

## **Introduction: Hard Times? Building and Sustaining Research Capacity in UK Universities**

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## Introduction: Hard Times? Building and Sustaining Research Capacity in UK Universities

*The prime function of leading-edge research is to develop new understanding and the creative people who will carry it into society.*

*Boulton, G. (2010). Harvesting talent: strengthening research careers in Europe. LERU, January 2010, Executive Summary, p.2.*

In 2005 the Association of Research Managers and Administrators published an edition of *'Issues in Research Management and Administration'* which focused on the development and management of research staff in UK universities (Kent & Hazlehurst, 2005). Many of the papers in that publication introduced the reader to new or anticipated developments in the sector, such as the introduction of full economic costing and the framework agreement on fixed-term employment. These papers speculated about the impact that such developments would have on the experiences of research staff, and on the higher education sector more broadly. Five years have now elapsed since this initial publication and it therefore seems opportune to revisit some of these issues and to reflect on the development of researchers in UK universities. This review is particularly timely given that the economic and political landscape has changed considerably in recent years, largely as a consequence of the global economic crisis, but also as we anticipate potential developments resulting from a change in UK government. This fifth edition of *'Issues in Research Management and Administration'* considers some of these developments and the impact that they have had on the sustainability and enhancement of the UK's research capacity.

The run-up to the May 2010 General Election generated a plethora of science and research policy documents, such as the government's *'Higher Ambitions'* (November 2009) and The Royal Society's *The Scientific Century'* (March 2010). These and other reports consider the future of higher education in the UK, and the nature of the scientific and technical workforce that is required to deliver the best possible outcomes for an economy and society emerging from recession. Each of these publications identifies a steady supply of university trained, highly skilled people as the key to short-term recovery from recession and the means by which, in the longer term, the UK will be able to produce new products and processes that enable it to flourish in the 'knowledge economy'. This emphasis on 'excellent people' is not new, but has become more prominent in UK higher education policy since the 1990s (see for example, Dearing, 1997; Roberts, 2002). This focus on the development of high quality people has taken place within an environment of growth in the higher education sector arising, in part, from the *'Science and Innovation Investment Framework 2004–2014'* (HM Treasury et al., 2004). This framework has ensured that universities have received substantial investment from government through year-on-year increases in the Science and Research budget. The new money has enabled higher education in the UK to expand through the recruitment of new staff, both academic and those in professional and support roles (e.g. HEFCE, 2010), and to repair or replace a decaying research infrastructure.

Recent years have also seen an increase in funds spent on the professional development of researchers. Since 2003, a portion of Government investment in science has been channelled

through the UK Research Councils (RCUK) towards universities with Research Council funded research staff and postgraduate researchers. This money, referred to colloquially as 'Roberts funding', is significant (£22.4m in 2007-08) and is ring-fenced within institutions. Funds must be used to implement Recommendations 4.2 and 5.3 of Sir Gareth Roberts' 'SET for Success' report (2002) on the supply of science and engineering skills in the UK; specifically, to support research career development and transferable skills training for researchers.

This increased attention to the development of researchers' skills may be seen as an extension of the 'supply-side' focus that has characterised UK education and employment policy since the 1980's (cf. Grubb and Lazerson, 2006; Ball 2008). Broadly speaking, this approach is built on the premise that the way to build a high skills economy and, in this case the research capacity of the UK, is to develop people and their skills. The question of how the UK might improve its performance in research and development is conceived as a problem of 'not having enough people with the right skills'. Thus for Sir Gareth Roberts, "the success of R&D is critically dependent upon the availability and talent of scientists and engineers" (Roberts, 2002. p.1). The emphasis here is clearly on the supply of individuals and their 'skills' rather than the way that research activity, including research-related employment, is structured. To illustrate this point further, although the report recognised that the way in which research employment is structured in the UK plays a crucial part in making research careers attractive and sustainable, its principal recommendation with respect to improving career opportunities for postdoctoral researchers focused on their development as *individuals* – or more specifically, that researchers should have a clear career development plan and access to transferable skills training.

The 'Roberts Funding' arrived at a time when other significant changes were occurring in the UK's higher education landscape. These include the introduction of role analysis in higher education following Sir Michael Bett's independent review of pay and conditions (Bett, 1999), the associated implementation of a framework agreement for the modernisation of pay structures in universities (from 2004), and a three-year national pay settlement to address a decline in salary levels compared with other professions (2006-2009). Other developments include: the introduction of full economic costing (from 2005); new legislation designed to limit the use of successive fixed-term employment contracts (2002, and fully effective from 2006); and a move to promote best practice in the employment of researchers within the European Union (from 2005 but reinforced in the UK by the adoption of a '*Concordat to Support the Career Development of Researchers*' in 2008). All of these have led to changes in the way that research activity and research employment is structured in the UK and, in combination, have affected the ways in which researchers are employed, managed, and rewarded within universities, albeit in ways not always discernible to the individuals concerned (cf. Kent, 2005; Oliver & Ackers, 2005).

The notion that excellent people are a resource to be treasured – "it is talent more than technology that society or business needs from universities" (Boulton, 2010) – has led to increased attention being paid to how to attract, support and retain them, thereby building research capacity (e.g. CST, 2010; The Russell Group, 2010). The success of the UK's universities depends very substantially upon their having a staff that is motivated, committed and supportive of the institutions' mission to conduct internationally-leading research and

teaching; without 'buy-in' from staff at all levels, our universities will not be competitive on the international stage. Many recent developments in institutions, such as the implementation of the principles of the Concordat and the provision of continuing professional development opportunities for research staff and postgraduate researchers, have arisen in part from an aspiration for the UK to become the 'destination of choice' for excellent early career researchers from all nations (cf. Bekhradnia & Sastry, 2004; UUK, 2008, 2009). However, these changes are also designed to address issues of staff retention and succession planning at both an institutional and UK level (see for example, Sheridan, 1992). At the institutional level, the retention of staff has the potential to support productivity increases and reduce recruitment costs (Williams & Livingstone, 1994; Ramlall, 2003). At a UK level, the drive to make higher education an appealing place in which to pursue a career supports wider goals around the development of the knowledge economy, particularly in light of a reported increasing difficulty in the recruitment of academic staff (e.g. Metcalf *et al.*, 2005).

The development of strategies that emphasise investment in the human capital of higher education has therefore been a key feature of UK science and research policy over the past ten years or more. However, in the current public spending climate, and in view of recent Government announcements of reduced funding for higher education in England and Wales over the next few years, investment in human capital is potentially vulnerable at all levels in the sector. The sector faces increasing demands to demonstrate the value of its contribution to wider society, whether through the impact of research, the employability of its graduates, or the return on investment in human capital.

While Government, the European Union and others seek to develop an environment within which human capital investment is emphasised, it is down to individuals within universities to interpret this and implement it 'on the ground'. In larger institutions, the expertise that underpins the research capacity-building effort is typically spread across several support units, including central and/or faculty-based Research Offices and Graduate Schools, Staff Development Units, Careers Services, Human Resources departments, and Libraries (cf. The 1994 Group, 2009). It follows that the level of co-operation and co-ordination between these units dictates, to a large extent, how effective they will be in achieving the desired goal of building an effective scientific work-force. While some scoping work has been done in this area, notably at the interface between researchers and human resources managers (e.g. Adams *et al.*, 2005), there are few studies that have investigated whether UK universities have been effective in developing research capacity.

This edition of '*Issues in Research Management and Administration*' focuses on some of the most pressing issues for researchers and universities, in the context of building and sustaining research capacity. In particular, we aim to focus attention on the structural and management factors that underpin research capacity, and to broaden the debate beyond the career behaviours and skills of individuals.

The first article, by **Chris Hale** (Universities UK) sets the context by examining the overall sustainability of the UK research base following the introduction of full economic costing (fEC) of research grants in 2005. He observes that fEC has brought multiple benefits to the sector, and

not simply additional monies in support of research. Nevertheless, a continuing deficit of £2bn in publicly funded research may lead some to query whether the sustainability of current levels of research is possible – with attendant concerns that government may simply turn its attention (and money) elsewhere. If research volume declines nationally, this will inevitably lead to fewer job opportunities for researchers. Of course, the way in which UK research is funded – and not just the volume of funding – has implications for the way that employment for researchers is structured. Hale points to the potential of fEC in providing opportunities for retaining staff between externally funded research grants which, in conjunction with changes in employment legislation, could lead to greater sustainability of the research workforce.

**Liz Oliver's** (University of Liverpool) article considers the current state of play in the implementation of European legislation on fixed-term work as it relates to researchers employed in UK universities. Although there has been a decrease in the proportion of researchers employed on fixed-term contracts in recent years Oliver finds no evidence for this legislation having led to greater stability of employment for researchers. She argues that the fixed-term legislation, which was not designed with the higher education sector in mind, is a blunt instrument and is not, in itself, sufficient for effecting the culture shift which may be required. Improving the sustainability of research employment requires changes in universities' management strategies, and not simply changes to the type of employment contract used for researchers.

This point is picked up by **Jane Thompson** (University and College Union). She offers a frank assessment of the continuing job insecurities experienced by many researchers, and the way in which the structure of employment for research staff limits opportunities for career progression. A further concern is that initiatives such as the 'Roberts funding' for transferable skills, and HEFCE's 'Rewarding and Developing Staff' agenda have not resulted in the movement of experienced research staff from Grade 6 to Grades 7 and 8 on the national pay spine; when compared to staff on teaching and research contracts, only a minority of researchers are employed at these grades. This reinforces the notion of a 'two tier' system of academics, in which staff on research contracts form the lower tier.

The fourth paper, by **Robin Mellors-Bourne** (The Careers Research and Advisory Centre (CRAC) Ltd.), examines how some of these larger systemic and policy developments affect the lives of the research staff population. Using aggregated data from the 2009 Careers in Research Online Survey (CROS), Mellors-Bourne presents a summary of researchers' perceptions of their treatment in comparison with lecturing staff, their understanding of the environment in which they are working, and their views and experiences of continuing professional development. In addition to providing useful benchmark data which may inform future policy regarding the employment, management and development of research staff, these findings will be useful to practitioners working to support researchers in higher education institutions.

The final paper, by **Rob Daley** (Heriot-Watt University), advocates a partnership approach to supporting the career development of researchers, involving experienced academics working alongside research managers, staff developers and other colleagues in support services. This

integrated approach to researcher development locates development activity as part of broader institutional capacity building and personnel management. Daley argues that the ‘*Concordat to Support the Career Development of Researchers*’ (RCUK, 2008) has the potential to become a key document that supports the building of bridges between different professional groups, each of which shares a commitment to the development of research capacity and human capital.

We trust that each of these papers will stimulate debate and encourage practitioners to consider the development of research staff within a wider structural context. Hard times may lie ahead, but as Dickens (1854) himself might have concluded (after Psalm 126:5), “they that sow in tears shall reap in joy”.

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