

# More than lucky? Exploring self-leadership in the development and articulation of research independence

**Kay Guccione, Research and Innovation Services  
University of Sheffield**



The  
University  
Of  
Sheffield.

# Small Development Projects

Small development projects (SDPs) were first launched in 2004 - shortly after the creation of the Leadership Foundation for Higher Education. Since then they have proven to be very popular and have introduced a range of innovative activities of benefit to higher education.

First published in January 2016  
Leadership Foundation for Higher Education

Published by the Leadership Foundation for Higher Education

Registered and operational address:  
Leadership Foundation for Higher Education  
Peer House  
8 -14 Verulam Street  
London WC1X 8LZ  
England

Tel: +44 (0)20 3468 4810  
Fax: +44 (0)20 3468 4811  
E-mail: [info@lfhe.ac.uk](mailto:info@lfhe.ac.uk)

[www.lfhe.ac.uk](http://www.lfhe.ac.uk)

© Leadership Foundation for Higher Education

# Contents

## Project Steering Group

Bryony Portsmouth, researcher professional development team leader, Research and Innovation Services; Justine Daniels, head of research development and assistant director of Research and Innovation Services; Charlotte Harden, fellowships development officer, Research and Innovation Services; Duncan Cameron, Royal Society university research fellow, Animal and Plant Sciences; Robin Purshouse, senior lecturer in Automatic and Control Systems Engineering and holder of ESRC Future Research Leaders Scheme Award; Heather Mortiboys, Parkinson's UK fellow, SITraN; Matt Risby, filmmaker.

## Acknowledgements

Sincere thanks are due to all of the study participants who shared their stories. Thanks also to the researcher development professionals across partner universities whose opinions informed the development of the data collection methods, and for administrative assistance. Special thanks to Robin Purshouse for an informative discussion on social networks. Thank you to Ben Orza, learning technologist, University of Sheffield, for guidance on designing online learning resources. And to Ali Riley, enterprise education manager, University of Sheffield, in acknowledgement of materials shared for online learning resource. Finally to the early career researchers who as workshop participants, web testers, and re-tweeters, helped to support the outcomes and materials that arise as a result of this project.

## Ethical approval

Granted by University of Sheffield ethics committee on 3 October 2014.

01	Executive summary	01
02	Introduction and aims	03
03	Methodology	05
04	Key findings	07
05	Discussions of findings	14
06	Concluding recommendations	16
07	References	18
08	Appendix	21

# 01 Executive summary

---

This report presents findings from a research study designed to enquire into early career researcher experiences of gaining a research fellowship award within the UK higher education academic career pathway. The stories of research fellowships that the researcher community tells can sometimes become barriers to academic career aspirations. Fellowship award success is often largely attributed to luck, both by award holders themselves and also by aspiring fellows. However, it is unlikely that success is due to luck alone. Individual ability to “make it happen” is a driver for academic career development, and this project explored those components of gaining a fellowship award that were attributable to the achievements, abilities, attitudes and actions of the research fellows themselves. By examining how researchers develop their ideas, CVs, skill sets and professional networks, and by identifying examples of active behaviour in post-doctoral researchers, this study presents a challenge to unhelpful myths that surround what it means to become an “independent researcher”.

The project specifically aimed to develop a framework for enabling research independence supported by learning and development resources for use in higher education institutions. It did this firstly by identifying examples of what successful researchers do in the pursuit of a research fellowship award. Secondly, it characterised the professional networks of research fellowship applicants and identified key players who had contributed to their success.

An approach was developed that would facilitate discussion of, reflection on, and understanding of the enablers and disablers of fellowship success, through a social, network-based lens. Of particular interest was the interplay between each research fellow’s social situation, their actions, and their understanding of their role in the success they has experienced. Interview questions were developed through lengthy and unstructured one-to-one interviews with current research fellows and with “key witnesses” to the organisational purview of fellowship applications – colleagues in researcher development

roles. Twenty five “fellowship stories” were collected from current research fellows across eight Russell Group universities. All participants were within their fellowship award period, and all but one were funded by an external grant awarding body. Data collection was via in-depth semi-structured interviews and a network form that collected information on the people the interviewee deemed influential or helpful in gaining their research fellowship. A high number of interviews were performed in order to capture a representative variety in experience across funder/award, gender, nationality and varied discipline research areas. Fellows’ network data was used to characterise common aspects of the self-identified key players, and the roles they played in gaining fellowship success. Thematic analyses were used to examine further interview data, and to draw out commonalities and differences.

In all cases the fellowship award had been perceived as a future goal and a significant career transition, and the applicant’s active input was essential in their success. Five areas of active development were identified in the data, and can be understood as interrelated, iterative, and often cyclical developments toward fellowship success. (1) Developing awareness of career opportunities and constraints; (2) Developing the confidence to apply and to do the project; (3) Developing and negotiating ownership of research ideas; (4) Developing application skills (writing and interviews); (5) Developing resilience and maintaining momentum.

Developing and utilising professional networks of people that support and enhance the above five development domains was key, and making career progress was always talked about in relation to the support structures afforded through other people. The people in fellows’ networks performed a variety of functions (emotional as well as intellectual) in enhancing this development process, and fellows perceived the support of their networks to be tightly linked to their development as an independent researcher. All fellows described the necessity of asking for help from others to support their

application, whether this came naturally or was more practiced. Aspiring fellows sought to make new contacts to support or enhance their applications, as well as activating existing contacts to take on supporting roles. The current supervisor or principle investigator at the time of application had a key role to play in creating the structures, permissions and environment that enabled the development of the researcher's confidence and ability to apply.

In line with other research, developing a profile as an independent researcher can be understood as a process of constant self-awareness, critical evaluation and changing priorities, and this was reflected throughout all the narratives. This study expands an existing idea in which the doctoral supervisor connects the student to the wider research communities, and also documents how the applicant's principle investigator (PI) mediates contact with wider networks, and plays a dominant role in affording the permissions and resources that enhance or confine the researcher's development. However, it was of note that the fellows who had not had an effective relationship with their PI were able to overcome this by connecting with other academic contacts. Applicants who felt ready to apply for a fellowship had been given time to "practice" leading projects and pursuing their own ideas. All 25 fellows had contacts within their networks that map to Bolden et al's "academic leadership" and "academic management" distinctions.<sup>1</sup> At least one "good academic leader" was always present in each fellow's network. Although it was felt by all participants that some component of luck had been involved, through engaging with this research study, new insight and self-awareness of their own contribution was acknowledged. This report includes recommendations that draw on the need for supportive professional networks, and the permissions, time and space that aspiring fellows need to reflect and plan their career moves. Information related to the study, two open access online learning resources, accompanying slide decks for developing aspiring fellows, and a link to the blog are available here.<sup>2</sup> ■

<sup>1</sup> Bolden et al (2012) <sup>2</sup> <http://www.sheffield.ac.uk/ris/ecr/mentoring/fsahoy>

# 02 Introduction and aims

---

This report presents findings from a research study designed to enquire into early career researcher experiences of gaining a research fellowship award within the UK higher education academic career pathway. Aiming to explore some commonly encountered perceptions of what it means to gain research independence, it focuses on the actions and activities of the researchers themselves as they develop towards gaining their first major research funding. This study has been designed not only to offer insights into the researcher experience but also to provide practical learning resources to assist researchers to develop towards gaining fellowship funding.

Despite acknowledgement of the lengthening of the post-doctoral career period,<sup>3</sup> and recognition of the importance of the post-doctoral period in advancing a research career, comparatively little attention has been paid to understanding the career experiences of post-PhD research staff. For those in this post-doctoral stage of their career,<sup>4</sup> an important route into securing a permanent academic post is via a funded research fellowship award. This type of funding affords the researcher time to focus on their research productivity and produce the publication outputs essential for academic success. Achieving independent status within the academic environment, such as by securing fellowship funding, can be viewed as a significant career transition,<sup>5</sup> and is seen as a key aspiration by many researchers during their post-doctoral career stage.<sup>6</sup> Securing a fellowship is a highly competitive process in which applicants must demonstrate their research independence and their potential to become a future research leader.

In listening to post-doctoral researchers' perceptions of "who succeeds with fellowships" through my role as a researcher development professional, my interest has been piqued by the stories that are owned and maintained by the researcher community around research fellowship awards. These narratives can be used to self-

construct barriers to academic career aspiration and the development of an independent researcher identity. Some key blocking perceptions that researchers cite as barriers to fellowship aspiration are:

- That being "independent" means that a researcher needs to be able to do everything themselves without asking for help.
- That the ability to generate ideas, and communicate them as a project proposal is an innate ability. This "innate ability" perception is consistent with writing productivity blocks described by Sawyer.<sup>7</sup>
- That you need to be lucky to get a fellowship. This may be luck in the proposal review process, or to be in the lucky situation of being given permission to apply, and to take some of the PI's research for your own project.

A large portion of fellowship award success is often understood as luck, both in accounts from award holders themselves: "I was just lucky" (perhaps as they seek to appear modest), and also by aspiring fellows: "I'm not that lucky". Although it is suggested that, due to increasingly high numbers of excellent quality funding applications and diminishing research budgets,<sup>8</sup> there is a luck component to gaining funding,<sup>9</sup> it is unlikely that it is due to luck alone. Individual agency is a driver for academic career development,<sup>10</sup> and so this project explored those components of gaining a fellowship award that were attributable to the achievements, abilities, attitudes and actions of the research fellows themselves.<sup>11</sup>

Of particular focus in this study is the ability to craft a distinctive, high-profile researcher identity, connect with others in the global research field, and garner valuable social capital through high value peer and collaborative networks. Recent socially situated models of academic career development and academic leadership development position this ability as an essential component.

By examining how researchers build and activate their professional social networks for fellowship applications, and by identifying examples of agentic behaviour in post-doctoral researchers, this study presents a challenge to unhelpful notions of what it means to become an independent researcher.

This study specifically aimed to develop a framework for enabling research independence supported by learning and development resources for use in higher education institutions by:

- 1) Identifying examples of agentic behaviours in the pursuit of a research fellowship award.
- 2) Characterising the professional social networks of research fellowship applicants and identify key players in their success. ■

# 03 Methodology

**Methodology:** Given the primary aim of identifying tangible examples of agency, activity and positive action toward gaining the research fellowship (that could be used by aspiring fellows), an open and broad critical appreciative inquiry approach<sup>12</sup> was developed that would facilitate discussion of, reflection on, and understanding of the enablers and disablers of fellowship success through a social, network-based lens.

**Designing the interview framework:** In alignment with this social, situational investigation of the experiences leading up to the successful fellowship application, a phenomenological tradition was applied to the interview schedules and processes. This acknowledged the researcher's subjective account of their story, placing them at the centre of the narrative. Of particular interest was the interplay between each research fellow's social situation, their actions, and their understanding of their role in the success they have experienced.<sup>13</sup> Interview questions and structures were developed through unstructured one-to-one interviews with nine individuals. Three individuals were current research fellows within one of the partner higher education institutions. The remaining six individuals are considered "key witnesses" to the organisational purview of fellowship applications, and are in researcher development roles within professional service departments at four UK higher education institutions.

**Participants:** Twenty five "fellowship stories" were collected from current research fellows (13 female and 12 male) across eight Russell Group universities. Eighteen were in STEM and seven in non-STEM discipline areas. Seventeen participants were UK citizens and eight were non-UK citizens. Access to fellows and interview set up was via the investigator's own network of researcher development colleagues. All participants were within their fellowship award period, funded by an external grant awarding body (research councils and charities) with the exception of one fellow funded via an internal scheme. Mean time from PhD award to fellowship award was 4.4

years, and the median number of applications a fellow had made was three. Eight of the participants had taken at least one parental leave career break.

**Data:** Data collection was via in-depth semi-structured interviews that were flexible as needed in response to cues from the participant. Interviews were informed by a preparatory step in which the participant was invited to reflect on the (up to five) people who had been influential or helpful in gaining the research fellowship. A network form collected information on the helpfulness of each contact; the nature of the support they offered; specific actions or behaviours; and details of who initiated the request/offer of support. This data was used to determine the nature, and strength of each contact's contribution in supporting the fellow through their application. Questions investigating fellows' perceptions of their readiness to apply, and how they negotiated the resources they needed to succeed were also included. Interviews were recorded and transcribed for analysis. A high number of interviews were performed in order to capture representative variety in experience across funder/award, gender, nationality, and varied discipline research areas. It was determined that saturation in the data was reached for the analytical themes described in this report.

Fellows' network data was analysed typologically, characterising common aspects of the self-identified close networks, the roles played by network members, and their contributions (type and strength) to fellowship success. Iterative thematic analyses were used to examine further interview data and to draw out commonalities and differences. A first analysis of all emerging categories was compiled, and secondary and tertiary analyses confirmed the presence or absence of categories and clustered them into thematic areas. The following themes were identified and are presented as interrelated, iterative, and often cyclical developments toward fellowship success for early career researchers that map closely to elements of the early career researcher identity trajectory construction.<sup>14</sup>

- Developing awareness of career opportunities and constraints.
- Developing the confidence to apply and to do the project.
- Developing and negotiating ownership of research ideas.
- Developing application skills (writing and interviews).
- Developing resilience and maintaining momentum.

Developing and using professional networks of people that support and enhance the above development domains was key, and making career progress was always talked about in relation to the support structures afforded through other people. In the next section, each development domain is illustrated using interview data.

Short video illustrations on the topics of networks, ideas, confidence, applications, and resilience are available via the Fellowship Ahoy! YouTube Playlist.<sup>15</sup> ■

<sup>15</sup> [https://youtu.be/oTFHDJ1h8Hc?list=PLGcyo9J-J\\_ERBL6\\_8CRnZrFJiSsENQM4I](https://youtu.be/oTFHDJ1h8Hc?list=PLGcyo9J-J_ERBL6_8CRnZrFJiSsENQM4I)

# 04 Key findings

---

A fellowship tale... before describing the data, one of the formative (initial) fellowship stories is shared below in its entirety. Adam (a pseudonym), who is a scientist, describes the developmental processes involved in journeying towards his fellowship award.

*"I had the idea I would apply for a fellowship when I was still at PhD level - so early enough to have time to prepare for it. I discovered they existed because a postdoc in another group got one, I wondered what it was all about so I asked her and we went for coffee to talk about it. She explained, and I thought to myself I'd go for it, I thought 'I can do that'. Once I knew about it I really fancied it for myself. So being motivated from the PhD onwards meant that I was aware that publications were the currency and was geared up to get as much as possible towards my future imagined application.*

*When started my postdoc and moved universities, I made sure in the first year that I got all my PhD stuff published (and a couple more) to keep me on track for this future goal. I properly clicked back into thinking about it in a meeting with my supervisor, we got into a debate over the next direction of the work I was doing. He could see it was important to me to choose my way forward and so he let me give it a go. I was proved right and so I got a couple more papers. He thought I was good at writing, and so he asked me if I'd considered a fellowship – I said I had. So then once he knew what I was aiming for, we could get together and start to put things into action. The first thing we needed to do together was to sit down and figure out how the projects and ideas were going to be carved up, what we had each brought to the projects, what we were comfortable taking forward.*

*That conversation with him helped define what my emerging specialism was, it helped me see my unique selling point and how I fit into a gap in the current research. As the opportunity presented itself, and we talked about it, I began to connect the dots and a number of old ideas began to come together to form an idea about who I was and how I could sell that. I then started to look around at the opportunities available, and see where I fit. Some were too soon, I didn't want to do*

*a rushed job. I gestated on it for a year, writing and refining. It was constant re-evaluation, it totally changed over the course of that year. Giving it thinking time helped it mature. I revisited it, looked for gaps, added pilot data. After three to four months I sent it to everyone I could to read. They all told me it was shit. My supervisor said "go and read some successful applications, there's a trick to it". So I read lots of them. I sat and made a table and looked to define the parameters they had in common. What I was missing was how to spin a story. They all started off with a bold heading, a big claim to hook you in. Then they were able to spin a detailed narrative down to a big question – their research question. By the time you get to the question part, you can't believe we don't already know that, and it seems like that's the most important question in the world. So, I threw the old one in the bin and this time I wrote it like a crime novel. I sent it back to my internal referees again and waited with bated breath. Before, it was like they couldn't see the science or see if it was good because they just hated the story. After I got the story right, they could very easily help me get the science right. So I submitted it.*

*What motivated me all the way along was that I really wanted to know the answer to the question I was proposing. That, and I didn't know what other job I could even do. I wasn't a person who always wanted to be a scientist. I had a very shaky start to my career, I totally failed my first year undergrad. But I really felt like I didn't want to do anything else. I had no idea if I was good enough, and my supervisor was honest he said I have no idea if you'll get it but you've got to try. And the idea of knowing the answer to the question kept me going because I like knowing things that other people don't know, and achieving things other people don't achieve. I had real irritation that I couldn't work it out and it needed more work. Eight years later I still haven't totally got it sorted! I'm still motivated to know the answer though.*

*The other people who supported me were my family, particularly my mum who is of a clinical background and was able to really help me separate myself from the project. She helped me take a more dispassionate view of the project, and that kept me on track and out of obsession and panic. It*

became, at times, the be all and end all and it felt like all my worth had become embodied in the paper this was written on. The criticism at that time felt so personal and my mum was there to get my head back out of my own backside and give me that perspective. She kept saying I was no worse off if it failed because I had the skills and experience to work something else out. She said “you’ve never had a day out of employment since you were 16, you’ll find another way” and it was true.

Then it came to the interview, I threw up before I went in, I was really nervous. Between submitting it and attending the interview I convinced myself I wasn’t going to get it. On the day I felt like walking in and saying “I’m crap, I’ll go”. But I survived it. The panel feedback was that they liked that I could acknowledge what I didn’t know. That I could admit that I had things to learn and where there were shortcomings but that I could also recognise the strengths of the proposal. They said “It’s hard to walk the line between confidence and arrogance and you did it.”

I was elated when I got it. Really delighted. Two months later it actually started and I was thrown into a panic again though. I sat there in an office with a new computer and a grant code, and the weight of expectation on my shoulders. I felt really under a lot of pressure to perform now. I talked to some other fellows, and found that they related to that so that was comforting. Throughout this I learned how to be really self reliant, getting the fellowship only started the process of research independence, I wasn’t independent as a decision maker when I got it, but it afforded me the right conditions to become independent in my own decisions over the next few years. I was unimpeded, in that I could simply do what I wanted to do, but also there’s no one there to pull you out if you make a mess of it, you are on your own in the sense as the buck stops with you. But there are colleagues, people to talk to, you can’t be a recluse! No one is truly independent though, we can’t be, research is a community of peers. You’re never independent of what everyone else is doing, or of the literature. This notion of independence as isolation is crazy. I just let it go, the sense that I have to do everything myself and be alone. Really it took me another eight years before I really felt the confidence in my decisions. Only in the last year I think I’ve properly established myself and fully made that transition.

A year into the fellowship I spotted an opportunity for a big grant. A few of us in the department had a brainstorming session for new grant ideas and it was in that group I presented my idea. And, because that’s what we do, a lot of

other people said it was crap. And they were lecturers and above and I seriously experienced a wobble, thinking they might be right. One person in that group came up to me and backed me up. He said “if you think it’s a real and valid question, don’t let other people put you off, you should go for it”. And I thought about it and I fundamentally believed I was right. Having got the fellowship I thought, well, someone thinks I’m good enough to make my own mind up, and I then felt driven to prove them all wrong. So I gave it a go and I got the grant. Five years later this has opened up a huge research area for me, a lot of my work has gone on from that first question. It’s a brand new research area. When I think that I nearly backed down, I get cold sweats. I worry when I think how close I was to doubting myself.

I often get asked if it’s a good idea to move for a fellowship and that staying in the same university for mine must have made it easier. But you know I think it’s harder to be seen in your new role by others if you stay in the same place. Some people never see you as an equal. To some people here I’m still seen as that undergrad with crazy dyed hair. But I don’t regret it and I wouldn’t change anything.”

### **(1) Active development towards research independence**

Factors common across all research fellows’ stories were:

- The fellowship award was perceived as a future goal to strive towards and applicant’s active input was essential in building towards this.
- People in fellows’ networks performed a variety of functions in crafting and enhancing this development process, and fellows saw the support of their networks as intrinsically linked to their development.

The five tightly inter-related active development themes (awareness, confidence, ideas, applications, resilience) were identified across the whole sample and quotes are used throughout to give examples. To illustrate more richly the decision-making processes, agency and situational enablers and constraints interwoven in the experiences of those who gain fellowship awards, a series of short compiled examples are presented as conversational narratives<sup>16</sup> under these five headings in Appendix 1. Throughout each researcher’s own narrative, a clear sense of the role other people have played in supporting and developing the researcher is present, illustrating the fundamental role of the researcher’s professional network in their career transition.

## (1.1) Development of awareness of opportunities and constraints:

**Gaining a fellowship award was seen as a bridge between undesirable fixed term contract work and a more stable career path.**

*"...completely rescued my scientific career... I was applying after seven years and two quite long postdocs seeing things going nowhere, not seeing jobs advertised for lectureships that I had any chance of getting. I was thinking that my career was due to end."* **Male, engineering**

Participants articulated when the decision to apply for a fellowship award occurred for them, and who in their networks had mediated this awareness.

*"One of my supervisors, who is the director of the unit here was saying, you know what, you need to think about what you are doing next."* **Female, science**

Interviewees talked of how they knew they wanted to commit to pursuing an academic career, whether this was to maintain their otherwise-ending research interests, or because no other career option seemed viable.

The responses reflected the fellow's accounts of raising their awareness of the opportunities open to them, and the influence of senior colleagues in helping to guide their thinking.

*"There is probably quite a lot of internal soul searching you have got to do... That probably is where your drive comes from - it comes from knowing this is the right thing to do."* **Male, science**

## (1.2) Developing confidence:

**Participants had all experienced anxiety around being "good enough" to get the fellowship award.**

*"I had quite a lot of encouragement from people to apply but personally I felt quite anxious about it. I wasn't really sure that it was what I wanted to do, and partly because I suppose it felt like quite a big step in terms of being responsible for something myself... actually I was scared of what might happen if I have to do it, I might not be able to do it, and I thought well actually, I will just do it."* **Female, social sciences**

They talked about how they how they developed their confidence in their ability to be competitive in the absence of clear benchmarks, and demonstrated an

awareness of the structural constraints placed up on them by the rejection rates of various awards.

*"I'm hearing pretty much every day that it's so competitive, that is so hard to get, and that is discouraging because [you meet] people who say, oh I applied I didn't get it, you know them and you know that most of the time they are very good scientists. And you think, oh gosh if they didn't get it how am I going to get this."* **Female, science**

Some perceived that the only "missing component" for success was confidence. Confidence was developed by the presence of practice opportunities to lead side-projects; by being accepted or encouraged by senior academics (eg as collaborators); and by gaining time out to write the application.

*"The only thing I thought I needed was the interview experience and confidence. I needed bit of confidence boost."* **Male, science**

*"I sort of knew a couple of people who weren't involved in the recruitment process but who were involved in the society that funded me, and I think that they gave me confidence that I might be a good quality applicant. Yes, I think that really gives you confidence when you feel like something you have done is funded and other people say this is a really good idea."* **Male, social science**

A short video clip of research fellows commenting on gaining confidence is available here.<sup>17</sup>

## (1.3) Developing and negotiating ownership of research ideas:

**Participants were able to describe how their fellowship project idea had arisen, and what actions they had taken to refine and develop it iteratively.**

*"I always kind of found it easy to start by thinking right, so rather than what is this big idea, what would be the next experiment I would do, and where would I take it, and I think kind of try to build it up small, and then hopefully at the end you can see actually all these experiments kind of lead towards this end result and this big body of work. I find it easier like that otherwise I find it a bit daunting."* **Female, engineering**

Participants also took steps to negotiate ownership of the research idea with their current PI and spoke of the need to gain permission to go and have ideas, and to take ideas away.

*"I asked my PI's permission, because my area is essentially his area and it would require a certain amount of accommodation for who does what. Yes, so there is a certain amount of politics. And trying to get past him with previous ideas was not working very well. And in this case the idea was significantly different from what he was doing. The first step was to get past my boss. Because if I didn't get his benediction I think I would have had to gone somewhere else and found another partner."* **Male, engineering**

Network contacts were activated for ideas development especially, playing a role in adding the bigger picture view, or strategic alignment with university and funder objectives.

*"There was [a] small group of people who I met with periodically as I came up with ideas of things to do. I have in my documents on my folder on my computer versions of things I might like to study... initial project ideas. I would sort of go and discuss them with people and they would say, no that's not very good, or that's got potential."*

**Female, social science**

A short video clip of research fellows commenting on developing research ideas is available here.<sup>18</sup>

An online learning resource on developing research ideas is available here.<sup>19</sup>

## (1.4) Developing applications (writing and interviews):

**Participants were able to demonstrate a wealth of ways they had approached preparing the written fellowship proposal, and the range of contacts that had supported them with writing, and (where applicable) preparing for the interview process.**

*"People need to look for help because no one knows how to write the application on their own. It's important not being afraid to ask for that help, can't expect to know that stuff when you are on your own."* **Male, arts and humanities**

Fellows described learning by just getting on and starting it, and a sense of learning the hard way the first time round particularly with respect to complex administrative duties and organisational processes surrounding funding applications.

*"You have to deal with the admin, you have to be phoning them up, you have to make sure you understand, because it*

*could make the difference between you getting it and not. You do quite a lot of chasing admin and phoning making it happen."* **Male, science**

The intense learning of the mock interview process was often described as painful, and humiliating, but an essential part of developing their independent researcher identity.

*"They gave me four mock interviews before I went, I mean horrible mock interviews just out to destroy me deliberately, which is exactly what you want really. So when it came to the real interview it was a cake-walk. Get people to really rip... your motivations apart. That was the toughest question I had in the mock interviews – why are you doing this... Look at your research and ask silly basic questions like, what is the point in all this?"* **Male, engineering**

## (1.5) Developing resilience:

**Participants were asked to comment on how they had persevered in striving towards the fellowship and how they self-managed through the pressure, criticism and rejection common to the academic career path.**

*"I try to split the whole thing up into two different things. One is the success of submitting an application. And I always celebrate that success and then the other bit is a massive extra bonus but if you don't celebrate the success of submitting, completing a piece of work, then like it will be really hard because then you just, you feel empty about it."*

**Male, social science**

Most participants did not speak of resilience as an attribute that they perceived they were developing.

*"Rejections, it's so bleak, I took them all badly, never got any better at it."* **Male, arts and humanities**

The majority spoke instead of understanding and accepting rejection as a normal constraint of the academic system, and one that was to be endured as part of their academic role.

*"I think you have just got to think about what your ambitions are because research is always going to involve rejection and success and you have to balance the two against each other I think."* **Female, science**

A short video clip of research fellows commenting on developing research ideas is available here.<sup>20</sup>

<sup>18</sup> [https://youtu.be/\\_R2SeYaMbaE](https://youtu.be/_R2SeYaMbaE) <sup>19</sup> <http://www.sheffield.ac.uk/ris/ecr/mentoring/inspired> <sup>20</sup> <https://youtu.be/icoTNEHvLLU>

## (2) Characterisation of research fellows' networks

Research fellows were asked to document and discuss the specific people and relationships that they felt had been influential in their successful applications. Thirteen types of individual network role appeared across all networks and these are presented below.

Role type	Examples of support for career development
<b>Principle investigator:</b> (for post-doc or PhD at time of application)	<ul style="list-style-type: none"> <li>  Suggesting fellowships as a career route or pushing the researcher to do it</li> <li>  Allowing time to write</li> <li>  Allowing freedom to pursue own interests</li> <li>  Discussion of project ideas</li> <li>  Permission to own some of the group's research</li> <li>  Advice and feedback on application writing – offering the “big picture” viewpoint</li> <li>  Interview preparation and organising mock interviews</li> <li>  Hosting the fellowship – designated mentor</li> <li>  Offering friendship and emotional support</li> <li>  Promoting the researcher and their work</li> <li>  Brokering contact with others in wider discipline network</li> <li>  Celebrating or commiserating together</li> </ul>
Another <b>senior academic</b> colleague	<ul style="list-style-type: none"> <li>  Advice and feedback on application writing</li> <li>  Interview preparation and attending mock interview</li> <li>  Offering friendship and emotional support</li> </ul>
Academic <b>host or mentor</b> for the fellowship award	<ul style="list-style-type: none"> <li>  Steering the direction, organisational alignment and feedback on application writing</li> <li>  Offering the “big picture” viewpoint</li> <li>  Navigating new organisational processes</li> </ul>
A <b>current research fellow</b>	<ul style="list-style-type: none"> <li>  Sharing of successful application and insider information on the processes</li> <li>  Interview preparation</li> <li>  Navigating new organisational processes</li> <li>  Offering friendship and emotional support</li> <li>  Celebrating or commiserating together</li> </ul>
<b>Head</b> of dept/school/ discipline	<ul style="list-style-type: none"> <li>  Giving permission at the departmental level</li> <li>  Navigating new organisational processes</li> <li>  Feedback on application writing</li> <li>  Interview preparation and attending mock interview</li> </ul>
<b>Peer applicant</b> for the same or a different fellowship	<ul style="list-style-type: none"> <li>  Going through the process together as allies</li> <li>  Sharing new learning</li> <li>  Discussion of project ideas</li> <li>  Advice and feedback on application writing</li> <li>  Mental health support</li> <li>  Offering friendship and emotional support</li> <li>  Celebrating or commiserating together</li> </ul>

<b>Collaborator</b> named on the fellowship application	<ul style="list-style-type: none"> <li>  Complementary expertise or experience</li> <li>  Discussion of project ideas</li> <li>  Advice and feedback on application writing</li> <li>  Putting faith in the project/researcher</li> </ul>
<b>Referee</b> for the fellowship application	<ul style="list-style-type: none"> <li>  Written endorsement</li> <li>  Putting faith in the project/researcher</li> </ul>
<b>Mentor</b> (formal or informal) sought out by the applicant	<ul style="list-style-type: none"> <li>  Suggesting fellowships as a career route or pushing the researcher to do it</li> <li>  Helping researcher negotiate permissions from PI</li> <li>  Advice and feedback on application writing – offering the external viewpoint</li> <li>  Mental health support</li> <li>  Offering friendship and emotional support</li> </ul>
<b>Grant capture manager</b> or facilitator within the HEI	<ul style="list-style-type: none"> <li>  Translating funder requirements and trends</li> <li>  Navigating new organisational processes</li> <li>  Advice and feedback on application writing</li> </ul>
<b>Researcher development professional</b>	<ul style="list-style-type: none"> <li>  Brokering contact with others in wider organisational network</li> <li>  Mental health and emotional support</li> <li>  Advice and feedback on application writing</li> </ul>
<b>Spouse / partner</b>	<ul style="list-style-type: none"> <li>  Advice and feedback on application writing – offering the lay perspective</li> <li>  Allowing time to write by taking on domestic or family tasks and responsibilities</li> <li>  Supporting through uncertain times</li> <li>  Support through geographical transitions</li> <li>  Mental health and emotional support</li> </ul>

Factors common across all research fellows’ networks are:

- | All fellows described the necessity of asking for help from others to support their application.
- | Aspiring fellows seek new contacts to support or enhance their applications; they also activate existing contacts to take on various supporting roles.
- | The current supervisor or principle investigator at the time of application has a key role to play in creating the structures, permissions and environment that enable applications to be made.

All fellows reported that at the stage of contemplating and developing a fellowship application they had sought to actively build contacts to support or enhance their applications. Fellows’ network building was achieved either directly through their own action to make contact, ask a question or make a request (eg with peers, current collaborators, their PhD supervisor, or academic support services staff); or by asking for an introduction from a colleague, usually their current principle investigator. The relationship with the current PI was a key conduit in linking the aspiring fellow into the “more difficult to reach” contacts ie new academic collaborators and senior

colleagues internationally. However, some aspiring fellows were able to perform this task themselves, for example in cases where a strong developmental relationship with a PI was not in place, or where the PI encouraged the applicant to make direct contact themselves as a development opportunity to raise their profile.

The PIs of most aspiring fellows had acted to support or champion the fellow’s career development, affording them the freedom to make decisions, test ideas and write their proposal. In some cases, where the PI was not willing to allow the researcher time and space to develop their ideas and proposal writing, aspiring fellows found a way around by writing in their own time, or in secret. Fellows also described being able to overcome the lack of a career champion figure (because of a relationship deterioration, or because they were moving on to a new career location) by forming a new relationship with a career mentor. Most often the formation of this relationship was driven by the aspiring fellow, and the mentor was included as the official host on the application. In one case though, the mentor was identified through a formal intra-organisation mentoring scheme.

Aspiring fellows also activated their pre-existing contacts to take on various supporting roles, for example getting feedback on their developing project ideas, to get critique on the written proposal, or the in preparing for the interview presentation. For each task a contact with the appropriate characteristics was sought. Interestingly all fellows talked about the necessity of being able to take action and ask for help, and often also described needing to get used to the accompanying sense of discomfort that comes with asking others for assistance. It was often described as a negative quality, ranging from being “a drain on someone’s time”, “cheeky” or “pushy”, to being “manipulative” or “ruthless”.

Interestingly, interviewees demonstrated considerable difficulty/reluctance in articulating the reciprocal benefits to the people who had supported them with their applications, often being unaware, or playing down the value they add to their professional networks. Many times they felt that they had been supported because it was “just part of someone’s job” or because they “were a nice person who likes helping others”. However, when pressed to reflect, the list of benefits fellows add to their networks was commonly understood as:

- Being a friendly colleague who was an ally to help with teaching, administration, and supervision.
- Contributing to the research area within the organisation and being a collaborator on further grants and publications.
- Offering complementary research or research-related expertise, equipment, or funds.
- Offering reciprocal support for a future fellowship application for the individual, their research group, or their department.

In Appendix 2, summary diagrams of the perceived key contributors to each fellow’s career transition are presented by discipline area.

A short video clip of research fellows commenting on their professional networks is available here.<sup>21</sup>

An online learning resource on developing networks for research success is available here.<sup>22</sup> ■

# 05 Discussion of findings

Like other recent investigations of researcher career progression and the academic experience, this study of researcher networks is situated within a workplace/career socialisation framework.<sup>23</sup> Developing an identity as an independent researcher, one that builds on a previous identity, is positioned as a fluid process of constant awareness, reappraisal and changing priorities,<sup>24</sup> and this was reflected throughout all narratives of the process of gaining the fellowship award.

All fellows reported that at the stage of contemplating and developing their fellowship application(s) they had sought to actively recruit appropriate contacts to support or enhance their applications. Social networks matter in career development processes,<sup>25</sup> and the effectiveness of a network depends on the occupations and experiences of the contacts.<sup>26</sup> Previous studies also suggest that social capital gained through network expanding activity is associated with objective career success.<sup>27</sup>

The importance of peer and faculty relationships is emphasised in academic transitions, and isolating environments may slow transition to independence.<sup>28</sup> It is suggested that for new doctoral researchers the supervisor is the point of connection to the wider research community within their institution, and also globally as part of their specialist research community.<sup>29</sup> Integrating into the academic culture can be mediated through the relationship with the supervisor.<sup>30</sup> This study also documents how the applicant's PI mediates contact with wider networks, and plays a dominant role in affording the permissions and resources that enhance or confine the researcher's development. However, the fellows who had not had an effective and developmental relationship with their PI were able to overcome this by seeking other academic contacts to support career development.

Applicants who felt ready to apply for a fellowship had been given some time to "practice" at acting independently, leading projects and pursuing their own ideas. Researchers do develop their independence during the postdoctoral period<sup>31</sup> and actively engaging

in academic work underlies one's developing identity as an academic.<sup>32</sup> As McAlpine et al<sup>33</sup> demonstrate, small everyday experiences contribute formatively to a developing academic identity, in addition to the formal and semi-formal aspects.

There is an association between academic career success and researchers' mobility.<sup>34</sup> The need to demonstrate independence by moving away from the current place of work is often cited as a barrier to applying for a fellowship award for researchers whose personal life is tied to their current location. Interestingly then, 17 of the 25 interviewees did not relocate for their fellowship award and of them, 10 had been working within the same department since beginning their PhD. This study then evidences a challenge to the necessity of relocation. It is possible that independence can be demonstrated without relocation, and interviewees were able to describe how they had actively achieved this in their applications.

All 25 fellows had identifiable contacts within their networks (sometimes across different role functions), providing support for development across the domains that map to Bolden et al's academic leadership and academic management, distinctions.<sup>35</sup> At least one "good academic leader"<sup>36</sup> was always present in each fellow's network. A good academic leader supports the aspiring fellow through:

- The provision and protection of an environment that enables productive academic work. Examples in this study were evidenced in the accounts of researchers whose PIs who had given them permission to develop and lead on small projects, had afforded them the time and space to write funding applications, and had allowed the researcher to have ownership of an idea for their application.
- Boundary spanning internally and externally to create opportunities for others. Examples were given in this study of PIs who mediated an aspiring fellow's network growth in linking researcher to wider academic and administrative colleagues, and mediated understanding the bigger picture context for the research project.

- Supporting and developing a sense of shared social academic values and identity. For example by modelling the fellowships route, by raising the awareness of early career colleagues to the standards and constraints of the academic career route, and by helping researchers to find their own research niche.

Performance of (and success in) academic tasks in a university setting is influenced by the development of cognitive, affective and social processes.<sup>37</sup> The emotional or affective dimension of professional work is significant<sup>38</sup> and Bridges details how emotional states can be heightened during times of change as the individual works to develop an understanding of what ways of working are ending, what can be carried forward as a useful behaviour in a new environment, and what new ways of acting and thinking need to be developed.<sup>39</sup> In this study fellows described a strong emotional component to gaining independence through times of intense and often “painful” learning experiences. Network contacts, particularly peers, and spouses provided support for emotional growth and development as well as intellectual. Researchers remarked frequently that to be given the time and support by a PI to apply for a fellowship was a form of emotional support that demonstrated a trust and faith in their ability.

The perceived notion of luck was referred to frequently throughout most of the interviews that contributed to this study. It was felt by almost all participants that some component of luck was involved eg in getting a tip off from a colleague about an opportunity, in meeting the right colleague at the right time, in being approached (or accepted) for a collaboration, in having a PI who was concerned with developing and supporting junior colleagues, and in actually getting the fellowship award through the peer review process. Through engaging with this research study, new insight and self-awareness of participants’ own contribution was acknowledged and the investigator was often thanked for the opportunity for reflection that their participation in the study afforded. Recommendations follow that draw on the supportive context of professional networks, and the making of provision for time and space for aspiring fellows to reflect and plan their career moves. ■

# 06 Concluding recommendations

This study illustrates researchers' lived perceptions of the key decisions and actions that helped them gain their award and maps the professional networks of fellowship applicants, highlighting perceptions of critical associations in fellowship award success. Researcher identity and career development is actively shaped and developed in direct response to changes in environment and discipline<sup>40</sup> and is, importantly, dependent on the recognition of a potential "better way" of doing, being, or understanding.<sup>41</sup>

How then do we enhance awareness, reflection and planning in PhD and early career researchers? Where are the opportunities in the early career researcher work-life to leverage junior colleagues' understanding of the wider research landscape? How can we broker network-building activities that support researcher development and socialisation? And how can we provide developmental practice opportunities that help early career researchers to build a sense of identity and confidence. Some ideas are shared below.

Research(er) development colleagues could design initiatives that support early career researchers to develop across the domains of agency identified in this report. In particular:

***(a) In gaining awareness of the different routes, contexts, struggles and prior experiences that can lead to successfully gaining a fellowship award.***

There is great diversity in what a research fellow looks like across areas such as confidence, career mobility, number of applications, timing, approach, and motivations in applying for funding. Highlighting this diversity may help to dispel early career researchers' feelings of not "fitting the profile" and encourage wider recognition of talented people. This could be achieved through institutions collating further case studies and stories across discipline areas, and presenting a balanced picture of who applies and succeeds with fellowships rather than having a select few high profile faces. Additionally, it could be achieved by raising the visibility of research fellows within their

organisations and cultivating networks of current fellows available to advise and mentor applicants.

***(b) To access independent career support and guidance via cross-institutional mentoring.***

Mentoring and coaching are increasingly seen as useful approaches for developing leadership skills such as self-awareness, self-efficiency and agency.<sup>42</sup> In studies in the academic environment, formal mentoring programmes provide a way for junior colleagues to link into wider institutional networks and therefore understand more about the requirements of their role. This has been demonstrated to impact upon research outcomes.<sup>43</sup> A formal mentoring programme that matches fellowship applicants with current fellows would provide protected time and space for career planning, identification of CV gaps, and discussion of areas for development, with an independent source of guidance and encouragement.

***(c) The design of an enhanced appraisal and reward process for early career researchers that recognises their contributions and supports a more tailored career reflection is called for.***

Early career researchers are often discouraged from engaging with development activities that are not directly related to the completion of the research project for which they are contracted. This means that an amount of "under the radar" work takes place, with additional contributions and development needs going unrecognised within an appraisal that concentrates on project objectives. A more expansive appraisal process, which takes into account all the work a researcher has done, and allows for the sharing of career aspirations, is suggested. This could facilitate negotiation of the researcher's career development in alignment with project targets and demands rather than in opposition. To mediate this process of negotiation, an additional offline reviewer could provide an independent opinion for career development. Further to this, annual review of early career researchers' CV and development plans at departmental level could enhance independent identification of candidates for support with fellowship applications. Exceptional achievement by early career

researchers could be rewarded with small, internally funded research grants that buy out researcher time to develop their research interests and pilot data, and to write fellowship applications.

### **(d) Broadening networks beyond the institution.**

Although it is acknowledged that academic professional networks span their discipline and are much wider than their host institutions, early career researcher networks tend to be more limited in their reach. Discipline-based network building activities for early career researchers are often mediated by the group leader, and rely on the PI acting to include them in meetings. For early career researchers, making contacts in their own right is more difficult as they can be excluded from some of the “visitor” activities we associate with academic staff (eg giving an invited seminar, setting up new collaborations, or examining a PhD candidate). Utilising our own researcher developer networks to establish partner universities for reciprocal early career researcher invited speaker seminars series could provide an outlet for the presentation and discussion of early career researchers’ own project interests within a broader network. It would also aid researchers in understanding their research competitors, building collaborative relationships, and positioning their work within the sector context.

**(e) Supporting cohorts of early career researchers to identify small external funding awards, develop a project proposal, and navigate internal finance and application processes.** Securing their own funding to conduct pilot research, (eg methods development awards, seed-corn funding, or summer studentship project funding) gives the developing researchers not only a point of CV enhancement, and real data to backup later applications, but affords them experience of the entire processes of idea and application development, project and people management, and reporting. Coordinated groups of early career researchers could be facilitated through this process by the provision of: tailored workshops on application writing, budget management / finance systems, and the recruitment of students; internal peer review systems that help them to refine their small project proposals; a designated point of contact available to advise and support researchers who successfully gain the funding.

**(f) We must help early career researchers demonstrate, and PIs recognise, the mutual benefits of encouraging development.** Rather than viewing development activities as working in opposition to the achievement of project objectives, recognition must be given to reciprocal affordances. Perceived organisational support (fair treatment; valuing employee contributions and wellbeing) has been linked with higher job performance,<sup>44</sup> positive organisational citizenship behaviours,<sup>45</sup> commitment, and reduced turnover.<sup>46</sup> Responsibility for engagement with formal initiatives and programmes is shared between the institution, the early career researcher, and their PI. Early career researcher engagement is dependent on research group leaders giving junior colleagues both the permission and the encouragement to behave in ways that aid their own career development.

This work demonstrates that, in addition to the recognised elements of luck in gaining research funding, success in gaining research fellowship awards is enabled by the agency of early career researchers, acted through professional networks. It characterises the key relationships that contribute not only to the aspiring fellow’s intellectual development, but also to the development of adaptive behaviours that enable academic career transition, such as feeling confident and “ready” and celebrating or commiserating together in communities through times of application success or rejection. It is hoped that the learning from this project will be used to inform programmes of career development for aspiring fellowship award holders. A series of accompanying resources have been developed to support this aim.

The project is still open for the collection of more fellowship stories. More information related to the study, the study blog, and the two open access online learning resources are available via the home page.<sup>47</sup> ■

# 07 References

---

Ahern, K and Manathunga, C (2004). Clutch-Starting Stalled Research Students. *Innovative Higher Education*, 28(4), 237–254.

---

Åkerlind, GS (2005). Postdoctoral researchers: Roles, functions and career prospects. *Higher Education Research & Development*.24(1), 20-40.

---

Allen, TD, Eby, LT, Poteet, ML, Lentz, E, and Lima, L (2004). 'Career benefits associated with mentoring for protégés: a meta-analysis'. *Journal of Applied Psychology* 89: 137–149.

---

Bazeley, P (2003). Defining “early career” in research. *High Education*, 45(3), 257–279.

---

BIS (2012). *Students at the Heart of the System*. Higher Education White Paper. Department for Business Innovation and Skills.

---

Bolden, R, Gosling, J, O'Brien, A, Peters, K, Ryan, M and Haslam, A (2012). *Academic Leadership: Changing conceptions, identities and experiences in UK higher education*. Leadership Foundation for Higher Education, 1–64.

---

Bridges, W (2003). *Managing transitions: making the most of change*. Perseus.

---

Bryman, A (2012). *Social Research Methods*. Oxford University Press.

---

Clegg, S (2008). Academic identities under threat?, *British Educational Research Journal*, 34(3), 329–345.

---

Clutterbuck, D (2004). *Everyone Needs a Mentor: Fostering talent at work*, 3rd edn, London: Chartered Institute of Personnel and Development.

---

Cockell, J and McArthur-Blair, J (2012). *Appreciative inquiry in higher education: A transformative force*. San Francisco: Jossey-Bass.

---

Eraut, M (2004). Informal learning in the workplace. *Studies in Continuing Education*, 26(2), 247–273.

---

Erdogan, B and Enders, J (2007). Support from the top: supervisors' perceived organizational support as a moderator of leader-member exchange to satisfaction and performance relationships, *Journal of Applied Psychology*, 92:2, 321-30.

---

Evans, L (2011). The scholarship of researcher development: Mapping the terrain and pushing back boundaries. *International Journal for Researcher Development*, 2(2), 75–98.

---

Felt, U, Fochler, M and Müller, R (2012). *Biography and/or Career? Young Researchers' Perspectives on Knowing and Living in Contemporary Research*. Vienna: University of Vienna, Department of Social Studies of Science.

---

Harris, S and Nolan, T (2014). Starting from the discipline: the development of early career academic leadership. *Leadership Foundation for Higher Education*, 1–44.

---

Horta, H (2009). Holding a post-doctoral position before becoming a faculty member: does it bring benefits for the scholarly enterprise? *Higher Education*, 58(5), 689–721.

---

Gardner, S (2006). 'I heard it through the grapevine': Doctoral student socialization in chemistry and history, *Higher Education*, 54(5), 723–740.

---

Gardner, SK (2008). "What's Too Much and What's Too Little?": The Process of Becoming an Independent Researcher in Doctoral Education. *The Journal of Higher Education*, 79(3), 326–350.

---

Glennen, RE (2003). The importance of faculty advising: A CEO and CAO perspective. In Kramer, GL (ed), *Faculty advising examined* (pp. 40–54). Bolton, MA: Anker.

---

Loi Ngo, HAFS (2006). Linking Employees' Justice Perceptions to Organizational Commitment and Intention to Leave: the Mediating Role of Perceived Organizational Support. *Journal of Occupational & Organizational Psychology*, 79(1) 101-120.

---

McAlpine, L (2014). the next-generation of university teachers: Over time, how do post-Ph.D. scientists locate teaching and supervision within their academic practice? *Teaching in Higher Education*. 19(8) 835-846.

---

McAlpine, L, Amundsen, C and Turner, G (2014). Identity-trajectory: Reframing early career academic experience. *British Educational Research Journal*, 40(6), 952–969.

---

McAlpine, L (2012). Academic work and careers: Re-location, re-location, re-location, *Higher Education Quarterly*, 66(2), 174–188.

---

McAlpine, L (2012). Identity-trajectories: Doctoral journeys from past to present to future, *Australian University Review*, 54(1), 38–46.

---

McAlpine, L and Amundsen, C (2009). Identity and agency: Pleasures and collegiality among the challenges of the doctoral journey. *Studies in Continuing Education*, 31(2), 107–123.

---

McDonald, S (2011). What you know or who you know? Occupation-specific work experience and job matching through social networks. *Social Science Research*. 40(6): 1664—1675.

---

Pilbeam, C and Denyer, D (2009). Lone scholar or community member?, The role of student networks in education in a UK management school, *Studies in Higher Education*, 34(3), 301–318.

---

Paré, A, McAlpine, L and Starke-Meyerring, D (2006, April). Entering the text: Learning doctoral rhetoric. Paper presented at the Conference of the American Educational Research Association, San Francisco, USA.

---

Piercy, NF (2006). Driving Organizational Citizenship Behaviors and Salesperson In-Role Behavior Performance: The Role of Management Control and Perceived Organizational Support. *Journal of the Academy of Marketing Science*, 34(2), 244–262.

---

Podolny, JM and Baron, JN (1997). Resources and relationships: Social networks and mobility in the workplace. *American Sociological Review*. 62(5) 673-693

---

Pololi, L and Knight, S (2005). 'Mentoring faculty in academic medicine: a new paradigm'. *Journal of General Internal Medicine* 20: 866–870.

---

Porter, RE (2005). What Do Grant Reviewers Really Want, Anyway? *Journal of Research Administration* 36(2) 47-55.

---

Sawyer, K (2009). Writing as a collaborative act. In Kaufman, SB and Kaufman, JC (eds), *The Psychology of Creative Writing*. 166-179. Cambridge University Press, Cambridge.

---

Seibert, SE, Kraimer, ML and Liden, RC (2001). A social capital theory of career success. *Academy of Management Journal*, 44(2): 219-237.

---

van Arensbergen, P and van den Besselaar, P (2012). The Selection of Scientific Talent in the Allocation of Research Grants. *Higher Education Policy*. 25(3), 381–405.

---

Weidman, J and Stein, E (2003). Socialization of doctoral students to academic norms. *Research in Higher Education*. 44(6), 641–656.

---

Witt, LA and Carlson, DS (2006). The work-family interface and job performance: Moderating effects of conscientiousness and perceived organizational support. *Journal of Occupational Health Psychology*, 11(4), 343–357.

---

Wolff, H-G and Moser, K (2009). Effects of networking on career success: a longitudinal study. *Journal of Applied Psychology*, 94(1): 196-206. ■

# 08 Appendix 1: Conversational narratives

---

To illustrate more richly the decision-making processes, agency and situational enablers and constraints interwoven in the experiences of those who gain fellowship awards, a series of short compiled examples are presented below as conversational narratives.<sup>1</sup>

Throughout each researcher's own narrative, a clear sense of the role others have played in supporting and developing the researcher is present, illustrating the fundamental role of the researcher's professional network.

Although interviews were conducted on a one-to-one basis, the compilations below have been created (subjectively, by the PI) in order to show nuances and variations in overlapping data, and make sense of the way the themes were perceived and described by individual participants in their own contextual stories.

Comments are arranged in five clusters and are attributed to a discipline area agreed with each participant (**SCI** = biological or biomedical sciences; **ENG** = engineering or physical sciences; **SS** = social sciences; **AH** = arts and humanities). Gender is noted, and numbers signify individuals.

## Development of awareness of opportunities and constraints:

- ENG 5 F** I was always keen to stay in academia but always put off by fixed term contracts. I am really conscious of getting stuck.
- SCI 10 M** I've been committed to the fellowship route you know from quite early on... that's what I wanted to do.
- SS 3 F** Because I'm a strategic... and it's because I do try and make myself as employable as possible, I've tried every opportunity that's come up really. No matter how critical you are of the constraints, I think you have to play the game, yes you do.
- ENG 2 M** I was done being a post doc. And doing someone else's project I wanted my own project. My PI was completely hands off, he basically said this is your starting point start of your project and I will see you in two years. I thought that was a positive thing. So, I was driving these projects for my boss anyway and that gave me the confidence to start my own path.
- ENG 2 M** Also completely rescued my scientific career... I was applying after seven years and two quite long post docs seeing things going nowhere, not seeing jobs advertised for lectureships that I had any chance of getting. I was thinking that my career was due to end.
- SCI 8 M** My track record, you know, put me in a position that I knew I could be competitive, and I've always had a desire to be independent.
- SCI 6 F** I thought I haven't got enough papers, I haven't got enough papers, I will delay, I will delay. And then I realised I wasn't eligible for it next year... and I went for it... yes but it was probably leaving it a bit till the last minute. If you're eligible and you are still going to be eligible in a year's time, two years time, go for them anyway because you will get feedback and none of that work will be wasted.

<sup>1</sup> Harris and Nolan (2014)

- SS 2 M** I think it was probably my PhD supervisor, who probably started talking about them with other post docs I knew... they probably asked everyone, are you going to apply to a fellowship?
- SCI 5 F** I was vaguely aware of it being something that people did in academia, but all the people around me... were still doing post docs, and so it hadn't come into my thinking perhaps because I didn't have anyone to look up to or look to who had actually got a fellowship.
- SCI 3 M** ...Both my supervisor and also the other PI in the lab that we shared, both had independent fellowships that's how they had their career had gone. So I saw it as the way you do it.
- S 4 F** One of my supervisors, who is the director of the unit here was saying, you know what, you need to think about what you are doing next.
- SCI 5 F** My PI said I think you would be a good candidate to apply for a fellowship. So I thought, oh ok if he thinks that, maybe it's true. I felt that I don't know if I'm ready or good enough...
- SCI 9 M** Not every PI mentions this...there is sort of a general limit for these kind of fellowships about six, seven years post PhD. And I was just about, just about in it before he mentioned it.
- SCI 3 M** I was exposed to it...if you don't know about something you are not going to think about doing it. And I think that quite often the people who get independent positions come from successful labs... one successful PI tends to produce a number of successful PIs.
- ENG 5 F** I shared a lab with somebody...and she came in and sort of said, oh somebody has just talked to me about fellowships, and I hadn't heard about them then. So I just started sort of kind of looking around I after that. I started talking about it with the PI that I was working under at the time. I think probably talked about it in my appraisal. I think soon as I started saying I was interested they were quite up for trying to support me.
- SCI 7 F** I sat and chatted with my supervisor quite lot actually, about the ideas that I wanted to carry forward into the project. I was quite lucky in that I got a lot of advice. And think that my supervisor would have definitely said if he didn't think I stood a chance.
- SCI 4 F** I also had in the back of my mind, oh well, it might not be successful 'cos it might not quite fit into the actual kind of research that they like to fund. But I just went for it anyway.
- ENG 1 M** My PI always told me he was very supportive of me applying for fellowships. Even before that he was willing to still give me the time to work side projects, which wasn't necessarily part of what I was actually getting paid for. I think also it is important for the people to have time out or time out of their usual projects to be able to do that or it's never going to happen.
- SCI 6 F** I was lucky in that my post-doc supervisor kind of let me focus on that... they were really supportive... I don't know why some PIs say no you can't, because the fact is then you leave that post-doc you continue writing up those papers anyway...I don't really understand people who don't let post docs do that... come on, they will probably finish their application and then work in the lab all weekend anyway. My PI was very supportive but I think it's the independence thing they don't all get. They [can be] fantastic supervisors, but not at letting you go, you're always tied in.
- SCI 2 F** My PI was supportive of my application, obviously she wasn't happy I was leaving, but still, you know, she was still supportive.

**SCI 9 M** I started thinking of alternatives, what would I like to do besides this. And my answer was... I wouldn't, this is what I really enjoy... you know with all the frustration and, you know, all the ups and downs that come with it.

**SCI 3 M** There is probably quite a lot of internal soul searching you have got to do, if I think that probably is where your drive comes from it comes from knowing this is the right thing to do

## Developing confidence

**SCI 9 M** When I applied for the internal [fellowship] I was told I think you have enough to apply for an external one, and I disagreed, I thought no I'm not ready. I need some more data.

**SS 4 F** I had quite a lot of encouragement from people to apply but personally I felt quite anxious about it. I felt quite, wasn't really sure that it was what I wanted to do, and partly because I suppose it felt like quite a big step in terms of being responsible for something myself... actually I was scared of what might happen if I have to do it, I might not be able to do it, and I thought well actually, I will just do it.

**SCI 7 F** I don't mind asking people for help actually although it makes me really nervous but I don't mind it... I prefer it by email actually 'cos it's much easier I think to write down things rather than have to call people on the phone.

**SCI 1 M** The only thing I thought I needed was the interview experience and confidence. I needed bit of confidence boost.

**ENG 2 M** Certainly my biggest fears is as a scientist is talking to other people. I'm constantly worrying someone is going to notice I don't know what the hell I'm talking about. But it seems to be a common fear that people will think I don't know what I'm doing, how the hell did I get here.

**ENG 5 F** I think even now like it's hard to feel quite sure if you are good enough for anything. So I think I'm just going to give it a shot and see what happens because otherwise I might get stuck.

**SCI 4 F** I think I tend to just go for it, to be honest. You can be too put off by specifications in, you know, in anything job descriptions or fellowships, actually you don't know if you fit until you apply, because you don't know what everyone else's work is like as well, and they have to fund something.

**SCI 2 F** I'm hearing pretty much every day that it's so competitive, that is so hard to get, and that is discouraging because [you meet] people who say oh I applied I didn't get it, you know them and you know that most of the time they are very good scientists. And you think, oh gosh, if they didn't get it how am I going to get this.

**SCI 3 M** Someone who I was talking to said, I think your publication record is the minimum it could be to apply. So some people might have thought, well then, I shouldn't apply, [but] I thought I should definitely apply. If I hadn't done that, I may not have been ready when I was ready.

**SCI 2 F** A thing that made me feel confident I was ready for the next step is I wasn't really learning anything new anymore in the lab, like I knew how to do most of the things that we were doing and so I was not feeling the challenge anymore.

**AH 3 F** Reaching out to a potential host and them accepting, that gave me a lot of confidence that somebody really wanted me come and work [with them]. And trusted me to do it.

- SS 4 F** My PI basically said, you know these [other work] things can wait you need to work on your application now. Err, so I think that was probably the biggest source of support...the space and the time to do it. It shows you're important, and it's a confidence lift.
- SS 2 M** I sort of knew a couple of people who weren't involved in the recruitment process but who were involved in the society that funded me, and I think that they gave me confidence that I might be a good quality applicant. Yes I think that's, quite, really gives you confidence when you feel like something you have done is funded and other people say this is a really good idea.
- SCI 7 F** It has been a good confidence boost to get this [fellowship]. It was incredible. I think it's just because it's the first stage of becoming established on your own and it's a big step to know people have faith in what you are doing, your research. I'm trying really hard to have a bit more faith in my own ability because I do really struggle with that.
- SCI 7 F** They sent me an email. And they just said, oh we just wanted to let you know that the outcome of your fellowship was successful and I had to re read the email about five times just to make sure they did say successful and not unsuccessful.
- ENG 5 F** I was just in a better place by, that was the third [application], just experience wise, I had just been exposed to the system a few times, so probably within myself was in a better place to deal with it.
- SS 4 F** There were times when I kind of thought I don't know if this is any good but there is a sort of sort of process that happens where you start off writing things... the more you refine it, and work on it, then you get to a point where you can actually think well now I begin to believe this, I've kind of, I have created something which, which is believable which I think might work... but you don't necessarily think that at the beginning. But you sort of have to carry on doing it...to believe in it.
- SCI 9 M** Yes, I mean, in the end it's not that difficult once you have done it.

## Developing and negotiating ownership of research ideas

- ENG 1 M** Finding ideas was always one of those things that I guess I worried about a little bit
- SS 4 F** I think the most arduous task is coming up with the idea in the first place almost I mean it's having ideas that are that are workable, that are doable, that are answerable. What seemed arduous was trying to pin down exactly what I was going to do. I don't think that you have to sort of have one brilliant idea that you know it takes, it takes time and it is that sort of iterative process.
- AH 2 M** I probably have too many [ideas] because I when I look at my computer I have several other articles that I've done portions of, but I haven't finished yet because I sort of get side tracked.
- ENG 5 F** I always kind of found it easy to start by thinking right, so rather than what is this big idea, what would be the next experiment I would do, and where would I take it, and I think kind of try to build it up small, and then hopefully at the end you can see actually all these experiments this kind of lead towards this end result and this big body of work. I find it easier like that otherwise I find it a bit daunting.
- SCI 1 M** I had an idea and then took me a while to process that idea and make it a sensible one.
- SS 2 M** Sometimes ideas are a little bit out there, and that can be good, but sometimes if it doesn't work on paper at all.

- SCI 7 F** It just followed on from others studies that I had done in my PhD and... had sort of been building I suppose since I came out of my PhD. So it's quite a long time in development.
- SCI 9 M** It came from previous work I had done for my PhD, I sort of went back and revisited it, so a mix of revisiting old older stuff and new connections. I tried it, got the preliminary data and looked promising, so I thought ok it's time for it.
- AH 1 M** I had used individual [ideas and] threads to apply for post-doc positions and failed. And eventually I sort of thought of way where I could bring it all together.
- SCI 8 M** It was one of those eureka moments where... we saw data that were so dramatic and it was not what we were anticipating, so it was mine. If I were to have discovered something that was really within the realm that [my PI] wanted to work on I think we would have some problems.
- ENG 5 F** My PI said to me to put some ideas together and come back and we can talk about it in a few weeks times... so just went from there. I think when somebody tells you to go and do it as well, we put a date in the diary, then you are a bit more forced to actually write something down. I guess I've always tried to write those things down, even if I never actually go back and read them I think if you write them down then it kind of cements it a little bit more in your head.
- ENG 4 F** With my first fellowship application... my PI and I were talking, when you are talking with somebody bouncing ideas back and forth sometimes things pop up. Some of the ideas that I put in the proposal were a part from what he was saying.
- SCI 5 F** My PI was quite instrumental because he had a lot of very good connections and was very happy to be supportive and share them with me, so the key was having an idea and having the support with which to implement and build on that idea.
- SS 3 F** My PI... her ideas kind of help me to form mine and stop me from getting ahead of myself... they allow me to sort of shape my project to something that I thought would be fundable. When I knew I needed to move [universities], another academic in that new place, helped me to rewrite the proposal so that it would fit their department.
- SCI 10 M** I took [a particular] post-doc job in the first place because it was quite clear that working with this PI, I was going to get lots of leeway to pursue my own kind of interest... so that made it quite easy to... develop ideas.
- SS 4 F** There was [a] small group of people who I met with periodically as I came up with ideas of things to do. I have in my documents on my folder on my computer versions of things I might like to study... initial project ideas. I would sort of go and discuss them with people and they would say, no that's not very good, or that's got potential. You could do something with that, go away and work on it again... it was definitely a process of changing things in response to what other people said.
- SS 2 M** There has also been ideas from mentors or people in those sorts of roles. Who have just said what about this... that sounds like it could... and I think sometimes they are the ones that have a better handle on innovation towards a real need.
- SS 3 F** In terms of the I own this bit you are going to take that bit, it's not clear at all, actually intellectual property is a real blurred thing, it's real fuzzy boundaries.

- SS 2 M** I needed to be quite sensitive about it and I didn't want to just assume I could have access to this data. So from that respect it was only a small element of it but I had to be very clear about it.
- SCI 6 F** You're never quite sure who has come up with what ideas because you discuss things on a daily basis and some things that you know I thought I'm sure that was my idea but [another post-doc] thought it was hers. When we talked about it openly we have just said it's difficult because we are all going to the same conferences.
- ENG 2 M** I asked my PI's permission, because my area is essentially his area and it would require a certain amount of accommodation for who does what. Yes so there is a certain amount of politics. And trying to get past him with previous ideas was not working very well. And in this case the idea was significantly different from what he was doing. The first step was to get past my boss. Because if I didn't get his benediction I think I would have had to gone somewhere else and found another partner.
- SCI 3 M** The most obvious person who could be antagonistic is your current boss. You know that's the biggest stepping stone I think. If they say you can't take anything that you have done in my lab with you that's a pretty difficult problem. In that situation you have to leave you have to go somewhere else because you are never going to be able to overcome that, fundamentally that person has to support you.
- SCI 5 F** I took quite a lot of pains to make sure that it was separate from PI at the time... very much separate to what his interests are. So he's not going to want to trample on what I'm doing.
- ENG 4 F** It was just very definite for me; I've had this idea so I'm writing it up
- SS 2 M** Time is never wasted, the ideas, you keep recycling them, and you get better each time at writing the whole process, they get better usually when they've had process of reconstructing them.

## Developing applications (writing and interviews):

- SS 2 M** For the actual application, getting in contact with people who have got the right experience, this is a whole set of people you need.
- SCI 4 F** I don't know, I'm not sure what it is why certain people have got good at asking for help and others aren't... I quite like that process of writing and then giving it to somebody to comment on. And revising it and getting it into a thing that's better.
- AH 1 M** People need to look for help because no one knows how to write the application on their own. It's important not being afraid to ask for that help too, can't expect to know that stuff when you are on your own.
- SCI 7 F** Get as much advice as you can, and talk to as many people as you can, and you will find that everybody's advice is different and the comments that people make when you give them [your proposal] will all be different.
- ENG 1 M** Talking to people is very important, even if you don't necessarily have normal contact with them, I found that people are often quite receptive to you.
- SCI 10 M** I spent a lot of time talking or thinking about things that could come up, talking to other people who had been through the process.
- SS 2 M** I think there is a sort of first time when you learn the hard way if you like because you just find out what you need. So yes it's sort of partly built on experience.

- SCI 7 F** The university have a kind of mentoring system and I had been and chatted to my mentor that I been assigned and I had had a practice interview err, with a guy who had the same fellowship but sort of a year ahead of me.
- ENG 5 F** It's one of those things that it's really hard to start. And you sort of thinking how I am going to fill six pages, how am I going to fill six pages. And suddenly you have got eight pages and think how am I going to get it down to six. Once I'm in the flow of it I don't mind it so much, but I don't think it's something I've got a natural kind of flair at.
- SCI 8 M** I very much enjoy sitting down and take ideas that I have and put them on paper get feedback, craft an idea... and then you get to the point where you are willing to give it out and... step back a little bit, and give it a few days to ruminate and clear your mind and then attack it again.
- SCI 10 M** I'm certainly not one of these people that just can't wait to write things up. I wouldn't say I'm someone who enjoys the process of writing. It forces you to really clarify your thinking and to be able to communicate it properly... things you thought you had straight in your head but you actually don't when you try to lay it out for someone else. I certainly gained something from actually going through the writing process beyond just the finished document.
- SCI 5 F** Funding bodies are looking for you to have an understanding of their strategic aims. And the strategic goals of the institution that you working in. It wasn't something I had to do before, I need to look wider, the wider picture.... the big picture.
- ENG 5 F** There were a couple of people there who had gone through the process and they passed their applications my way. I got a lot of feedback and it went through quite a lot of iterations.
- SCI 7 F** I probably did 20 or so drafts of it. I must have had it read by about eight or ten different people both within the university and externally.
- ENG 4 F** If you write something in let's say a week, it's never as good as if you are spreading over several months revisiting it, sending it to colleagues, taking a look at it, improving upon it and so on.
- SCI 9 M** I gave it to my PI and a few other people like the head of the division also offered to read it. There is someone who is a [panel member] he sees what kind of proposals go in. So it's always useful to have feedback from those people.
- AH 2 M** I don't enjoy writing applications I'm very bad at it, I mean the sort of bureaucratic stuff, I'm not good at all.
- SCI 3 M** You have to deal with the admin, you have to be phoning them up, you have to make sure you understand, because it could make the difference between you getting it and not. You do quite a lot of chasing admin and phoning making it happen.
- SS 2 M** Obviously there is lots of tedious kind of admin that comes with it, just getting things together or costs and, you know, stuff like that.
- SCI 7 F** I did struggle with was getting my head around various things that you have to do in the university, all these sort of pathways in place for applying and getting people to sign off on it, and making sure it goes here there and everywhere. And, like, the information doesn't filter down particularly well... until you get really into it and get well versed on all the little things you have to do. It can be a bit stressful.

- ENG 2 M** Once I knew I had the interview I had a scrap of paper in my pocket which had, it was actually on a piece of A4 but folded up so many times. I wrote down any questions I thought they might ask, and every time I talked to somebody who might know something about fellowships... I asked them what do you think they will ask me, and if it wasn't on my list already I wrote it down.
- SCI 1 M** I guess the biggest thing I had to get over was kind of my fear of interviews... I spent a lot of time practising... and trying to be able to think on my feet and to answer questions sensibly.
- SCI 9 M** I had one or two mock interviews. It makes you realise what bits people see that are the weakest. Painful but useful.
- ENG 2 M** They gave me four mock interviews before I went, I mean horrible mock interviews with just out to destroy me deliberately, which is exactly what you want really. So when it came to the real interview it was a cake-walk. Get people to really rip... your motivations apart. That was the toughest question I had in the mock interviews – why are you doing this... Look at your research and ask silly basic questions like, what is the point in all this?
- SCI 6 F** I think definitely work out what scares you... literally think of the top 20 questions that if they asked you, you would go aargh! Because the chances are... if you work your way through them it will kind of calm you a lot.
- SS 4 F** I looked up who was on the panel and I pretty much worked out who I thought was going ask questions, so I knew what they might be interested in.
- SS 2 M** In interviews I now always start off with the most important thing first in each answer knowing that they could cut me off at any point. I try to do the same with the writing as well, making sure that I came up with the most important justification or reason first rather than last.
- ENG 2 M** One or two of the [real interview] questions were really hard to do to answer, and it wasn't because I didn't know the answer, it was just poor questioning technique. I had to say in the interview I obviously don't understand the question can you please restate it.
- SCI 3 M** I actually think in my preparation for interview I learned a number of things about me, you know, that bigger process that actually I was probably a better communicator after it overall whether I got it or not actually I had to learn, and in fact I said to people preparing for my fellowship probably the only thing I properly prepared for in my whole life.

## Developing resilience

- SS 2 M** I quite like the challenge of applying for funding, is it's such a great step up for you in your career if it happens, you're sort of daring to do something.
- SS 4 F** I don't give up with things once I start doing them. Once I've decided I'm going to do it I will do it even if it's quite hard.
- ENG 5 F** They are incredibly time consuming to actually write, so to go into it and think actually I might be doing this a few times before I get anywhere, well, but the rewards are worth it. I think you probably have to be a bit thick skinned when you go into it, I think rejection is quite likely to happen, so be prepared for it.
- SCI 10 M** [There's] that much invested in these applications that [rejection] does knock you back... when you get a series of these in a row as well it does kind of chip away at you... this last one was my final shot really. I think everyone deals with these rejections quite badly it's almost a battle of wills.

- SS 3 F** Recognise that the chances of you getting it [are tiny]. That's weighing on your mind all the time I think, I was just really conscious, how am I going to be the top 10% when I've been rejected twice already. But I kind of just keep kept pecking away, just keep trying keep persisting. You have to be competitive and you have to show how you stand out and why you are the one to do it, you kind of have to be confident like that. A bit of a warrior.
- SS 1 F** Once I had started I thought no I really want to do this and you invest all that effort and 'cos you have gone so far that you want to see it through when I didn't get it the first time I was disappointed... but I read the feedback and I thought actually no, [I'll] go for it again. And I remember they said to me at the second interview, you are back again, you are really tenacious.
- ENG 5 F** From the application you then probably have six months to get on with normal life and forget about it before you get that letter through saying whether you have got it or not. I think that probably helps a bit because it's not it's not kind of so all-consuming at the time when you get the news.
- SCI 2 F** I think one big one is actually the fear to fail, I think that is a very big obstacle for many people. I'm going to do my best and obviously there is a chance I'm not going to get it but that's fine... it is ambition. I know what I want to get, and I'm not there yet. If I don't get it you know I don't get it, I mean it's not like I'm a failure as a scientist, it's not like I'm a failure as a person, if I don't.
- SCI 7 F** I take it really personally when I get rejected. I went to talk to my mentor about this and she always said once you get an email or the phone call or whatever, don't read the feedback until you have calmed down a bit... you need to get all that out of our system before you can objectively sit down and read your feedback. If you can little bit of reflection then you can read it and see, well, yes they are right about that... and you can take that on board a bit more.
- SCI 3 M** You have got to be prepared to work within that system of how these things are assessed. I don't think I am resilient to it at all. I've just had to be aware and practice. You have got to gain the energy from those few positives.
- SCI 5 F** Because my PI was so supportive and keen on pushing it forward and because he facilitated a lot of the steps along the way, I never felt that I was on my own in this. So, but I can see how people wouldn't make it [through] if they didn't have a good support network.
- SCI 7 F** I think you have just got to think about what your ambitions are because research is always going to involve rejection and success and you have to balance the two against each other I think.
- AH 1 M** Rejections, it's so bleak, I took them all badly never got any better at it.
- ENG 2 M** My wife always tells me that I'm over sensitive and things like that and I am. But I guess you just have to take it on the chin.
- SCI 5 F** I just accept it and roll with the punches, I think in academia you have to. I think you have to become a little bit bullet proof.
- ENG 2 M** I think it's just sheer bloody mindedness. I think I just don't see any way out so I just go forward. I don't think it's a positive thing that keeps me going I think it's an absence of any reason not to keep going.
- AH 2 M** Well there is no other option. I continue on this pathway being told no no no and knowing often times... if you just keep going something will happen. If you have enough connections, make enough people to believe in your work. I still remember rejections that are painful in terms of my work but I mean I just have to keep going on.

- SCI 6 F** I love what I do. Really want to do it. I'm much more competitive than I realised, not with other people but with myself.
- SCI 2 F** You need to know yourself to know how much you can take.
- SS 2 M** I try to split the whole thing up into two different things. One is the success of submitting an application. And I always celebrate that success and then the other bit is a massive extra bonus but it's if you don't celebrate the success of submitting completing a piece of work, then like it will be really hard because then you just, you feel empty about it.
- SCI 3 M** You have got to be prepared to work within that system of how these things are assessed. I don't think I am resilient to it at all. I've just had to be aware and practice. You have got to gain the energy from those few positives.
- SCI 7 F** I think you have just got to think about what your ambitions are because it's research is always going to involve rejection and success and you have to balance the two against each other I think.
- AH 3 F** I've learned to keep going no matter what you are feeling or how tough it is. ■

## Appendix 2: Fellows' network diagrams

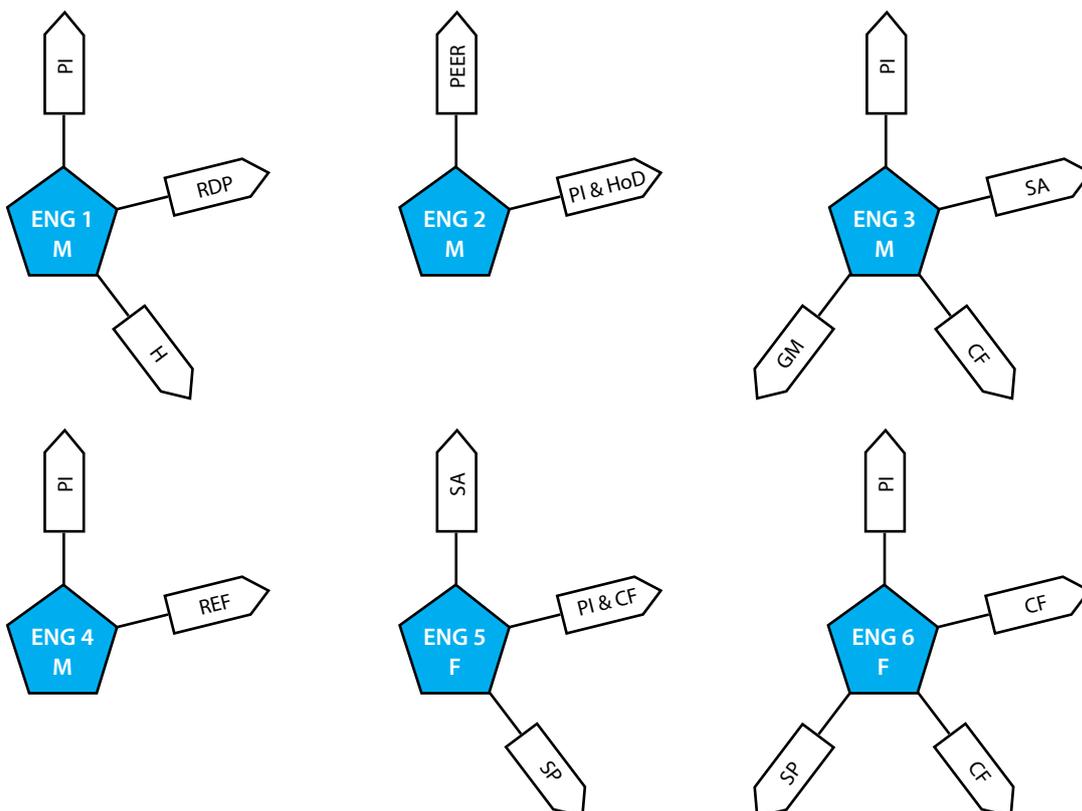
Below, summary diagrams of the perceived key contributors to fellowship success are presented.

### Role type key

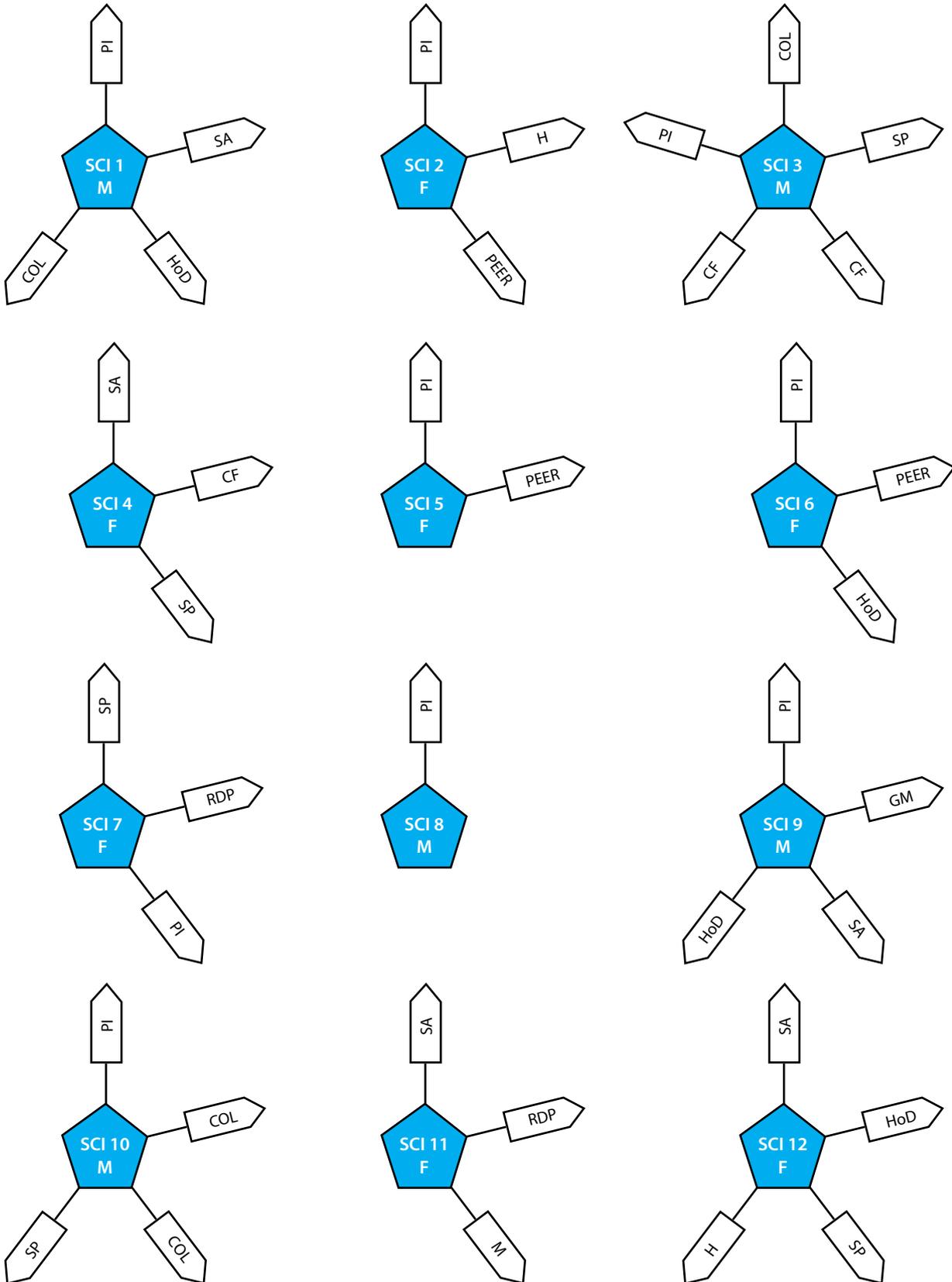
- PI** Principle investigator (for post doc or PhD at time of application)
- SA** Another senior academic colleague
- H** Academic host or mentor for the fellowship application
- CF** Current research fellow
- HoD** Head of dept/school/discipline
- PEER** Peer applicant (same or different fellowship)
- COL** Collaborator named on the fellowship application
- REF** Referee for the fellowship application
- M** Mentor (formal or informal) sought out by the applicant
- GM** Grant capture manager within the higher education institution

Fellowship holder network map figures. Each participant fellow is shown as an individual pentagon diagram. Contacts, extracted from the "network forms", are labelled with the role type as identified above. Tie-line length denotes perceived "helpfulness" on a scale of 1-5 with longer lines signifying the fellow found the individual more helpful in their application. A broken line denotes a contact who was not specifically named on a network form, but was discussed in depth at interview.

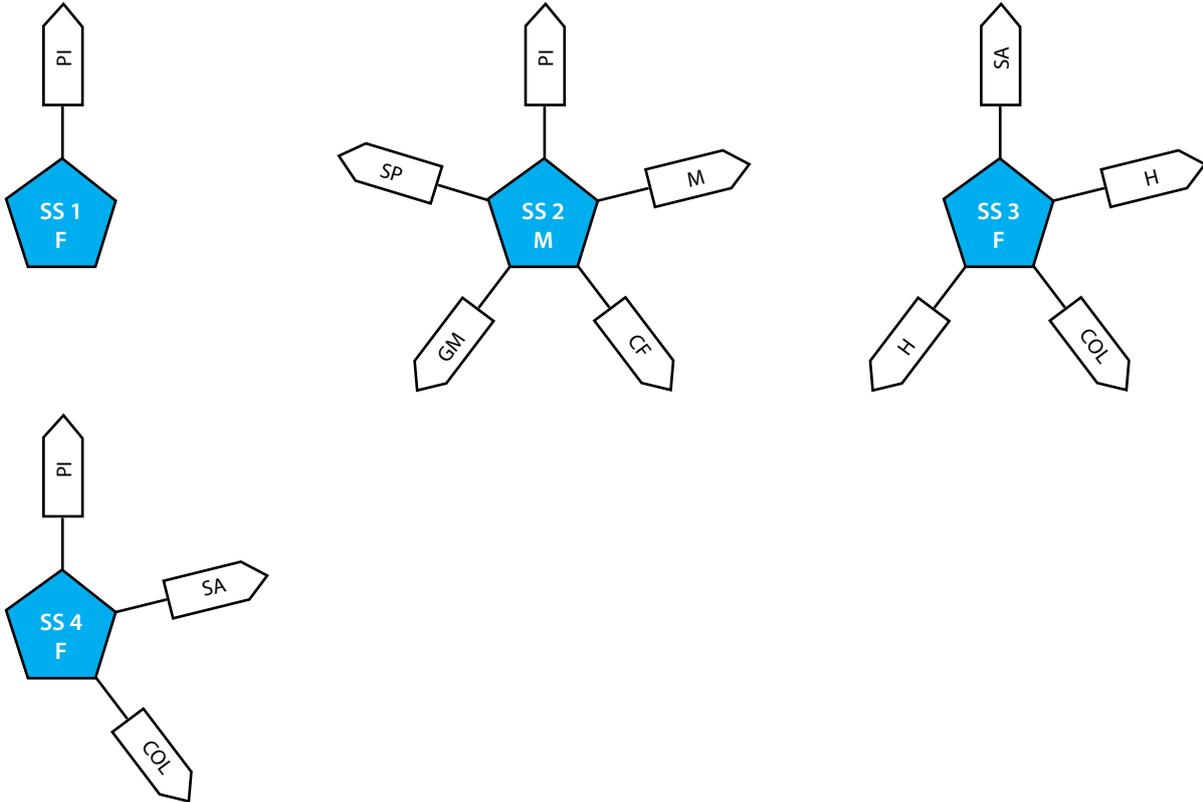
### Engineering and physical sciences discipline areas



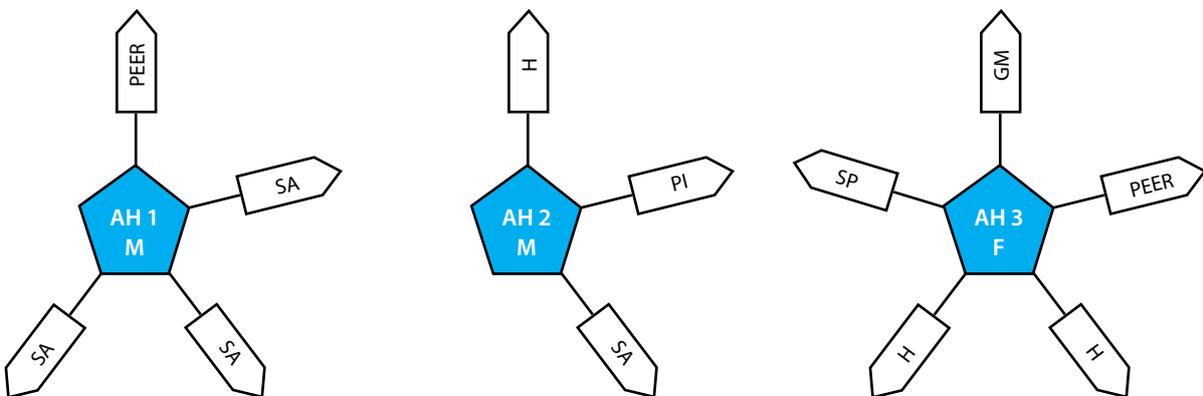
## Biology and medical science discipline areas



## Social sciences discipline areas



## Arts and humanities discipline areas



Contact us at

**info@lfhe.ac.uk**

or connect with us



@LFHEMarketing



LFFacebook



LFHELinkedIn



www.lfhe.ac.uk