# Wellcome Trust Clinical Career Tracker

Results of wave I (2011)



### Wellcome Trust Clinical Career Tracker: Results of wave I (2011)

#### Introduction

In 2011, the Evaluation Team at the Wellcome Trust launched the first wave of the Wellcome Trust Clinical Career Tracker (WTCCT), an online survey that enables us to track and understand the career intentions, motivations and destinations of key cohorts of Wellcome Trust-funded clinical researchers. Information on the training experience and subsequent career choices of those we fund provides important evidence that can be used to help inform future funding mechanisms and strategy.

#### Methodology

Each year, we contact individuals who are in their final year of a funding award and former award holders. Cohorts of current and former recipients of the following types of funding are included in the WTCCT:

- Clinical PhD Studentships
- Research Training Fellowships (RTFs), which provide support for medical, dental, veterinary or clinical psychology graduates who have little or no research training but wish to develop a long-term career in academic medicine
- Postdoctoral Training Fellowships for MB/PhD
   Graduates, which provide support for newly qualified MB/PhD graduates to make an early start in developing their independent research careers
- Intermediate Clinical Fellowships (ICFs), which provide support for outstanding medical, dental, veterinary or clinical psychology graduates to continue research interests at a postdoctoral level and develop towards independence.

Recipients of funding from these schemes are included because they are strategically important funding mechanisms for the Wellcome Trust (and the UK more broadly) and intend to have a 'multiplier effect', by building clinical research capacity and enabling knowledge and skills to be shared with collaborators and across the research community.

Each year, members of the cohorts (in their final year of funding and those who have completed their term of funding) receive a short online survey asking about career path, intentions and destination. We intend to track those in each cohort for a minimum of five years, beginning in their final year of funding. In this way, as the cohorts build over time and our information on their career path grows, we hope to understand the challenges and opportunities that emerge for former funding recipients and feed our findings into future funding strategy.

In wave I of the WTCCT (October 20II), overall participation was high, with a total response of 83 per cent across all the cohorts. A key challenge in any kind of panel-based tracking is to ensure that the response rates at each investigation point remain high; we are working with those we fund to secure high levels of participation.

Table 1

#### Response by clinical PhD students

Cohort	Number approached	Number of responses achieved
Clinical PhD cohort 2007/2008	25	19 (76%)
Clinical PhD cohort 2008/2009	34	28 (82%)
Total	59	47 (80%)

Table 2

#### Response by RTF recipients

Cohort	Number approached	Number of responses achieved
RTF cohort 2006/2007	29	21 (72%)
RTF cohort 2007/2008	31	27 (87%)
RTF cohort 2008/2009	41	35 (85%)
RTF cohort 2009/2010	34	30 (88%)
Total	135	113 (84%)

#### Table 3

#### Response by ICF recipients

Cohort	Number approached	Number of responses achieved
ICF cohort 2005/2006	15	13 (87%)
ICF cohort 2006/2007	6	5 (83%)
ICF cohort 2007/2008	9	8 (89%)
Total	30	26 (87%)

Table 4

### Response by recipients of Postdoctoral Training Fellowships for MB/PhD Graduates

Cohort	Number approached	Number of responses achieved
Postdoctoral Training Fellowships MB/ PhD cohort 2005/2006	2	2 (100%)
Postdoctoral Training Fellowships MB/ PhD cohort 2006/2007	4	4 (100%)
Total	6	6 (100%)

All analysis presented in this summary of the first WTCCT annual survey is based on the cohorts who responded, unless otherwise stated. Owing to the relatively small cohort sizes, all charts and tables reporting survey data show raw numbers, unless otherwise specified.

When appropriate, and for illustrative purposes, comments have been included to support the data; these are a sample of all comments received by grant type and are anonymised.

#### Key findings

The analysis presented in the first wave of the WTCCT provides a snapshot of the career *intentions* and actual career destinations of those included in the cohorts. Information on actual career destinations is limited at this stage but will build as more time elapses after the participants' funding. Wave I will provide the baseline upon which any trend analysis in future years can be built.

Of current PhD students (n = 34), the majority (n = 28) indicated that they intended to combine academic and clinical activities in the future. In subsequent waves, we will consider how intentions match actual career destinations. Of the 13 former PhD students, only one remained employed solely in academic research; four were combining academic research with a clinical career, and the remaining eight were working as clinicians.

Forty-two of 113 Research Training Fellows had completed their Trust award and were in the next stage of their career. Of the former Research Training Fellows, the majority (n = 39) were in full-time employment. Twenty-seven were combining academic research with clinical activities, 12 were working as clinicians and two were conducting academic research only.

Twenty of the 26 Intermediate Clinical Fellows were still on their award when completing the survey. The majority (n = 17) expressed their intention to combine academic and clinical duties in their future career.

All award holders of the Postdoctoral Training for MB/PhD Graduates were on their award when completing the study.

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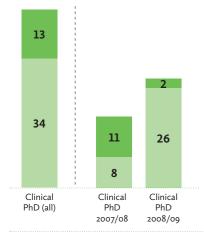
## Clinical PhD award holders: career paths and aspirations

"The Clinical PhD award has given me a great insight into clinical trial design and progress. It has also given me a good background of how a laboratory and trials unit should and shouldn't function. It has definitely convinced me to go down the route of phase I/II clinical trial design, as well as keeping clinical commitments."

#### Clinical PhD student

At the time of completing the WTCCT survey, the majority (n = 34/47) of recipients of Wellcome Trust Clinical PhD studentships were still on their award (Figure 1); therefore, the Tracker captured a mixture of intentions and actual career destinations of two cohorts of current and former PhD award holders.

Figure I
Clinical PhD programme: status of award holders (cohort 2007/08 and 2008/09)



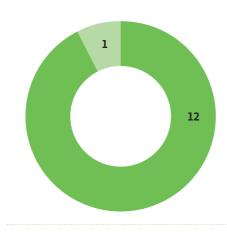
Finished the award

Still on award

Base: Clinical PhDs (cohorts 2007/2008 and 2008/2009), n = 47. Q: Are you still on award or have you finished your award?

Of the 13 who reported completing their studentship, all were in employment, most (n = 12) full time and one part time (Figure 2). Six were employed on a permanent contract and seven on a fixed contract.

Figure 2 Clinical PhD programme: former PhDs (cohort 2007/08 and 2008/09) – employment status



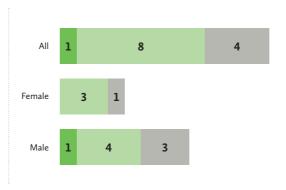
Employed full timeEmployed part time

Base: Clinical PhDs (cohorts 2007/08 and 2008/09) who finished the award. Total, n = 13; PhD 2007/08, n = 11; PhD 2008/09, n = 2. Q: Which of the following best describes your current employment status?

Of the 13, only one remained employed purely in academic research; four people (one female and three male) were combining some academic research with a clinical career, and the remaining eight people (three male, four female and one person who did not wish to disclose their gender) were working as clinicians (Figure 3). We will track potential differences in career destinations of women vs. men in future waves of the WTCCT.

Figure 3
Clinical PhD programme: former PhDs (cohort 2007/08

and 2008/09) - working pattern



Academic research only

Clinical activities only

A mixture of academic and clinical activities

Base: Clinical PhDs (cohorts 2007/08 and 2008/09) who finished the award. Total, n = 13; PhD 2007/08, n = 11; PhD 2008/09, n = 2. One person preferred not to indicate their gender.

Q: Which of the following best describes your current working pattern?

Former students who were carrying out clinical activities only (n = 8) were asked whether they intended to return to academic research at a later stage. Nearly all (n = 7) expressed an interest in pursuing academic research in the future.

Of current PhD students, the majority (n = 28) indicated that they intend to combine academic and clinical activities in their future career (Figure 4). We intend to use the WTCCT to help us map intentions against actual career paths after completing the award.

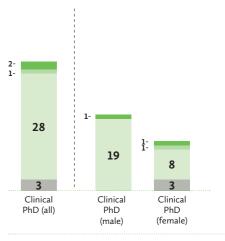
#### Examples of comments from current PhD students

"I really enjoy both sides. I like the immediate return I get from seeing patients, diagnosing illness and teaching students that my NHS job offers, but it can be stressful and lack intellectual stimulation. Research takes far longer to attain significant success but is mentally stimulating and entirely self-driven." Clinical PhD student

"I have hugely enjoyed research; I like the intellectual challenge and the freedom that research gives. But I also really enjoy clinical medicine and am not ready yet to leave that completely. I think they are synergistic." Clinical PhD student

Figure 4

### Clinical PhD programme: PhDs on award (cohort 2007/08 and 2008/09) – plans after completing the award



Academic research only

Clinical activities only

A mixture of academic and clinical activities

Don't know

Base: Clinical PhDs who are still on award (cohorts 2007/08 and 2008/09), n = 34. One person preferred not to indicate their gender.

Q: Which of the following are you most likely to do once you have finished your award?

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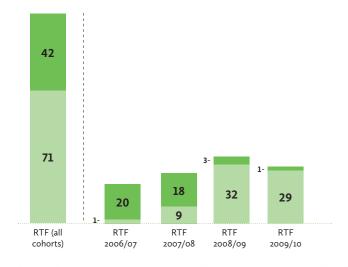
# Research Training Fellows: career paths and aspirations

"The RTF has confirmed my desire to be a clinician scientist and to pursue a career doing research on diseases in low-income countries. Following my PhD, I hope to apply for further research funding...the strong research background, collaborations and experience I have gained during my RTF will support any applications I submit."

Research Training Fellow

In wave I of the WTCCT, we captured a mixture of intentions and actual career destinations of four cohorts of current and former Research Training Fellows (RTFs). At the time of the survey, 42 of II3 responding had completed their Trust award and were in the next stage of their career (Figure 5).

Figure 5 Clinical PhD programme: status of award holders (cohort 2006/07-2009/10)

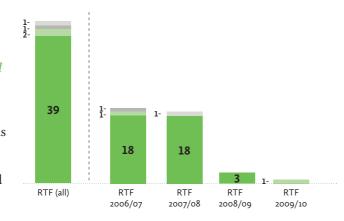


Finished the award
Still on award

Base: RTF programme (cohorts 2006/07–2009/10), n = 113. Q: Are you still on award or have you finished your award?

Of the former RTFs, the majority (n = 39/42) were in full-time employment (Figure 6).

Figure 6
RTF programme: former RTFs
(cohort 2006/07–2009/10) – employment status



Employed full timeEmployed part timeStudying full time

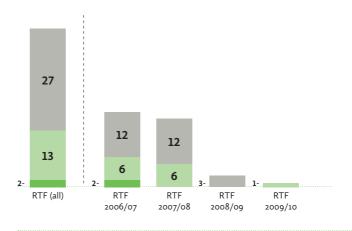
Studying full timeStudying part time

Base: Former RTFs (cohorts 2006/07–2009/10), n = 42. Q: Which of the following best describes your current employment status? Respondents were allowed to select more than one answer.

Of the 42 former RTFs, two-thirds (n = 27) were combining some academic research with clinical activities, 13 were working as clinicians and two were conducting academic research only (Figure 7). Six out of 11 women and 21 out of 31 men were continuing with academic research alongside their clinical career (Figure 8).

#### Figure 7

RTF programme: former RTFs (cohort 2006/07–2009/10) – current working pattern



Academic research only

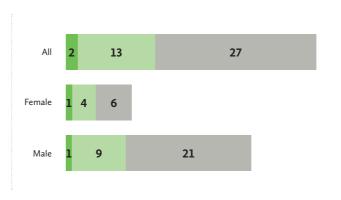
Clinical activities only

A mixture of academic and clinical activities

Base: Former RTFs (cohorts 2006/07–2009/10), n = 42. Q: Which of the following best describes your current employment status?

gure 8

RTF programme: former RTFs (cohort 2006/07 - 2009/10) - current working pattern



Academic research only

Clinical activities only

■ A mixture of academic and clinical activities

Base: RTF programme – former (cohorts 2006/07–2009/10), n = 42. Q: Which of the following best describes your current working pattern?

Like the Clinical PhD students, the majority of RTFs who had not completed their award indicated that they would like to combine academic research with clinical activities in their future career (Figure 9). We intend to use the WTCCT to help us map intentions with actual career paths after completing the award.

#### **Examples of comments from current RTFs**

"I enjoy both research and clinical work and find the two inform and energise each other. Clinical practice is invaluable to generate questions and understand the relevance and context of the science. Conversely, both the results and the rigour of doing good science inform good clinical practice. I would like to combine both elements in my career."

Research Training Fellow

"I am still very committed to becoming a clinical academic. The RTF has been a fantastic experience and I'll be sad to finish. A number of new avenues for future research have opened up as a result of the work in the RTF, and I've co-written another grant, which will allow this work to continue. After I finish my fellowship, I'm hoping to secure a clinical lectureship with a view to applying for an Intermediate Clinical Fellowship."

Research Training Fellow

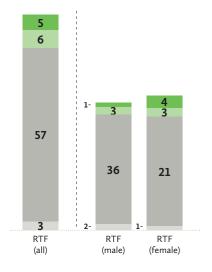
"I enjoy both the research and the clinical medicine...without continuing the clinical medicine, the focus for the academic work may not be so focused."

Research Training Fellow

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#### Figure 9 PTE programme: PTEs on awar

### RTF programme: RTFs on award (cohort 2006/07–2009/10) – plans after completing the award



- Academic research only
- Clinical activities only
- A mixture of academic and clinical activities
- Don't know

Base: RTFs who are still on award (cohorts 2006/07–2009/10). Total, n = 71; Male, n = 42; Female, n = 29.

Q: Which of the following are you most likely to do once you have finished your award?

# Intermediate Clinical Fellows: career paths and aspirations

"(The fellowship) overall greatly consolidated my existing aspiration for a long-term career as a clinician scientist. Experienced challenges of establishing from scratch in a new institution with no colleagues in the same field, and building strong collaborations."

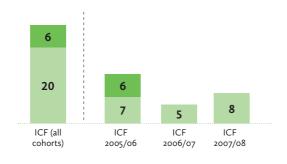
Intermediate Clinical Fellow

Of the 26 current and former Intermediate Clinical Fellows (ICFs) who responded to the WTCCT, 20 were still on award (Figure 10).

All former ICFs (n = 6) were men in full-time employment combining academic and clinical duties; three were in receipt of continued funding as lead applicant.

#### Figure 10

### ICF programme: status of award holders (cohort 2005/06-2007/08)



Finished the award

Still on award

Base: ICF programme (cohorts 2005/06–2007/08), n=47. Q: Are you still on award or have you finished your award? As for those cohorts still on award, the vast majority (n = 17) of current ICFs expressed their intention to combine academic and clinical duties (Figure 11).

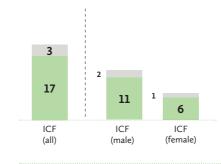
"I enjoy both research and patient care. I feel that continuing to look after patients will help me to generate important research questions that I can pursue."

Intermediate Clinical Fellow

"I am keen on pursuing a career that involves pursuing research the majority of the time but mixes in clinical commitments in neurology. My motivation to do this began during my PhD but has increased during this intermediate fellowship – I plan to apply for a Senior Fellowship in the future." Intermediate Clinical Fellow

#### Figure 11

### ICF programme: ICFs on award (cohort 2005/06–2007/08) – plans after completing the award



A mixture of academic and clinical activities

Academic research only

Base: ICFs who are still on award (cohorts 2005/06 - 2007/08). Total, n = 20; male, n = 13; female n = 7. Q: Which of the following are you most likely to do once you have finished your award?

# Postdoctoral Training Fellowships for MB/PhD Graduates: career paths and aspirations

"The MB/PhD award has given me a vital opportunity to return to full-time academic research at a time when I was beginning to feel distanced from research owing to the pressures of the past five years of clinical training...This fellowship scheme has allowed me to get back into the lab and rediscover my passion for laboratory medicine while maintaining my clinical links and training. This has reinforced my commitment to seeking a joint academic/clinical career track in future."

Postdoctoral Training Fellow - MB/PhD Graduate

All fellows were still on their award at the time of completing the survey (n = 6). Recipients of this grant expressed unanimously their intention to combine clinical activities and an academic career in the future after completing the fellowship.

### **Examples of comments from current Postdoctoral Training Fellows**

"I would like to continue both academic and clinical activities due to the large investment I have placed in both with respect to my training. If it transpires that clinical demands are too great then I would need to reconsider this, and the amount of time I dedicated to either would depend upon the relative success of my research."

Postdoctoral Training Fellow - MB/PhD Graduate

"I would like to go on to become a senior clinical academic. My focus would be on academia, but good research is – in my view – inspired by continuing clinical exposure."

Postdoctoral Training Fellow - MB/PhD Graduate

"When my award finishes, I will still have three years of registrarlevel medical training to complete to gain my CCT. During this time, I hope to be able to continue my research in a clinical lecturer position, with additional grant funding from a suitable source. I really want to continue down a joint clinical/academic route and would be loath to see a successful postdoctoral fellowship period come to a sudden halt with a need to return to pure clinical training."

Postdoctoral Training Fellow - MB/PhD Graduate

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### Advice on starting a career in clinical academic research

The former award holders gave a range of advice to their junior colleagues just starting a career in clinical academic research, including "select the right supervisor and a well-regarded institution", "collaborate inside and outside the institution", "find an inspiring project" and "enjoy it". They also suggested what is needed to get into academia: for example, persistence, dedication, patience and enthusiasm.

"Try to set manageable and long-term goals. The pace of research is very different to the pace of clinical work and it can take a long time to adjust to this, during which you do not feel like you are achieving very much. Use the entire team of people around you as an invaluble resource...It can be a struggle to get up to speed in the research environment when you first start, but the people around you can help you enormously."

Former PhD student

"Research can certainly be the best part of your career, but remember that you need to do it only if you are interested and have a question needing an answer. If not, then you are wasting your time and others'."

Former PhD student

"It is a fantastic career, full of variety and intrigue. Hitch your wagon to a star: find a research team and supervisor with an international reputation who will support and develop you, plus a project which inspires you."

Former Research Training Fellow

"Choose your supervisor, mentor, lab and institution carefully. This is often more important than the specifics of subject area. Pick an established laboratory with a proven track record. Speak to people who have worked there before to get an understanding of the dynamics."

Former Research Training Fellow

"Look out for and grasp opportunities as they arise, manage time effectively, enjoy your autonomy, network effectively as collaboration is key, and enjoy the liberation of 'thinking time'. Be persistent."

Former Research Training Fellow

"Be persistent and don't be put off if you don't get a fellowship or funding the first time. Don't do research or work on something that you are not really interested in just for the sake of doing research or getting a research degree."

Former Research Training Fellow

"Seek advice from people whose work and approach you respect, and continue seeking advice from people outside your institution."

Former Intermediate Clinical Fellow

#### Word cloud 1

#### Base: Clinical Career Tracker Wave 1: Former award holders

Q: How, if at all, has your award influenced your future career aspirations?



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 $<sup>{\</sup>tt I} \quad \text{The clouds give more prominence to words that appear more frequently in the source text. (www.wordle.com)}$ 

#### The Wellcome Trust

We are a global charitable foundation dedicated to achieving extraordinary improvements in human and animal health. We support the brightest minds in biomedical research and the medical humanities. Our breadth of support includes public engagement, education and the application of research to improve health.

We are independent of both political and commercial interests.

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