REVIEW

Developing critical mass and growing our own academics

P J D Winyard, H D Cass, T J Stephenson, A R Wilkinson, R E Olver

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Academic paediatrics is an exciting and rewarding career path but is not immune to the problems of recruitment and retention currently affecting most branches of medicine. The Modernising Medical Careers initiative, with its explicit academic training path, offers an unparalleled opportunity to develop novel schemes that promote recruitment and retention. Coordinated action is required to define, publicise and support the new academic training programmes and to attract the best trainees into them.

As judged by the number of trainees opting for an academic career and the number of posts available for training, academic paediatrics, in common with virtually all academic specialties, is in decline. Data¹ covering the period between 2000 and 2005 show a 7% decrease in paediatric clinical academic full-time equivalents across all grades but a 50% decline in paediatric clinical lecturers. Of particular concern is the survey² of final-year paediatric specialist registrar intentions showing that only 1% planned to seek a senior lecturer post, normally regarded as the key step to an independent academic career. The general lack of enthusiasm for an academic career exemplified by paediatrics has been the main focus of the Academic Careers Sub-Committee of Modernising Medical Careers (MMC) and the United Kingdom Clinical Research Collaboration, chaired by Professor Mark Walport. The recommendations of the Walport Report³ aim to demolish the barriers faced by potential clinical academic trainees, which it identified as being the absence of a clearly defined entry point or career pathway, the difficulty of finding a way through the training requirements of clinical and academic medicine, and the shortage of posts structured for career establishment and their insecurity of tenure. As some of the barriers are discipline-specific, it is pertinent to ask if there are other factors that discourage trainees in paediatrics from pursuing a clinical academic career, and if there is more that can be done to reverse the adverse trends in recruitment and retention.

To the generic disincentives identified by Walport might be added diminished lifetime earnings, adverse work–life balance, lengthened training and uncertainty of outcome. As if this is not enough, trainees can see the effects of pressure on their senior role models generated by the research assessment exercise and the introduction of performance management. Specific to paediatrics are the negative attitudes displayed by some non-academic paediatric

mentors, the lack of recognition of child health as a major priority by the National Health Service (NHS; and hence by the Medical Research Council), the perception that much paediatric research is of poor quality, the lack of a cognate research assessment exercise sub-panel, and the loss of departments of paediatrics and child health as universities restructure around system-based and disease-based research themes. Much of academic paediatrics is itself system-based or subspecialty-based, a fact that has to be recognised when planning individual research training programmes. Nevertheless, although it is clearly undesirable and impractical for all research training relevant to children to be carried out in departments of paediatrics and child health, there needs to be some paediatric focus for research and role models for the recruitment of research trainees.⁴

Among all this negativity, it is easy to overlook the positives of a clinical academic career, not the least of which is the variety of experience and the greater autonomy that it offers. The new consultant contract has made clinical and academic commitments explicit and, through research, there is the very real possibility of making a difference to the lives of children well beyond the confines of the clinic and ward. The other core component of medical academia, medical education, is an expanding academic specialty with excellent career prospects and, in recognition of the need for greater numbers of academic leaders in this area, Walport proposes a training programme for medical educationalists to parallel that for research trainees.

MMC AND WALPORT

The principal aims of the Walport Report³ are to build research capacity and remove some of the barriers to clinical academic training by providing a clear and coherent integrated training path for trainees—establishing academic training programmes through partnerships between universities, local NHS trusts and postgraduate deaneries. These programmes (fig 1) will consist of an Academic Clinical Fellowship (ACF) and clinical lectureship, with an intervening 3-year, externally funded training fellowship leading to a higher degree. Although the report describes a linear progression from ACF to PhD to lectureship, it rightly stresses the need for flexibility, with a variety of entry points to the training path.

Each trainee selected for an ACF, which will last 2–3 years, will be awarded a National Training Number (Academic) (NTN (A)) at entry

Abbreviations: ACF, Academic Clinical Fellowship; MMC, Modernising Medical Careers; NTN (A), National Training Number (Academic)

See end of article for authors' affiliations

Correspondence to: R Olver, Division of Maternal and Child Health Sciences, Ninewells Hospital and Medical School, University of Dundee, Dundee DD1 9SY, Scotland, UK; r.e.olver@dundee.ac.uk

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Figure 1 Paediatric academic training path. ACF, academic clinical fellowship; F1–2, foundation years; MRCPCH, Membership of the Royal College of Paediatrics and Child Health; ST1–8, specialist training years; SSC, student-selected component (of the curriculum); →, accelerated progression. Note: the specialist training years ST1–ST8 represent a maximum for non-academic trainees, some of whom will be eligible to be awarded the certificate of completion of training (CCT) within 5–6 years. Similarly, it will be possible for clinical academic trainees to reach level 3 competency and be placed on the Specialist Register within 8–9 years.

and will have protected time to prepare an application for an externally funded competitive training fellowship in research or medical education and acquire level 1 clinical competencies. People unsuccessful in obtaining a training fellowship in 3 years will rejoin a standard clinical training programme. Assuming that the trainee fulfils expectations, including the award of a PhD (or possibly an MD), progression to clinical lecturer will be assured and will not entail further competition.

A clinical lectureship lasting up to 4 years will start at the end of the training fellowship and will be awarded *ad personam*—so a clinical lecturer could undertake part of his or her postdoctoral training in another institution. Wherever held, it will offer career development with opportunities to obtain further support (eg, clinician scientist award, project grant) and completion of specialist training. To its credit, the Royal College of Paediatrics and Child Health has been at the forefront of the campaign for the acquisition of clinical competencies rather than time served to be the determinant of the rate of progression through clinical training under MMC, thus giving a real opportunity for accelerated progress through the competency levels and a shortening of training for clinical academics.

The integrated training programmes are being established in two stages. Firstly, a national competition to identify suitable partnerships to host the ACF programmes and clinical lectureships and, secondly, a local selection process, with national overseeing, to identify suitable individual trainees for these posts. In the first round,⁵ 104 training programmes were awarded to support 597 ACF posts (52 in paediatrics) and 303 clinical lectureships (approximately 18 designated as paediatrics or child health) over the next 5 years. (These data exclude Cardiff, where the allocation is yet to be confirmed.) Towards the end of 2006, there will be another competitive round of bids that are expected to generate as many ACFs again, particularly in specialties and regions, which fared less well initially. In the longer term, “new-blood” senior lectureships are proposed to accommodate the new generation of trained clinical academics exiting from the scheme.

There is no doubt that the Walport Report is the most important academic training initiative in recent years and, crucially, it is accompanied by new central NHS research and development funding for England and Wales to provide 25% and 50% protected academic time for ACFs and clinical lecturers, respectively (in Scotland there is a parallel scheme, with some additional central funding for a small number of PhD studentships). The training fellowships will be funded by external agencies such as the Medical Research Council and research charities, and the award of sufficient numbers of these posts is crucial to the success of the scheme. Workforce planning is at best an imprecise art, but there seem to be sufficient training positions (750 ACFs and 400 lectureships at steady state) to maintain or even expand the

clinical academic workforce. If the first round of awards is anything to go by, this applies to paediatrics also.

DEANERY DILEMMAS

The opportunity for a more streamlined working partnership between universities and deaneries is long overdue. In the past, there has been tension between the drive to foster academic training and the logistic problems of running regional training programmes while managing the NTN pool. Everyone concerned has recognised that nurturing future academics is a key priority, but there have been major difficulties in harmonising such radically different training systems.

The new academic training programmes offer the chance to redress these issues but the appointment process must be managed with the involvement of the Deanery and Specialty Training Committee in such a way as to ensure that successful applicants meet the criteria for both academic training and NTN entry. It will still require considerable flexibility in programme management to allow trainees to move from run-through programmes into the academic track and back again, if required. Moreover, because ACFs and lecturers in this scheme are being drawn from the existing paediatric training pool, a compensatory increase in the total number of NTNs and training places is needed to generate adequate numbers of both clinicians and academics.

In summary, some of the longstanding operational difficulties will persist within the new academic training system, but these are offset by the advantages of a nationally recognised and supported academic framework explicitly mapped on to the clinical training programme. However, no framework will ensure the future prosperity of academic paediatrics unless coupled to an effective recruitment programme that will attract the best and brightest of our graduates.

PROBLEMS OR OPPORTUNITIES?

We have come to a critical point in the provision of clinical academic training in the UK.⁶ There was a real danger that academic issues would be put to one side while the changes in clinical postgraduate training were dealt with. Walport goes a long way in defusing this threat, but what else can be done to promote academic training in paediatrics? That “The key aim must be to recruit and retain more clinical academic staff, by making the academic career path a more attractive and achievable option”⁷ is self-evident, but how can we deliver within paediatrics? Many areas for improvement were identified in a recent workshop on academic recruitment (see Acknowledgements), but three are worthy of wider discussion, not just for academic paediatrics but also, because its future is inextricably linked to that of the clinical specialty, for paediatrics as a whole: (1) promotion of careers in paediatrics, particularly at the medical student and foundation stages, (2) innovative schemes to facilitate flexibility during training, and (3) local and national support for the

best use of resources and to maximise the chances of long-term success.

We must acknowledge that competition to attract the best trainees is severe, and become advocates to recruit them into paediatrics. This should start at medical school by encouraging paediatric student-selected components, special study modules and intercalated BSc's and continue through foundation, with paediatric clinical and academic input into foundation programmes. Paediatricians can contribute to local "careers fairs", and the current scheme for medical students to attend the annual meeting of the Royal College of Paediatrics and Child Health could be extended to include foundation trainees. Once we spark the initial interest, it is vital to supply accurate information on potential careers, emphasising that there is now a very clear career pathway for paediatric training with academic paths mapped to it (fig 1). The key message for recruitment is that the new scheme parallels non-academic training and has fewer "choke" points than earlier and, with competency assessment rather than "time served", does not have to be disproportionately longer than clinical training alone.

Innovation is urgently needed to increase the appeal of careers in paediatrics and, specifically, academic paediatrics. In an ideal world, everyone would conform to the designated pathways, but in reality we must allow flexibility for other routes to be taken. This is particularly true in paediatrics because of the high proportion of women and the different demands placed on them throughout all branches of medicine.⁸ Service pressures are a major drive towards uniformity but these can only have detrimental effects on recruitment. Potential innovations include (1) increased job sharing (2) protected academic training with reduced or no on-call commitments, (3) equal recognition for research and teaching as core academic activities, (4) facilities for distance learning for those confined to one geographical region, and (5) opportunities to enter and exit academic pathways at all levels. In addition, we must consider whether recruitment would improve if new senior posts were created, which required only a limited repertoire of skills or did not include on-call commitments. These "office" positions would be attractive to academics and non-academics with family or other fixed commitments, and might counter the current losses towards equivalent positions in general practice.

We regard academic trainees as a national resource that should be valued and nurtured, so why not establish a national programme to represent and support them? A core purpose of the proposed Association for Academic Paediatrics, which will include academics of all grades, is to develop a strong academic support capability for academic trainees (box) by providing mentoring and advice and by organising academic training "schools" that would allow academic trainees to get together for mutual support and information exchange, present their work and have it critiqued, and receive training in generic skills and updates on training regulations, funding opportunities, etc. It would facilitate training in teaching and research and promote effective cross-centre and cross-discipline collaborations.⁹ A similar approach has been adopted by the Canadian Child Health Clinician Scientist Program¹⁰ to deal with a recruitment crisis, and it seems to have been successful. Such an organisation will send a clear message to trainees that we have "got our act together" in academic paediatrics and that this is a vibrant, exciting choice for their future careers.

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Box 1. Key action points

To attract and retain the best trainees we should

- Become advocates to recruit trainees into paediatrics
- Start at medical school by encouraging paediatric student-selected components, special study modules and intercalated BSc's
- Provide paediatric clinical and academic input into foundation programmes
- Develop a national programme to support and nurture academic trainees
- Consider new training and senior positions with a lesser on-call load
- Supply readily accessible accurate information on potential careers, emphasising that
 - there is a very clear career pathway for paediatric training with academic paths mapped to it
 - the need for flexibility in moving between clinical and academic paths is recognised
 - competency assessment has the potential to shorten academic training

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Authors' affiliations

P J D Winyard, Institute of Child Health, Royal Free and University College London, London, UK

H D Cass, Great Ormond Street Hospital for Children and the Institute of Child Health, London

T J Stephenson, Deans Office, The Medical School, University of Nottingham, Nottingham, UK

A R Wilkinson, Department of Paediatrics, University of Oxford, Oxford, UK

R E Olver, Division of Maternal and Child Health Sciences, University of Dundee, Dundee, Scotland, UK

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