

## **J12.1 Raglan Thursday 6 December 10.30 - 11.00**

### ***Summer Vacation Research Competition: An opportunity for Post-doctoral Researchers and Undergraduates (0387)***

#### **Background**

Being a post-doctoral researcher is not necessarily a happy time full of opportunities for progression and promotion (Grinstein & Treister, 2018). The postdoctoral system has been described as broken (Powell, 2015). Whilst postdoctoral positions may be thought of as opportunities for research post-PhD (McAlpine & Akerlind, 2010), they are often ignored in the literature (Scaffidi & Berman, 2011). We know there is a drop off in interest in pursuing a research career as students progress through higher education (Roach, 2017). However, research into academic research and researchers often focuses on 'tenured' academics; how they might go about developing opportunities for research, collaborations with others, and balancing it with teaching and other commitments (Brew & Lucas, 2009). Reflecting on research might only happen from the PI's perspective (Shakespeare, Atkinson, & French, 1993). Being in "the limbo of a postdoctoral research post" (Becher & Trowler, 1989, p. 137) is often seen as a required stage in the development of a successful academic career. However, postdocs do not always have a clear career plan to develop an academic career (Sauermann & Roach, 2016). Developing into a successful academic depends on many factors (van Balena et al, 2012). Research is seen as a game (Lucas, 2006), particularly in the context of the REF. However, achieving excellent world-leading research depends on postdocs, to carry out the work, and to form the research environment, and as such if we want to develop research we need to develop researchers at every level (Vitae, 2017). A supportive atmosphere is the most important criterion in enhancing life satisfaction and maintaining positivity about a research career for postdocs (Grinstein & Treister, 2018).

#### **The Competition**

The idea behind the Summer Vacation Research Competition was to 'tick' as many boxes as possible. We wanted to support the postdocs at the university, whilst aligning ourselves to the University's aims to support undergraduates in experiencing cutting edge research, providing opportunities for widening participation, and creating a supportive and nurturing research environment.

The numbers of postdocs are not spread evenly across each faculty. There are approximately 95 in Social Sciences, 22 in Humanities and 89 in Sciences. We secured funding from the Science Faculty, the Graduate School and the Careers and Employability Services to run a pilot scheme of the Competition in the Science faculty, offering three prizes. There are seven schools in the Science Faculty, and again the numbers of postdocs are not split evenly between them.

We invited postdocs from all the schools in the Faculty to apply to win a prize of up to £2100. This would allow them to have a second year undergraduate intern to work with them on a project of between 4-6 weeks with a research stipend of £350/week. The research stipend was set by the Careers and Employability Services as the minimum living wage, and it far exceeds the more 'normal' research stipend offered to undergraduate interns of £200-£250/week. We wanted the postdocs to win more than just funding, so the competition was set up as a prestigious prize including a mentor and training, as these are beneficial to developing a successful academic career (Xuhong, 2013).

The postdocs were required to complete application forms that closely mirrored those of research councils. In turn, the undergraduates had to apply to a pool of candidates. They were asked to

complete an academic CV and a personal statement. We secured ethical approval to interview those involved with the project so that we could analyse its impact.

We had 7 applications from postdocs, from 4 schools within the faculty. 5 were from women, and 2 from men. A panel including the Science Faculty Director of Education, Associate Dean for Research, the Director of the Unit for the Enhancement of Learning and Teaching met to discuss and rank the postdoc applications.

There were 12 applications from undergraduate students, with 8 from those identified as Widening Participation students. They were from 5 schools within the university, and were evenly split between men and women. The three competitions winners met to shortlist the candidates, and interviewed four. The three students chosen to win internships were all widening participation students.

### **Lessons Learned**

The timing of the pilot summer vacation prize led to a number of challenges. The time available to advertise the competition and for postdocs and undergraduates to enter was very limited. The undergraduates had to apply for general internships rather than for specific projects. Given these constraints we were very pleased with the numbers and quality of the applications we received at both the postdoctoral and undergraduate level.

Moving forward, we aim to take the competition university wide, and hope to win support from the teaching and research arms of the University as well as the Schools, along with continued support from the Faculties, Careers and Employability Services and the Graduate School. We aim to move the timeline of the competition, using the event to celebrate the achievements of the competition winners in 2017/18 to launch the 2018/19 round.

The competition allowed schools to note undergraduate students interested in pursuing research trajectories at an earlier stage, which is necessary as applications for MRes and PhD degrees happen early in the 3<sup>rd</sup> year cycle. In addition, it gave the winning students an opportunity to work on an independent project, potentially have their name on academic publications, prepare research talks and a poster for dissemination across the University, make contacts in laboratory groups, work on cutting edge research and gain valuable laboratory experience that would make them preferred candidates for continuing in research.

The postdocs found it to be a valuable experience. Even those who did not win were enthusiastic about the competition and said that they valued the opportunity and feedback. We will follow up the winners to record any long lasting benefits to their careers, and are expecting the mentoring and support to form an important part of this (Scaffidi & Berman, 2011). There are not many opportunities specific to postdocs, and this summer vacation research competition was designed to allay that.

## **References**

- Becher, T., & Trowler, P. (1989). *Academic tribes and territories* (2 ed.). Buckingham: SRHE & Open University Press.
- Brew, A., & Lucas, L. (Eds.). (2009). *Academic research and researchers*. Maidenhead: SRHE & Open University Press.

- Grinstein, & Treister. (2018). The unhappy postdoc: A survey based study. *F1000 Research*.
- Lucas, L. (2006). *The research game in academic life*. Maidenhead: SRHE & Open University Press.
- McAlpine, L., & Akerlind, G. (2010). *Becoming an academic: International perspectives*. Basingstoke: Palgrave Macmillan.
- Powell, K. (2015). The future of the postdoc. *Nature*, 520, 7546.
- Roach, M. (2017). The declining interest in an academic career. *PLoS One*, 12(9).
- Sauermann, H., & Roach, M. (2016). Why pursue the postdoc path? Scientific Workforce. *Science*, 352(6286), 663-664.
- Scaffidi, & Berman. (2011). A positive postdoctoral experience is related to quality supervision and career mentoring, collaborations, networking and a nurturing research environment. *Higher Education*, 62, 685-698.
- Shakespeare, P., Atkinson, D., & French, S. (Eds.). (1993). *Reflecting on research practice: Issues in health and social welfare*. Buckingham: Open University Press.
- van Balena, B., van Arensbergen, P., van der Weijden, I., & van den Besselaar, P. (2012). Determinants of success in academic careers. *Higher Education Policy*, 25, 313-334.
- Vitae. (2017). *5 steps forward report*. Retrieved from <https://www.vitae.ac.uk/vitae-publications/reports/vitae-5-steps-forward-web.pdf>
- Xuhong, S. (2013). The impacts of postdoctoral training on scientists' academic employment. *Journal of Higher Education*, 84(2), 239-265.