different award and grant schemes. I hope this article has made it a bit clearer what the CS Awards are about. If you have any further questions, please don't hesitate to contact me directly at carsten.flohr@kcl.ac.uk.

Acknowledgment

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Award Scheme	National Institute for Health Research (NIHR) Clinician Scientist	Medical Research Council (MRC) Clinician Scientist	Wellcome Trust Intermediate Clinical Fellowship/Clinician Scientist	Academy of Medical Sciences/Health Foundation Clinician Scientist
Time of application	Post-doctoral, pre- or post-CCT	Post-doctoral, pre- or post-CCT	Post-doctoral, pre- or post-CCT	Post-doctoral, pre- or post-CCT
Eligibility	SpR/StR/Consultant/Senior Lecturer with commitment to research career	SpR/StR/Consultant/Senior Lecturer with commitment to research career	SpR/StR/Consultant/Senior Lecturer with commitment to research career	SpR/StR/Consultant/Senior Lecturer with commitment to research career
Application rounds per year	One	One	Two, preliminary application required	One every three years
Award period	Up to 5 years	Up to 5 years (basic research 4 years, clinically-orientated research 5 years)	Up to 5 years (only if at least 1 year pre-CCT)	5 years
Funding provided	Personal salary and research expenses (technician, equipment & consumables, travel) Only very short periods abroad funded Leadership Programme offered	Personal salary and research expenses (technician, equipment & consumables, travel) Up to one year of overseas research training possible, or training in second UK research centre	Personal salary and research expenses (technician, equipment & consumables, travel) Overseas research training possible	Personal salary and research expenses (equipment & consumables, travel) Leadership Programme offered
Focus	Applied/patient-led research and health service research Basic research not funded Animal research not funded	All areas of clinical and basic research Animal research funded	All areas of clinical and basic research, except cancer Animal research funded	Translational research in identified areas of national shortage, including paediatric disciplines, ie potentially paediatric dermatology and allergy
Clinical duties	Depending on CCT status & negotiable Post-CCT 2 sessions per week	Up to 4 sessions per week	Up to 4 sessions per week	Negotiable
Transfer to new host institution	Award portable within the UK	Award not portable	Award not portable	Award portable within the UK
Country	England. Similar scheme in Scotland, Northern Ireland, and Wales	United Kingdom	United Kingdom, Republic of Ireland, or Wellcome Trust Overseas Research Centres	United Kingdom
Website address	http://www.nihrcc.nhs.uk/natclinscienc-escheme/	http://www.mrc.ac.uk/Fundingopportunities/Fellowships/Clinicianscientist/MRC001823	http://www.wellcome.ac.uk/Funding/Biomedical-science/Grants	http://www.health.org.uk/current-work/leadership_Schemes/clinician_scientist.html or http://www.acmedsci.ac.uk/p57.html

Table 1. Funding bodies which are taking part in the National Clinician Scientist Award Scheme. Other funding bodies taking part in the scheme are Cancer Research UK, Leukaemia Research UK, Glaxo SmithKline, and the Institute of Child Health.