Summary Report

# Career Tracker 2010

Wave 2



## Wellcome Trust Career Tracker: Results of wave 2 (2010)

## Introduction and background

In 2010 the Evaluation Team at the Wellcome Trust launched the second wave of the Wellcome Trust Career Tracker, which tracks the career destination and progression of our researchers and helps us understand the career choices they make. The Career Tracker will be used to inform funding policy and strategy.

Each year a short online survey is sent to designated cohorts of individuals in receipt of Wellcome Trust funding; cohorts are grouped based on type and year of their award funding. Each year, a new cohort is added as their award comes to completion, and former awardees are asked to update their career status.

## Methodology

Individuals in receipt of the following awards, and in their final year or recently finished, were sent an online survey:

- basic science PhD studentship (PhD)
- Research Career Development Fellowship (RCDF)
- International Senior Research Fellowship (ISRF).

PhD studentships and RCDFs are awarded to researchers at UK institutions, whereas ISRF awardees are based at academic institutions outside the UK (mainly in Eastern Europe and India).

Overall participation in Career Tracker wave 2 (2010) was high, with a total response of 84 per cent.

At the time of wave 2, two-thirds (66 per cent) of those providing a response had completed their Trust award and were in the next stage of their career.

#### Table 1

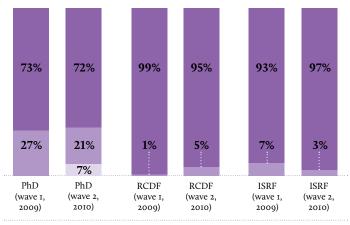
Summarised response of awardees by funding scheme

Cohort	Financial year of award	Total cohort included in study (n)	Wave 2 2010 Responded to survey (n)	Response (%)
PhD 04	2003/04	59	41	69%
PhD 05	2004/05	72	59	82%
PhD o6	2005/06	69	65	94%
RCDF 03	2002/03	20	18	90%
RCDF 04	2003/04	14	13	93%
RCDF 05	2004/05	17	15	88%
RCDF o6	2005/06	22	20	91%
ISRF 02	2001/02	21	18	86%
ISRF 03	2002/03	15	12	80%
ISRF 04	2003/04	5	3	60%
Total			264/314	84%

### Key findings

The findings from the second wave of the Career Tracker study are broadly consistent with results gathered in wave I, allowing the beginnings of trend analyses:

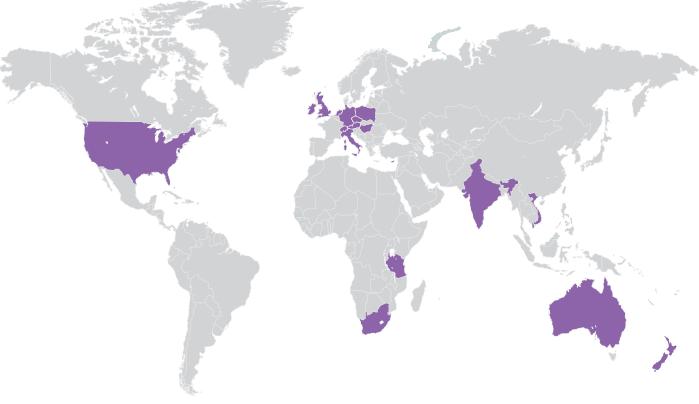
- After the end of their award, the majority of awardees continue to work in academia.
- Almost three-quarters (72 per cent) of former PhDs were employed in academic research (vs 73 per cent in 2009).
- Of those PhD awardees who had yet to complete their Trust funding period, more than three-quarters (77 per cent) were planning to continue working in academic research.
- Almost all RCDFs enjoyed a high level of independence as researchers in receipt of funding in their own right.



📕 In academia 📃 Not in academia 📃 Not working

Base: All respondents who finished the award.

*Wave 1* (2009): *PhDs*, *n* = 44; *RCDFs*, *n* = 94; *ISRFs*, *n* = 29. *Wave 2* (2010): *PhDs*, *n* = 100; *RCDFs*, *n* = 44; *ISRFs*, *n* = 30.



Australia, n = 5	Estonia, n = 5	Ireand, n = 1	Poland, n = 2	UK, n = 109
Austria, n = 1	Germany, n = 3	Italy, $n = 2$	South Africa, $n = 2$	USA, $n = 21$
Cyprus, n = 1	Hungary, n = 5	Netherlands, $n = I$	Switzerland, n = 1	Vietnam, n = 1
Czech Rep, $n = 2$	India, n = 10	New Zealand, n = 1	Tanzania, n = 1	

Base: All respondents who finished the award (n = 174). PhD, n = 100; RCDF, n = 44; ISRF n = 30. Q: Which country are you currently based?

#### The majority of former awardees are based in the UK

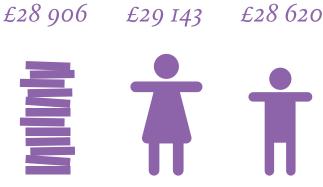
## Career Tracker

# PhD award holders: destinations post-award

As in wave 1, academia was the main employment destination: almost three-quarters (72 per cent) of former PhD students were working in academia, and the majority (75 per cent) were in postdoctoral research assistant posts. Very few (3 per cent) were employed in academia on a permanent contract, the majority (83 per cent) being employed on a fixed contract.

The average current annual salary of former PhD awardees working in academia was £28 906, and female academics had a slightly higher average annual salary than their male academic counterparts (£29 143 vs £28 620, respectively).

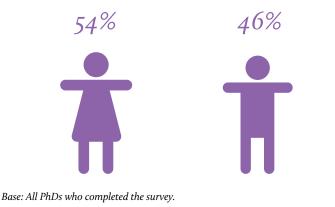
Respondents' current annual salary:



Base: All PhDs who finished the award and are in academia. Wave 2 (2010): PhD female, n = 35; male, n = 29. Not included: 'Prefer not to say'.

The total PhD cohort (everyone who was invited to take part in the survey) comprised 53 per cent females and 47 per cent males. Out of the PhDs who responded to the survey, 54 per cent were female, compared to 59 per cent in 2009. In wave 2, the proportion of women remaining in academia after their award had finished was lower than that of men; 66 per cent (vs 63 per cent in 2009) of female PhDs and 80 per cent of male PhDs (vs 93 per cent in 2009) stayed in academia.

#### Respondents' gender:



Wave 2 (2010): n = 162. Not included: 'Prefer not to say'.

After completing their PhD training, the majority of individuals who remained in academia stayed in the UK (67 per cent). One-third (33 per cent) of PhDs in academia went overseas. Those who left mentioned, among other reasons, 'better employment opportunities abroad', a 'willingness to experience academic research in another country', 'enhancing CV', and a 'better possibility of doing cutting edge science'.

# RCDF awards holders: destinations post-award

The total RCDF cohort comprised 67 per cent females and 33 per cent males. Out of the RCDFs who responded to the survey, 68 per cent were men and 32 per cent were women. After completing their award, 95 per cent of RCDF awardees were employed in academia (vs 99 per cent in 2009), nearly all continuing in the same or a similar research area.

#### Respondents' gender:



Base: All RCDFs who completed the survey. Wave 2 (2010): n = 66. Not included: 'Prefer not to say'.

The Wellcome Trust remained the main funding source for RCDFs – 35 per cent of awardees who had finished their award and remained in academia continued to receive funding from the Wellcome Trust as a principal applicant; another 20 per cent were funded as principal applicant by the Medical Research Council (MRC).

In wave 2, one in five of the RCDFs who remained in academia were employed as a senior lecturer (23 per cent), research fellow (20 per cent) or lecturer (20 per cent), and the majority were still based in the UK (83 per cent, vs 87 per cent in 2009).

Respondents in academic research (post-award) – UK vs non-UK based:

Non-UK based UK based 83% 17%

Base: All RCDFs who finished the award and are in academia.Wave 2 (2010): n = 42.Q: Please tell us which country you are currently based.

## ISRF award holders: destinations post-award

In wave 2 almost all ISRF award holders were employed in academia after completing their award (97 per cent, vs 93 per cent in 2009).

The total ISRF cohort comprised 22 per cent females and 78 per cent males. Out of the ISRFs who responded to the survey, 19 per cent were female (vs 25 per cent in 2009).

In line with a key aim of the ISRF scheme, nearly all former awardees remained in the country of their award. The majority (67 per cent) had a permanent post in academia. All ISRF respondents who finished the award and were in academia continued to do same or similar research as they had been doing during their award.

### Beyond academia

In total in wave 2, 31 respondents who had finished their Wellcome award had left academic research (18 per cent of awardees who had finished their award): 28 PhDs (28 per cent of PhDs who had finished their award), one ISRF (3 per cent of ISRFs who had finished their award) and two RCDFs (5 per cent of RCDFs who had finished their award). Although most were still working in science-related areas – such as the pharmaceutical/biotech industry (n = 7), medicine (n = 3), science administration (n = 2) or science communications (n = 2) – others (n = 10) started careers in new fields, such as TV production, social work and investment.

The reasons given for leaving academia included: a 'willingness to contribute to improve global health but not at the bench' (former PhD awardee), 'uninspiring career prospects' (former PhD awardee) and a 'dislike of politics that seem to be associated with an academic career' (former PhD awardee).

As previously mentioned, women were more likely to leave academia than men; 21 (20 PhDs and 1 RCDF) of the 31 who left academia were women.

## Career Tracker

### Advice on starting an academic career

The former awardees gave a range of advice to their junior colleagues just starting a career in academic research, including 'have a clear plan', 'collaborate and network', 'publish in good journals', and 'move labs/go to good institutions'.

They also suggested the type of attitude that is needed to get into academia: for example, 'self belief', a 'willingness to learn new skills and techniques', and 'patience' and 'persistence'.

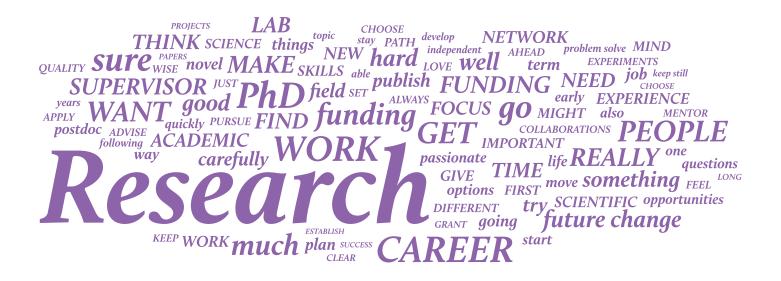
'Word clouds' created from answers to the question "What is the best piece of advice you can offer to someone just starting a career in academic research?" The clouds give greater prominence to words that appear more frequently in the source text. (www.wordle.net) "Make the most of the opportunities that present themselves. This could be to become involved in collaborations, learning new techniques, or things more for your personal development, like attending conferences or personal development workshops." Former PhD awardee

"Publish wisely, collaborate very wisely and recruit very, very wisely." Former RCDF awardee

"Aim big when applying for lab positions. Don't shy away from contacting a lab because you worry it is outside of your research field/too illustrious in terms of its institution or reputation. Just go for it!"

Former PhD awardee

*"You need patience and passion."* Former PhD awardee



#### Main motivations

All awardees that were planning to continue their career in academia were asked to describe their main motivations for pursuing this career. They mentioned 'freedom and independence', a 'passion for science' and 'working for more than just money':

"I have greatly enjoyed the challenge and stimulation of academic research, and wish to continue in this area as I feel it will be the best use of the skills and experience I have accumulated to date." Former PhD awardee

"Challenging, curiosity, independence, working for more than just money, international atmosphere." Former PhD awardee

"I am devoted to scientific research. It is exciting for me to test new ideas and discover new mechanisms. I also believe that this is the field I can be useful for people." Former PhD awardee

#### Barriers

When asked to suggest some barriers to the pursuit of a career in science, the Career Tracker participants mentioned difficulty in obtaining funding and a lack of job security:

"What I dislike though are the working hours and the lack of a proper financial reward for the time spent in the lab." Former PhD awardee

"I love scientific research and want to continue down this route. However, I am not sure if academic research is for me, due to the insecurities and lack of guarantee of funding that crop up every few years. I would prefer a more stable career, so am hoping to pursue several options until I find what I want to do!" Former PhD awardee

### Next steps for the Career Tracker study

Participants will continue to be tracked annually and new cohorts added over time as they complete their award. A new cohort of Sir Henry Wellcome Fellowships will be added to the Career Tracker in wave 3, 2011. We will continue to provide updates on the progress and challenges of the participants, particularly those pursuing careers in academia.

#### The Wellcome Trust

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