

# Academic training in rheumatology in 2009: a UK trainee survey

LL Gompels, H Chinoy, V Devakumar, D Bax and CG Mackworth-Young

**ABSTRACT** – Significant changes to the structure and entry into specialist training continue to be implemented. This is likely to have had a long-term impact on rheumatology service provision and the proportion of trainees undertaking academic medicine. An online questionnaire was sent to all trainees on the Joint Royal Colleges Postgraduate Training Board (JRCPTB) database. Out of 211 trainees, 141 responded (66.8%). Of these, 33 (23%) were registered for, or had been awarded, an MD or PhD with a wide variety of funding sources. Mainstream funding sources included Arthritis Research UK, the Medical Research Council, the National Institute for Health Research and the Wellcome Trust, but a substantial number of trainees (n=17, 51.5%) also utilised other sources of funding. The data from this study will be valuable in the planning of future rheumatology training and academic career pathways and provide useful comparative data for other medical specialties.

**KEY WORDS:** academic, funding, postgraduate, research, registrar, service, training

## Introduction

Over the last decade there has been extensive restructuring of specialty training in the UK. Calman reforms in 1997 abolished the senior registrar grade and created a unified specialist registrar (SpR) grade.<sup>1</sup> Modernising Medical Careers (MMC) has resulted in further substantial restructuring. Under MMC, a new system of recruitment and training was introduced, with recruitment to the foundation programme in 2005 and recruitment to specialty training in 2007. Most recently there have been further pressures on training occurring as a result of the European Working Time Directive (EWTD).<sup>2</sup> The outcome of these changes on specialty training and those undergoing academic medicine is not certain. They may have particular significance for rheumatology as a specialty because of the relatively low coverage of rheumatic disorders in the undergraduate

curriculum.<sup>3</sup> Trainees considering which specialty to choose may therefore not have had an opportunity to experience to any degree the management of musculoskeletal diseases prior to choosing a specialty since this selection of career pathway occurs much earlier in training.<sup>4</sup> As a result of these changes there has been concern among UK rheumatologists that there will be fewer trainee doctors choosing rheumatology as a career. This, in turn, may result in fewer rheumatology trainees embarking on academic careers.<sup>5</sup>

Since 1971, there has been a UK Consultant Rheumatology Workforce Register to record details of all NHS consultant rheumatologists.<sup>6</sup> The present study was set up in order to provide information about UK rheumatology trainees that will complement data from the Consultant Register Workforce, and assess the effects of the above changes on academic training in rheumatology.

## Methods

An online questionnaire was sent to all trainees on the Joint Royal College Postgraduate Training Board (JRCPTB) database between 2008 and 2009. In addition, the questionnaire was also sent to an email database that is updated yearly at the trainees' annual general meeting (AGM). A reminder email was sent six weeks later. This format was similar to previous questionnaires that had been sent to trainees. The current questionnaire gathered demographic information, with further questions regarding academic training, to determine the proportion of trainees undergoing academic training, as well as their source of funding and their registration for a higher degree. The questionnaire was designed so that participants could enter details from an online template.

## Results

The details of survey participants are included in Table 1. In total, 141 out of 211 trainees responded (66.8%). This compared to response rates of 73% and 67.7% from previous surveys of rheumatology trainees.<sup>5,7</sup> A greater proportion of the respondents were female and more females aimed to accredit in rheumatology alone, but proportionately more male trainees were aiming for dual accreditation in rheumatology and general internal medicine (GIM). Less than half the trainees had either on-call commitments or participated in a dedicated on-call service. The majority of respondents had full-time posts, with less than 10% working part time. One respondent described her position as a job share. Of the 33 trainees out-of-programme, seven listed themselves as on maternity leave.

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Table 1. Details of survey participants.

			n	%
<b>Type of training</b>	<b>Single specialty accreditation</b>	Male	22	31.4
		Female	48	68.6
	<b>Dual specialty accreditation<sup>a</sup></b>	Male	35	49.3
		Female	36	50.7
<b>Year of training*</b>	Year 1		12	8.8
	Year 2		24	17.6
	Year 3		28	20.6
	Year 4		20	14.7
	Year 5 <sup>b</sup>		52	36.8
	Unspecified		5	1.5
<b>Location of training</b>	<b>Deanery</b>			
	London		28	19.9
	North West		19	13.5
	Yorkshire		16	11.3
	Scotland		11	7.1
	West Midlands		10	7.1
	Severn		10	5.0
	Mersey		7	5.0
	Northern		7	4.3
	Wales		6	3.5
	Wessex		5	2.8
	East Midlands		4	0.7
	Kent Surrey and Sussex		1	0.7
	Peninsula		1	0.7
	Oxford		1	0.7
Not Specified		15	10.6	
<b>Country of medical graduation</b>	UK		107	76.4
	EU		1	0.7
	Other		32	22.9

\*Year of training refers to total number of years since starting specialist rheumatology training (including out-of-programme experiences).

<sup>a</sup>Refers to specialist accreditation in both rheumatology and general internal medicine.

<sup>b</sup>Includes trainees listing their training as >year 5, reflecting actual time in training, eg including out-of-programme experience and/or flexible training.

The details of trainees engaged in full-time research are included in Table 2. Out of 142 respondents, 33 were engaged in full-time research, with a wide variety of funding sources. Twelve were in receipt of funding with the following sources: Arthritis Research UK (ARUK) (6), Medical Research Council (MRC) (3), National Institute of Health Research (NIHR) (2) and the Wellcome Trust (1). One responder registered for an MD had funding from the ARUK and two of those awarded an MD had funding from the NIHR; the remainder (10) had funding from other sources. Eight out of 15 currently registered for a PhD had funding from ARUK, MRC, Wellcome Trust or the NIHR. In addition, four trainees registered for or awarded a PhD had already undertaken an MSc. One trainee who was registered for a PhD was also registered for a diploma in epidemiology.

Fifteen trainees listed other out-of-programme experiences, the most common being a masters in medical education (3/15) or a diploma/certificate (5/15) in medical education.

Of those who listed themselves as being out-of-programme and currently engaged in full-time research, the mean duration of training undertaken was 3.4 years. Of those who had been awarded either a PhD or an MD, their expected mean duration of training was eight years. This excluded one person who had completed a PhD prior to starting specialist training.

## Discussion

This national questionnaire-based survey demonstrated that a significant proportion (24%) of rheumatology trainees still engage in academic medicine by registering for, or having been awarded, an MD or PhD. There were fewer doing so compared to two previous surveys where 43% had listed academic activity in 2006 and 34% in 2002.<sup>5,7</sup> These figures, however, were similar to those collected from the eighth RCP annual survey of all

**Table 2. Rheumatology trainees engaged in full-time research: summary of degrees for which trainees were registered, or which had already been awarded.**

Degree	Registered*	Funding body		Awarded*	Funding body	
MD	11	ARUK	1	2	NIHR	2
		Other	3			
		Unspecified	7			
PhD	15	ARUK	5	5	NIHR	1
		MRC	2		Unspecified	4
		Wellcome Trust	1			
		Other	5			
		Unspecified	2			
MSc	19			14		

\*Defined as those who have listed themselves as having registered with, or awarded a higher degree by, a university body.

ARUK = Arthritis Research UK; MRC = Medical Research Council; NIHR = National Institute of Health Research.

registrars, where 25% considered themselves currently in academic training.<sup>8</sup> However, there have been longstanding concerns about the falling number of academic trainees in all specialties due to a combination of the pressures of producing internationally competitive research, the difficulty of obtaining long-term funding, and the problem of reconciling academic training with the increased rigour of clinical training programmes.<sup>9</sup>

In this study, there were a higher number of female trainees (60%), compared to 53.7% in 2002. The effect of gender on both workforce planning and delivery of service, as well as on career choices in academic medicine, has been recognised as one of the significant challenges for future service design across all specialties.<sup>10–12</sup> For example, the wishes of a number of flexible trainees to continue part-time working in the early consultant years means that more trainees (and therefore national training numbers) will be needed to fill consultant posts to deliver the whole time equivalents required. The long-term impact that this may have on the number of academic trainees is not known. A study of American rheumatology trainees demonstrated that among female trainees the most significant barriers to research were considered to be the incompatibility of academia and family life, and levels of salary during and after research.<sup>13</sup>

The total number of rheumatology trainees may have remained relatively static in comparison to substantial increases in training numbers in other specialties. In 2002, 198 rheumatology trainees were recorded, 227 in 2005/65,7 and 211 trainees when this survey was undertaken in 2009. A RCP survey in 1999 listed a total of 2,495 physician trainees nationally<sup>14</sup> with 5,424 listed in 2008.<sup>8</sup> Over the next few years, there is likely to be a large excess of doctors in several medical specialties who have completed their training and are looking for consultant posts. This has been recognised in the census of consultant physicians which is undertaken yearly by the RCP<sup>15</sup> and also by the NHS staff (1999–2009) overview.<sup>16</sup> Monitoring of trainee numbers and demographics is vital for the future

provision of specialist service provision. There has also been minimal published research on the demographics, funding and subsequent careers of academic trainees in all specialties. This has led to a report from the newly formed Centre for Workforce Intelligence (CfWI) to provide yearly recommendations on levels of specialist medical training numbers required for all medical specialties.<sup>17</sup>

There are a significant number of trainees who have undertaken five or more years of specialist training. This reflects the number of trainees who extend their training while in research rather than an overall decrease in the number of trainees each year. The extended duration of training has implications for workforce planning, and for trainees themselves in terms of both financial and career planning. This may particularly be the case in specialties with significant procedural training requirements, such as cardiology where pressures to complete training may have had a long-term impact on dissuading trainees from pursuing an academic career.<sup>18,19</sup>

About half of academic rheumatology trainees in this study had funding from either the ARUK, MRC, NIHR, Wellcome Trust or a university body; this is a similar pattern to that found for academic trainees in all medical specialties, where 27% had funding from a research charity, 12% from the MRC and 8% from the NIHR. A similar proportion (47%) of national trainees had funding from other sources.<sup>8</sup> This survey did not explore any actual or perceived barriers to entering research. For example the majority of respondents registered for a MD listed local sources of funding rather than national funding bodies. Understanding the proportion of trainees who had attempted to find funding for research, but were unable to find it, or those that did not have local opportunities to pursue would be of interest.

In conclusion, there have been significant changes to specialist training over the last decade that may be having an impact on both the overall number and demographic of rheumatology

trainees. This, in turn, may have an impact on the number of trainees who engage in research. It would be valuable to extend this work to other specialties to determine how these trends change over time. It is also hoped that the data from this survey will contribute to the planning of future training and academic career pathways. This survey will be repeated in either 2013 or 2014.

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