



## Vitae researcher development conference 2009

8-9 September 2009, University of Warwick

[www.vitae.ac.uk/vitaeconference2009](http://www.vitae.ac.uk/vitaeconference2009)

### Conference report

Media partner



Vitae is supported by Research Councils UK (RCUK), managed by CRAC: The Career Development Organisation and delivered in partnership with regional Hub host universities



**CRAC**



The Concordat to Support the Career Development of Researchers sets out the expectations and responsibilities of researchers, their managers, employers and funders. It aims to increase the attractiveness and sustainability of research careers in the UK and to improve the quantity, quality and impact of research for the benefit of UK society and the economy.

The single largest contribution to the implementation of the Concordat will be through the Vitae programme. Vitae champions the personal, professional and career development of researchers in the UK and its activities will support universities and research institutions to achieve the principles of the Concordat. Vitae has published a series of specific briefings for the range of higher education professionals involved in implementing the principles of the Concordat.

One of Vitae's aims is building an evidence base to support the researcher development agenda. As part of this aim, Vitae is working with the Concordat Implementation Coordinator, the HE sector and other stakeholders to review progress in implementing the Concordat and taking forward the benchmarking projects. Key to this is the publication 'Careers in Research Online Survey (CROS) 2009: analysis of aggregated UK results' which will be launched at this conference.

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

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# Introduction

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The Vitae researcher development conference is the UK's largest event for people with a commitment to the personal, professional and career development of researchers. Over 400 participants met to debate and create the future and immediate higher education landscape. This included potential changes in policy, funding, structures of research and the implications for training and developing the next generation of researchers.

The conference's five aims addressed the strategic and practical implications of:

- sustaining the investment in our researchers in order to build research capacity and remain globally competitive
- research and evaluation relating to the impact of researcher development and of researcher careers
- the implementation of the Concordat to Support the Career Development of Researchers, including the benchmarking process
- latest developments in policy relating to postgraduate researchers
- practice to support researcher skills and career development

Participants explored the key changes in the external context, discussed strategic and practical responses in supporting the skills and career development of research staff and postgraduate researchers and shared ideas and practice with a network of all those who have a stake in developing the UK's researchers.

## Background

Since the first Vitae researcher development conference in September 2008, the world has changed significantly. Economic downturn has brought an increase in competition for jobs, pressure on government funding and a widespread sense of uncertainty about the future. Higher education institutions are also facing financial pressures related to pay increases and the recession. Further change is imminent as the full extent of economic downturn becomes apparent and political leaders prepare for a general election.

At national level, initiatives such as the Government's framework for higher education<sup>1</sup> are set to have an impact on postgraduate policy. The Concordat launched in June 2008 has prompted institutional reviews of provision and conditions for research staff.

Seven years after the Roberts review, institutions are providing a broad range of opportunities to enhance researchers' skills and careers. A growing body of evidence highlights the importance and impact of researcher careers. The conference brought together people and expertise to build on this to strengthen the academic base, economic and cultural prosperity and our place in the global research environment.

This report summarises the keynote plenary presentations, panel debate and issues and outcomes from workshop discussions, identifying the key issues emerging from the day. Videos and presentation slides from the keynotes and further details of the 52 workshops are available at [www.vitae.ac.uk/vitaeconference2009](http://www.vitae.ac.uk/vitaeconference2009). The Twitter feed for the conference can be accessed via the hash tag #vitae09.

<sup>1</sup> *Higher Ambitions: The Future of Universities in a Knowledge Economy*; [www.bis.gov.uk/wp-content/uploads/publications/Higher-Ambitions.pdf](http://www.bis.gov.uk/wp-content/uploads/publications/Higher-Ambitions.pdf), published 3 November 2009

# Welcome

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**Janet Metcalfe, Chair and Head, Vitae** welcomed participants and urged them to take advantage of the conference's many opportunities for debate and practice sharing; via the platform, workshops, fringe sessions and networking. With internet technologies for 'amplification', a greater sharing of information and views was possible than at any previous Vitae event. Janet then introduced **Ellen Pearce, Director, Vitae**, to outline conference themes and key features.

This year's conference aims (see page 4) were created in response to, and in order to influence, recent changes in the external environment as well as to address issues raised by the researcher community.

The future of the Roberts agenda will be an important theme. Ring-fenced funding and reporting has provided a huge drive to this agenda. The funding is currently confirmed until 2011. The conference will focus on creating a 'workable future': exploring, planning and being able to respond to a number of possible scenarios. Over the coming months also, the postgraduate reviewed by Professor Adrian Smith<sup>2</sup> will impact greatly on the future researcher landscape, as will the shaping of the Research Excellence Framework.<sup>3</sup>

As we enter a time of policy review, it is crucial to be able to demonstrate the value of our work on research outputs, researcher careers, economic prosperity and society. Several reports launched at the conference respond to this. The 'Rugby Team Impact Framework: one year on' report begins to demonstrate the far ranging impacts of investment in the training and development; these include successful grant writing, gaining fellowships, employability and in outreach activities. The national analysis of the Careers in Research Online Survey<sup>4</sup> which was run at 51 institutions this year, highlights strong engagement by researchers in their careers and areas for further improvement.

The conference will also feature the new 'Researcher development framework' that is being developed by Vitae and the Rugby Team (an evolution of the Joint Skills Statement for doctoral researchers). This national framework will be a tool for planning, promoting and supporting the personal, professional and career development of research staff and doctoral researchers. Workshop participants will have the opportunity to input to its development before wider consultation in the autumn.

Participants will also be particularly interested in:

- the announcement, by Professor John Wood, of Imperial College London, of the projects to be supported by the first round of Vitae innovate's funding stream to support innovative approaches and projects in the field of personal, professional and career development of researchers
- the recent Vitae publications in the 'What do researchers do?' series covering first destinations by subject, a collection of 40 career profiles and a new project 'career stories on film' (the latter part of a collaborative project with icould, a free inspirational careers resource also managed by CRAC ([www.icould.com](http://www.icould.com)))
- developments to, and relaunch of, the Vitae website, including new home pages and navigation.

<sup>2</sup> [www.bis.gov.uk/postgraduate-review](http://www.bis.gov.uk/postgraduate-review)

<sup>3</sup> [www.hefce.ac.uk/Pubs/HEFCE/2009/09\\_38/](http://www.hefce.ac.uk/Pubs/HEFCE/2009/09_38/)

<sup>4</sup> [www.vitae.ac.uk/cros](http://www.vitae.ac.uk/cros)

# Day 1 plenary presentations

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## Researcher development – a steer for the future

Chaired by **Dr Janet Metcalfe, Chair and Head, Vitae**

### Professor Ian Diamond, Chair, RCUK

*Ian Diamond presented how RCUK's perspective on how the research councils and universities could take forward researcher training and development to support the next generation of world-class researchers; 'excited researchers who think differently', understanding the importance of both academic and non-academic impact. Options for funding researcher development post 2010–11 were being considered. A key concern was to establish which mechanism might best encourage the embedding of researcher development in institutional and funding body strategy and practice.*

In the seven years of the Roberts agenda considerable effort has gone into supporting researcher development, for example, by means of Roberts payments, UK GRAD and then Vitae, and the revision of the Concordat. Universities have made an enormous difference in their practices: developing strategy, co-ordinating support, developing training programmes and new activities. Benefits are becoming apparent, but more needs to be done to evidence the difference that the Roberts agenda has made.

The RCUK's strategic framework calls for developing a research workforce to provide a flexible and dynamic research base – one which has strength in all key disciplines, is responsive to new knowledge, new technologies and new strategic economic and social needs. How we foster the development of early career researchers is crucial in achieving this vision.

The UK's international competitiveness remains the key driver. Both the Wellings<sup>5</sup> and Thrift<sup>6</sup> reports endorse the value of researcher development in contributing to this. Future policy, formulated after the forthcoming review of postgraduate education, will be influenced by evidence of impact of past investment.

Such drivers enable us to identify clearly what success looks like and thus a broad framework for demonstrating benefits. Success in terms of research excellence means: a UK attractive for research and researcher training; a globally competitive research base; highly innovative and effective business; policy and infrastructure.

The excellent researchers achieving this need to be equipped with skills needed in any employment destination and be able to provide evidence of benefit to the UK. Such impact is multi-faceted, and acknowledges private (eg individual) as well as public benefits, including informing policy and planning. In terms of research, it includes diffusing knowledge, producing 'better' knowledge and maintaining networks for knowledge exchange. In furthering innovation and international competitiveness impact implies the ability to access, understand and use knowledge (eg for knowledge transfer).

Universities' commitment to academic excellence is not in doubt, but what about developing non-academic excellence with impact? Do research degree programmes place emphasis on the development of employability of the person as well as progress towards completion or publications? The Concordat has given renewed impetus but HEIs must take real ownership to implement it, evaluating progress and results, if we are to attract and retain researchers who do more, better research with impact. To build the case for researcher development within your institution you need evidence of the difference it makes. This calls for an increased focus on the outcomes of training.

RCUK is undertaking a major national study to improve understanding of the value and impact of doctoral training. The RCUK Doctoral Cohort Study collects data on the careers trajectories and impacts of doctoral students and analysis will provide evidence of outcomes from investments in research training.

Ring-fencing of Roberts payments was decided by the RCs to ensure the Roberts agenda had sufficient profile and momentum to establish effectively. Post 2011, we expect evolution, for greater embedding into universities' processes and into our own. Researcher development will continue to be one of the many competing uses for research funding. There is no prospect of increases in the science budget at the rate or level of the last ten years. RCUK plans to consult research organisations about the implications and risks associated with different funding scenarios.

Whatever changes may come, the research councils remain committed to this agenda. The sustainability and international competitiveness of the research workforce is core to our missions, although there can be no doubt that value for money will need to be addressed. Building on progress is about safeguarding the high-quality, responsive programmes and practices many institutions have developed and continuing a strong focus on culture change.

<sup>5</sup> [www.dius.gov.uk/higher\\_education/shape\\_and\\_structure/he\\_debate/intellectual\\_property](http://www.dius.gov.uk/higher_education/shape_and_structure/he_debate/intellectual_property)

<sup>6</sup> [www.dius.gov.uk/higher\\_education/shape\\_and\\_structure/he\\_debate/research\\_careers](http://www.dius.gov.uk/higher_education/shape_and_structure/he_debate/research_careers)

# Day 1 plenary presentations

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## **Professor Brigid Heywood, Pro Vice-Chancellor Research and Enterprise, Open University**

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*Brigid Heywood invited reflection on how institutional and researcher developer strategies were adapting to the rapidly changing digital environment. She illustrated ways in which the Open University (OU) embraced digital technologies to support scholarship on a global scale and engage new generations of researchers and the wider community. Digital technologies were 'changing how we communicate, disseminate and engage at every level'. Exciting new ways of achieving meaningful impacts have been created, but such developments also pose new challenges for managing research.*

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Digital technologies are a fundamental part of our lives. How are we accommodating those technologies in training programmes, development of research projects and methodologies for dissemination and engagement? Are we absorbing next generation capability into our thinking about next generation research? In previous generations most research was conducted in a conventional academic institution, and this tends to define our image of a researcher. But what defines a researcher and a research community in today's digisphere where companies are making increasing use of crowd-sourcing and researchers work in a blended local and global research community? We will continue to need experts and expertise but what constitutes a researcher will change.

The OU does the same kinds of research as conventional universities. It planned, designed and launched the Beagle mission to Mars and is a major partner in the Titan probe project. In impact terms, such research has to be prepared for long time-scales, adaptability and unexpected outcomes. One possible outcome from the Beagle project is a groundbreaking diagnostic test for tuberculosis, currently being trialled in Africa.

The university is underpinned by a research facility to support the technologies that it deploys in teaching and digital scholarship. With one of the largest digital research repositories in the UK, the OU is now piloting access to open primary data. Its open access learning material archive is proactively global in reach, for example, the pioneering OpenLearn project's work in Africa.<sup>7</sup>

Public engagement is of course fundamental to the OU mission. Current initiatives aimed at engaging future generations of researchers include partnering with the Apple i-tunes University project. This involves a series of 'research vignettes' which will also be reframed for YouTube audiences. Mobile phone technologies are also the medium for a potentially global climate change monitoring project in partnership with the National History Museum and Imperial College, 'Evolution Megalab'.<sup>8</sup> By such examples we see how the potential impact and reach of the research world is transfigured by digital possibilities.

Universities need to do far more to think through the implications of these new opportunities and behaviours. Who are researchers communicating *with*, and who *for*? Does your IP policy take account of the possibility that your PhD student may disclose your IP via Twitter? If a project is corporate-funded, how do you treat disclosure; a company's view on dissemination will differ from that of a public funding body? We may need new methods of defining collaboration and ownership; of communicating and accrediting research contributions, for example for citations and promotion criteria. Digital scholarship will change many of our behaviours: each of us should try to anticipate and plan for the changes required of us.

<sup>7</sup> [www.open.ac.uk/africa/openlearn.shtml](http://www.open.ac.uk/africa/openlearn.shtml)

<sup>8</sup> [www.evolutionmegalab.org/](http://www.evolutionmegalab.org/)

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## Professor Alexandre Quintanilha, Director, Institute of Biomedical Engineering, Porto

*Professor Quintanilha considered it critical to consider the implications of global challenges for the kinds of researchers we should be developing. He focused on the complex challenges that increasingly require researchers with the qualities and opportunities to embrace disciplinary and geographical mobility. A collective effort was needed to overcome the challenges of interdisciplinarity; he urged UK colleagues to share their experience and success stories globally.*

In Portugal over the last decade and a half the government has made huge investments in the science base to accelerate its development; the PhD student population has grown by 10-12% per annum in recent years. A major and highly successful programme focused on schools and university outreach, 'Ciência Viva', aims to grow the researchers of the future. We evaluate the quality of our graduate training by publications, funded projects, career opportunities and effective tech transfer. But what kinds of researchers do we need?

Recognition began in the 1980s that 20<sup>th</sup> century gains – massive population growth, energy consumption, health, food production – came at a price. 90% of health funding is directed at 10% of the world population<sup>9</sup>. One in five people in the world eats too much, one in five has too little to eat, another one in three eat badly. Energy efficiency is lagging behind need.

There are vast areas that science does not understand. Priorities should be integrated biology and complexity studies; and we should not underestimate the difficulty of undertaking these. All areas have both blue skies and applied elements. In our graduate programmes we need to produce curious and imaginative professionals capable of tackling some of these critical issues. To do that more need to be willing to move across disciplines and geographical borders, from the developed to the developing world, excited about tackling new challenges.

Interdisciplinarity is often considered too risky or vague, labelled as 'endangering disciplinary foundations'. Difficulties for those wanting to do interdisciplinary research span:

- publishing – an article is rejected because it seems to fall between the focus of discipline-based journals
- grant evaluation – requires expertise in both areas, different disciplinary languages makes communication difficult
- staff promotion – people without a departmental 'home' lack champions and visible opportunities

Those of us responsible for the research environment must work at finding ways of overcoming the barriers to interdisciplinarity: it is crucial to our global future.

<sup>9</sup> [www.cid.harvard.edu/archive/cmh/cmhreport.pdf](http://www.cid.harvard.edu/archive/cmh/cmhreport.pdf)

## Question and answer panel session

### *How will decisions about the future of Roberts funding be made?*

Ian Diamond responded that decisions would be based on an evaluation of success conducted in collaboration with partners; researchers, employers and funding agencies. Evaluation must draw on a mix of quantitative and qualitative evidence; of inputs, outputs and outcomes. Feedback from researchers would be sought through case studies. Evaluation will ask universities the hard question 'would you do this if there was no 'free money?'' Ian disagreed that this implied a withdrawal of Roberts funding whatever universities' response, rather it was a key question to enable evaluation of culture change in universities – the value that HEIs place on developing these researcher skill sets.

Is the structure of the UK research councils (RCs) helping or hindering our ability to do interdisciplinary research?

Ian Diamond replied that the current funding structures helped the UK conduct great research both monodisciplinary and interdisciplinary and drew attention to the cross-council priorities of: ageing; living with environmental change; energy; global uncertainties (security); digital economy; connected communities; food security; fostering recovery and enhancing resilience. He agreed that peer review skills in evaluation of interdisciplinary proposals were underdeveloped; the RCs were seeking ways of supporting the academic community.

### *What are the implications of the digisphere for open access publishing?*

Brigid Heywood believed the UK was 'slightly tardy in anticipating these changes in the management of intellectual property', yet could be a global leader. The open source issue encompassed data sharing and co-archiving – not only the publishing of data but also its analysis and ownership. Of the various IP vehicles, it was essential to understand use of the creative commons licence.

### *Is there less need to encourage geographical mobility in the digital age?*

Alexandre Quintanilha argued that face-to-face dialogue and experience of other environments was extremely important. Important ideas often came when outside the routine research focus. Often the need to simplify one's language and avoid jargon, for someone with a different mother tongue or from another discipline, brought clarity by encouraging the researcher to reexamine and thus broaden their 'way of asking questions'. Mobility also helped expose researchers to different positive role models.

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## Envisioning the future of doctoral education

Panel discussion, chaired by **Jeffrey Defries**, Chief Executive, CRAC, with: **Dr George E. Walker**, Senior Vice President for Research Development and Graduate Education, Florida International University, USA; **Dr Lidia Borrell-Damian**, Senior Programme Manager, European Universities Association (EUA); **Stephen Axford**, Director, Science and Society, Research Base, Department for Business, Innovation and Skills (BIS); **Professor Mick Fuller**, Head of Graduate School, University of Plymouth.

**George Walker** introduced *The Carnegie Initiative on the Doctorate (CID)*, a major partnership project with 105 US doctoral-granting departments in six disciplines 'committed to restructuring their programs to better prepare graduates'.<sup>10</sup> Recurring themes of the partnerships included the importance of; preparing future 'stewards of the discipline', scholarly integration, and developing the intellectual community.

Lack of regulation of doctoral programs in the US has some benefits, but makes for lack of overall vision and uneven quality. Further, the pedagogy of research itself is little studied: 'how do you introduce talented new people to the field so that, throughout their careers they have the attributes to be wonderful, engaged scholars?'

The Carnegie Foundation<sup>11</sup> addressed these issues by inviting research universities to participate in a five-year action and research partnership to develop their vision for their doctoral programme and implement it. It was a true partnership, with no particular agenda — Carnegie surveyed, convened and facilitated; local administration provided resources. The initiative aimed to engage departments in chemistry, education, English, history, mathematics and neuroscience in a process of self-discovery, via a thorough review of their doctoral programmes. Applicants had to be prepared for sustained effort, highly visible accountability, and collaboration with 'critical friends', often their competitors. Participation of graduate students and critical mass of faculty were vital.

A recurring theme was that value lies in the outputs of programmes; the discovery of new knowledge, self development and coaching others. Traditional training models that focus on delivering inputs, and separate research from teaching skills, are no longer appropriate. Principles of student formation should include integrative and collaborative learning in the broadest sense, and clear learning progression.

Although the initiative focused on research students, faculty are clearly key role models. Therefore CID addressed broader issues of mind sets. It asked: what is intellectual community? How do we foster it? What is the relationship between intellectual community and the formation of scholars?

For students to become future 'stewards of the discipline' they need deep and broad development: to be able to discover new knowledge (deep), but also to evaluate claims to new knowledge and understand what is required for a range of roles such as teaching and I.P (broad). They should thus be apprenticed with several faculty mentors. Respect, trust, and reciprocity are required.

Researchers need flexible habits of mind to engage with multidisciplinary thinking. The prevailing view was that programmes should keep their disciplinary basis. Multidisciplinary 'molecules' are not fixed; it is essential to be able to break them down and form new molecules out of different disciplinary 'atoms'.

CID found that the aims of doctoral programmes are often not transparent to either faculty or students. As a result it is difficult to evaluate programme progress. The CID approach of student-centered doctoral programme reviews can be profitably used by any institution to clarify the issues and lead to improved effectiveness.

**Lidia Borrell-Damian** discussed some general challenges in Europe for the development of doctoral programmes before describing the work of an EUA project relating to a key feature of the changing doctoral landscape: stronger links with employers.

EUA, with over 850 member institutions across 46 countries, acts as an independent stakeholder for Europe's universities. Its dual role is to provide a forum for debate and learning and to inform the policy-making process with evidence from universities' experiences.

Doctoral programmes have been a formal part of the Bologna process since 2003. The speed of change within European universities' doctoral programmes has accelerated swiftly since 2005 (Salzburg Principles).

Institutions face major challenges and their role is changing. Policy drivers give education and research a central role in the development of knowledge economies. Attracting and training future generations of researchers is critical. Traditionally, the

<sup>10</sup> [www.carnegiefoundation.org/previous-work/professional-graduate-education](http://www.carnegiefoundation.org/previous-work/professional-graduate-education)

<sup>11</sup> [www.carnegiefoundation.org/](http://www.carnegiefoundation.org/)

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supervisor took the major responsibility for doctoral programmes; now that responsibility is shared with institutions and doctoral candidates themselves. As links with employers become stronger, partnerships are evolving. Key drivers are first class research, university prestige and success, national and European prestige and success, and employability, set in a context of increasing global competition.

EUA is responding to these challenges with initiatives aimed at improving the quality of research training and enhancing career opportunities, spearheaded by its Council for Doctoral Education (EUA-CDE).

One such initiative is the DOC-CAREERS project<sup>12</sup>, which is a) exploring the nature of collaborative doctoral programmes (whether government, university, or industry-led) and examining partner perspectives (including doctoral candidates), and b) addressing non-university employment opportunities. The project has involved over thirty research and development companies, universities and other stakeholders in science, technology and the social sciences. It found many companies had a range of interactions with universities, often in the medium- to long-term time frame. Relationships had often evolved from 'buyer-supplier' to one where companies considered universities long-term strategic partners. On doctoral employability issues, interviews with CEOs showed that technical proficiency, ability to work both in depth and at the frontiers of knowledge and across disciplinary/functional boundaries were most valued. SMEs typically wanted recruits also to have good communication and teamworking skills, customer orientation and an entrepreneurial mindset, whereas larger companies were ready to provide training to enhance these.

The projects broad conclusions were that:

- business considers mobility of highly skilled professionals between sectors a 'must'
- doctoral programmes and knowledge transfer are intrinsically linked
- successful long-term university-business cooperation processes are holistic
- institutions should track their doctoral graduates
- support of governments and growing awareness of IPR are important structural factors

**Stephen Axford** explained the origins of the government's forthcoming review of postgraduate education, outlined what it would cover and described the process it would follow. There was no doubt that the current economic climate produced drivers that mean asking some difficult questions. The review would look at the whole spectrum of postgraduate education in the UK, taught as well as research degrees. By and large, the government judged postgraduate education to be in 'pretty good shape', showing healthy demand from students, business and academia. It was no foregone conclusion that a national postgraduate strategy was needed, but it was timely to pose the question.

The review has its origins in John Denham's HE Debate as Secretary of State for DIUS over a year ago. John Denham's question was essentially; is there a gap in our understanding? Do we need more government policy and intervention in the postgraduate area, or is the market working? Relevant debate contributions were those of Nigel Thrift and Paul Wellings. In July Lord Mandelson announced a formal review would be led by Prof Adrian Smith, Director-General for Science and Research at BIS. It will ask:

- How competitive is UK postgraduate education in relation to the rest of the world?
- What are the overall benefits of postgraduate study – to individuals and the knowledge base as well as the economic benefits?
- Are we truly meeting needs of stakeholders; business, higher education and so on?
- Do we have the right blend of taught masters and research degrees? What are their different outcomes at subject level?
- How does participation in postgraduate study compare with demographics at other levels of education? What are the barriers to progression from undergraduate level? Some challenging questions around wider social indicators need to be asked.
- Is the long-term strategic direction of postgraduate provision roughly aligned with the needs of the economy coming out of recession? Several White Papers (eg *New Industry New Jobs*, *Digital Britain*) have highlighted sectors the UK might 'recover into'. It would be foolish to try to plan exact matches, but strategic indicators will be borne in mind.

It will be a short review, with recommendations to the Minister early in 2010. The consultative process will involve appointing advisors, holding stakeholder meetings and a call for evidence.<sup>13</sup> Regarding related initiatives; the government intends to publish the HE Framework by the end of 2009. The higher education fees commission (set up by bipartisan agreement) will report after the next general election.

<sup>12</sup> [www.eua.be/research/doctoral-programmes/doc-careers/](http://www.eua.be/research/doctoral-programmes/doc-careers/)

<sup>13</sup> <http://nds.coi.gov.uk/clientmicrosite/content/Detail.aspx?ReleaseID=407542&NewsAreaID=2&ClientID=431>

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*In response, **Mick Fuller** suggested that UK HEIs were already working within a postgraduate research strategy – the European one. The Bergen Communique (2005) had called for ‘a doubling of PhD graduate numbers’ to achieve the necessary growth in doctoral candidates taking up research careers within the European Higher Education Area. He argued that, while it was right to be self-examining, doctoral education was in a healthy position, and that the ‘worry factor’ was overemphasised. Further research concentration had many disbenefits and should be avoided. The UK had the most diverse number of types of graduate routes in the world, brought about through HEI autonomy which drives innovation.*

Although the number of doctoral graduates from UK universities grew between 2003 and 2007 Lisbon agenda targets are a long way off. Most growth has come from international students. UK student numbers remained relatively stable. It is sometimes forgotten that the largest proportion of doctoral students (37%) are those who are self-funded. Institutional funding backs 22%, research council grants 14%.<sup>14</sup> The doctoral landscape also shows large numbers of postgraduate researchers in a minority of HEIs. As highlighted in the Wellings report, half are trained within 16 institutions. One quarter are spread across a ‘long tail’ of 84 institutions.

Questions driving the review of postgraduate strategy include: are postgraduate students ‘fit for purpose’? Do we need more joined-up national strategy? Do HEIs’ autonomous – strategies deliver the necessary quality and value for money?

Proponents of the ‘value for money argument’ claim that funding should be concentrated in the larger research-intensive universities and departments, however:

- diversity supports economic impact. For example, innovative doctoral models have helped deliver industrial and public sector research strategies by training employees in research methods
- polarisation could occur, with funded UK students in research-intensive HEIs or departments, predominantly overseas students and home students undertaking professional doctorates elsewhere
- sustaining a polarised model could mean doubling supervision loads and space provision in the top 12–20 HEIs, with likely implications for capacity and quality of supervision
- is it right to divorce doctoral training from the active research going on across all universities?
- achieving concentration might mean having to rescind the higher degree awarding powers of 50 HEIs

Flexibility is preferable to fixed models. Critical mass is important for high impact research and researcher training, but needs to be more carefully defined. Current RCUK Doctoral Training Centre models may be too limiting. Collaboration and resource sharing is good, but PGR students need a ‘home’ and work better in smaller groups.

HEIs have great interest in expanding excellent doctoral opportunities. Success in RAE 2008 spawned confidence and demonstrated research excellence is very widespread. In REF models higher PhD numbers mean more income for research, so research activity and research training go hand-in-hand. Research students bring an HEI multiple benefits: prestige (so greater ability to enter partnerships); outputs (papers, exploitable knowledge); income; academic motivation (supervision is popular).

It is therefore unlikely that many HEIs will withdraw from doctoral training, unless they are forced to. Our prediction for 2025 is that the UK will train more doctoral research students, including more international students. There will be still greater diversity, greater support for development of early career researchers in more organised training programmes, a wealth of partnerships – and the UK’s research eminence will be maintained.

<sup>14</sup> [www.hefce.ac.uk/pubs/hefce/2009/09\\_04/](http://www.hefce.ac.uk/pubs/hefce/2009/09_04/)

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## Question and answer panel session

### ***What is the future for interdisciplinary research?***

In the US, demand from federal agencies and students is growing rapidly. Institutional practice has to adapt (eg centres for multidisciplinary research) so that researchers do not 'fall down the cracks'. Mick Fuller believed assessment of the thesis to be HEIs' biggest challenge, as examiners were nearly always from monodisciplines. Lidia Borrell-Damian pointed out the importance to employers of deep subject knowledge coupled with the ability to make creative (and global) connections to other disciplines.

### ***Will the BIS review address the issue of concentrating PhD students in fewer institutions/departments?***

Stephen Axford confirmed this. The review would seek an in-depth understanding of the strengths and potential weaknesses of a system where PG study is done to different extents in different institutions.

### ***What are the priorities in the current focus on international competitiveness in the graduate education market?***

Motivations may include: improve the knowledge and skills base of the individual and the countries they have come from; generate business in the UK service sector; boost UK/EU skills base in areas of skills shortage; enrich our own programmes.

The panel felt that all these motives were present and intertwined. Mick Fuller commented on the dangers of using international students primarily to generate cash for universities. Alumni offered great opportunities for international collaboration. More vision was needed at an institutional and individual level. Institutions should have internal discussions about their motives and strategies. Participants commented that international researchers also enriched the UK at a societal level. It was noted that most international students were committed participants in researcher development; decisions about the future of Roberts funding should take this into account.

### ***What single request would panel members make of the review of postgraduate education?***

George Walker highlighted the pitfalls of skill-need projections. Other panel members asked that all stakeholders be consulted, including all different groups of students and employers within and beyond academia.

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## Delivering the vision of the Concordat

Panel discussion chaired by **Dr Sara Williams**, Chair, Vitae Research Staff Development Advisory Group and Training and Development Manager, Cardiff University, with: **Dr Stuart Fancey**, Acting Assistant Director, Research Policy and Strategy Scottish Funding Council; **Dr Robin Mellors-Bourne**, Director, Research, Intelligence and Communication, CRAC: The Career Development Organisation; **Sean Wallis**, Senior Research Fellow, UCL and UCL UCU Branch Secretary; **Sue Rossiter**, Chief Executive, National Foundation for Education Research NFER); **Graeme Rosenberg**, REF Project Manager, HEFCE.

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**Dr Stuart Fancey** set the scene for the panel session with a reminder of how the Concordat offered an essential structure for the future. Implementation was work in (very active) progress, assisted by Concordat signatories and supporters.

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The 2009 Concordat is a set of principles for the future support and management of research careers. It includes a statement of the signatories' collective expectations for support and management of researchers and an explanation of how best to embed these principles in practice. There is an important emphasis on researchers' responsibility to take control of their own career development. Principles are the starting point – implementation is what matters.

Implementation must be a team effort, involving HEIs and researchers with signatories and supporters. Two key groups are the Concordat Strategy Group and the Concordat Executive Group. At regional level, groups are forming to support implementation, for example the

Scottish Researchers' Career Coordination Forum. This brings together key players: HEIs, SFC and others to: identify ways in which the Concordat and related issues can be taken forward; coordinate support for career development; embed good practice; build consensus; provide connectivity.

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**Robin Mellors-Bourne** outlined how the *Careers in Research Online Survey (CROS) 2009*, a key Concordat benchmarking project, is proving valuable for monitoring Concordat implementation. 58% of respondents have heard of, or have some knowledge of, the Concordat. According to national-level data, most researchers feel valued, satisfied with work-life balance, integrated in their department and stimulated by research culture, and supported in their training and career development by their institution.

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CROS 2009 comprises parallel online surveys, run by HEIs to target their research staff, over spring 2009. Responses to common questions have been combined for aggregate analysis.

The resulting national picture is very representative of the overall research staff population. 16 of the 20 Russell Group universities took part and 12 of the 18 1994 Group of smaller research-intensive universities. A substantial dataset of nearly 6,000 questionnaires were completed (representing a positive 21% response rate). 71% of respondents were from Russell Group universities, broadly in line with their representation in the overall research staff population.

In response to questions about recruitment and selection of researchers, many respondents felt that their institution had a commitment to diversity and equality. Interestingly, employment contract status (open ended or fixed-term) did not feature as an over-riding issue determining responses. There is clearly still work to do in improving recruitment practices; for example, while 80% were interviewed, fewer than half were interviewed by their PI.

Questions around recognition and value also produced evidence of both progress and room for improvement. Half have undertaken appraisal in last two years (up from 32% in CROS 2002) and most feel valued for their research work. However, many feel that their broader contributions like teaching, supervision and management are not valued and half do not believe they are treated equally to lecturing staff regarding career progression or participation in decision-making.

Progress in the area of support and career development was well evidenced. Two-thirds received an induction to their role, up from about half in 2002. Two-thirds had participated in training in the last year, up from one-third in CROS 2006. Most are encouraged to consider career development; 40% talked to their manager about this. However, few talked to the careers service or sought advice from development staff.

The responsibilities of researchers formed a new area of questioning in the 2009 survey. Most respondents were well-informed about relevant employment and research issues (although less so about their career progression). Half have a career plan, a higher percentage than might be found in most other sectors. Overall, taking ownership of one's career appears to be a strong factor driving respondent attitude and engagement. While the survey indicated a strong appetite for development (and widespread belief that access is open); many research staff appear not yet to have taken advantage of these opportunities.

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**Sean Wallis** suggested a model for making research careers a realistic possibility. He argued that the fundamental problems facing HE research staff employment had persisted in recent years despite changes in fixed-term contract legislation and some improvements in institutional practice. This resulted in huge inefficiencies for HEIs. For the Concordat to make a real difference to researcher careers, institutions and research councils must adopt policies and practices that support proactive redeployment and career planning.

The consequences of the status quo are demotivated and stressed research staff, who often leave mid-project. Promising researchers, results and ideas are lost. Researchers are placed in a permanently subordinate position to lecturers. Although the legal framework has changed, so that more researchers now have open-ended contracts, annual research staff turnover could be as high as 30% – the same as 15 years ago.

But is research necessarily fixed-term? Projects are short term, but these are not stand-alone: research programmes are long term, as are significant areas of research activity: building methodological or technological research capacity (programme grants); developing an independent academic reputation (fellowship grants); retention of researchers for the long term at institutional level.

Redeployment needs to be managed proactively. Current schemes, with mechanisms such as central databases of researchers, are frequently ineffective. Processes are rarely policed and PIs have financial disincentives to accept redeployees. A proactive approach needs to prepare for the end of project from day 1, with a plan for future projects (writing research proposals, collaborating with colleagues, etc.) driven by science needs. Informally, in research groups, such practices exist, but institutions need to drive the embedding of best practice.

A model policy of proactive redeployment and career planning should include the following elements:

1. Developing research clusters and networks (ie research groups may fit into multiple overlapping themes): to share research and provide opportunity for collaboration; develop research programme themes; manage successful bids, with staff, facilities and estate following the research. Individual PIs should be supported and integrated into these themes.
2. Provide a Research Skills Record (RSR) for every researcher: a record of research skills that are generally applicable within theme(s) that identifies: current skills; expected future research needs of group/cluster; research groups that researcher could be transferred to if necessary; relevant CPD needs.
3. An order of allocating staff to projects: (i) named researchers on grant proposal; (ii) research staff in same group; (iii) redeployees on any institution-wide register; (iv) research staff in cluster, network or department; (v) external applicants. Staff can also be moved to avoid redundancies of others.

Research councils should assist this process with policy changes:

- funding: unnamed researchers should not be costed at the bottom of the pay scale, which creates a financial disincentive for redeployment. RCs could allow bids to cost higher salaries, but reclaim unspent portion at project end
- applications: researchers must be able to apply in own right, otherwise research staff are still permanently dependent on 'their' PIs.

If we move forward in the recognition that research is fundamentally long term we can enhance our research capacity and our 'human capital', broadening the pool of experienced researchers and increasing collaboration, which is good for research, academia and researchers.

**Sue Rossiter** offered insights into her own organisation's experience of strategic management of staff in uncertain income streams.

NFER is the UK's largest independent educational research organisation. A registered charity with over 260 research and support staff, it undertakes national and international educational research, mainly for public sector clients and won competitively. Since 1993, all its research staff have received permanent contracts.

The quality of our staff is closely related to the impact of NFER's work. One of NFER's three top level goals is to be a great place to work. This requires:

- developing excellent leadership skills and management skills at all levels
- managing change effectively
- ensuring we manage performance well and provide staff development opportunities to meet identified individual and organisational needs
- modernising the systems and processes which support the winning and delivery of excellent projects
- building in some fun at work

The strategic planning process is very important in managing uncertainty. This includes regular review of our 'place' and environment and clear plans and targets. Processes designed to support this strategy are:

- departmental plans and individual objectives
- proposal selection and writing a part of the everyday business (with identified resources)
- training to develop business acumen
- encouragement of entrepreneurial behaviours to develop new services

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When working in uncertain income streams it is especially important to give staff rich experiences and opportunities. People management is not equated to research management.

The working environment offers variety and skill development, with teamwork, multiple projects, informal mentoring and coaching, and opportunities to contribute to the organisation including strategy. Staff can also make bids for internal research funds.

NFER is delivering on all 'practice' aspects of the Concordat. Professional development for researchers includes structured induction, initial training to reach NFER standard, personal development plans, skills training, funding for relevant qualifications, management and leadership training.

Uncertainty is increasing, with public spending cuts likely to affect all major clients, a more competitive environment and a general election imminent. NFER's response aims to manage staffing levels in relation to anticipated income. Its strategy is both to protect (via capacity to deliver and develop, training and development) and to attack new areas of business, such as crime and adult learning. The organisation may need to find ways to achieve more flexibility in (permanent) contracts.

So, being proactive and outward looking is essential. We focus on the success of the organisation and of the individual. In our environment, research is a 'team sport'.

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**Graeme Rosenberg** described how the Research Excellence Framework (REF) was developing. Following a review of equalities and diversity measures in the Research Assessment Exercise (RAE), HEFCE was forming proposals for new and strengthened measures, to the benefit of early career researchers. Extensive consultation would commence shortly.

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Research assessment aims to identify the best research wherever this carried out, in order to 1. inform funding decisions 2. provide benchmarking and support better management of the research base and 3. provide public accountability.

In the RAE, equalities and diversity measures aimed to encourage institutional good practice and fair treatment by panels. HEIs were required to produce Codes of Practice for the selection of staff. Guidance was provided to institutions and panels. There was provision to take account of candidates whose capacity was affected by such circumstances as part-time working, a career break or length of career. Indeed, participation by early career researchers in RAE 2008 was promising. In their final reports, 70% of panels made (unprompted) comments on the numbers and high quality of early career researchers submitted.

The Equality Challenge Unit (ECU) has recently completed a review of RAE measures. Its findings indicate that the REF should contain similar equalities measures, but also identify several areas for improvement. Practice by panels and institutions was found to be inconsistent, for example:

- panels' different guidance on, and treatment of, early career researchers
- esteem indicators – sometimes panels were uncertain how to interpret these in the light of personal circumstances
- equality impact statements – not all HEIs had completed them and they were of varying quality
- communicating the Codes to staff and disclosure of personal circumstances processes in HEIs

The review also voiced a widespread concern that the mooted use of bibliometrics in the REF would disadvantage early career researchers. However, the REF has moved on from early proposals. Following a pilot, bibliometrics have been found insufficiently robust. The REF will thus be a process of expert review, informed by citation indicators in some panels. HEIs are best placed to select staff to take part. The greatest change will be that the REF will take explicit account of the impact of research on the economy and society. The burden on institutions will be reduced where possible with fewer panels, operating with greater consistency.

The REF will assess three elements; output quality, impact and environment. Environment will include assessment of postgraduate researcher provision and the development of research staff, wider contributions to the research base, and engagement with the public and research users. A current focus is how greater mobility between academia and user organisations (eg using secondments, staff exchanges) can be supported in the REF.

Equalities and diversity measures will build on the ECU review. Institutions' codes of practice for staff selection will be supported by more guidance on good practice. We propose to establish a central group to develop a standard set of criteria and guidance for individual staff circumstances, and to provide consistent advice to panels about – or centrally adjudicate on – individual cases. We are also analysing data from the bibliometrics pilot exercise, to explore whether there is bias in terms of citations to papers authored by different groups of researchers, including early career researchers; the findings could inform the way citation data is interpreted by expert panels.

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## Question and answer panel session

**Given that CROS 2009 analysis found that employment contract status did not feature as an over-riding issue determining responses, is the contractual landscape changing in ways that make the old opposition between fixed-term and open-ended contracts invalid? Should we be looking at the quality of the position instead?**

Liz Oliver, who is researching this area, suggested that there can be bad open-ended contracts just as there can be good fixed-term contracts. Use of open-ended contracts is increasing, but what is actually happening to researcher careers? Sean Wallis responded that fixed-term contract status made for unnecessary stress, leading to greater staff 'churn'. In his experience, the problem of high research staff turnover had not decreased.

**Do we need the funding and research councils to adopt more farsighted funding arrangements, with a programme rather than project focus, to accompany innovative research staff contract models?**

Sean Wallis felt that the greatest mindset change needed to happen in HEIs. Responsibility rests with universities to address huge staffing inefficiency. Other panel members agreed that universities needed a strategic development focus.

**To what extent can we should we use the REF to ensure that institutions are applying the principles of the Concordat? Is it deliberate strategy that just as we may be losing Roberts' funding, the REF is putting new emphasis on the future research base?**

Graeme Rosenberg replied that REF developments were coincidental. Research quality assessment is based on a track record of outputs, but we also need to look at whether the institution is capable of continuing to produce excellent research – hence the focus on whether the research environment is conducive to the flow of excellent research, with impact, and vitality of research base in the discipline. Development of research staff and training of postgraduate researchers will be a key part of that judgement.

**What does the panels' recent work reveal about gender issues?**

Sean Wallis observed that HESA data shows that biggest pay differentials are in research-intensive universities, and suspected that this was because more women were in research posts than in lecturing posts, with fewer opportunities to move up the pay scales. Despite progress, a male-dominated culture persisted in many departments, with career advancement linked to this ethos. Sue Rossiter highlighted the importance of institutional leadership in attitudes towards e.g. career breaks and part-time

*Question and answer panel session continued...*

employment. Robin Mellors-Bourne commented that, in the aggregated CROS returns there were very few gender differences between males and females. Female response rates were slightly higher, which was not unusual.

**Can the panel shed light on the high levels of dissatisfaction on how teaching integrated with research found by CROS?**

Robin Mellors-Bourne commented that CROS provides useful background data on how many people are undertaking different activities. Just about a majority feel that they are not treated equally with lecturers. On the question of how well their wider contribution was valued, responses were split roughly equally three ways; those who did/didn't feel valued and the 'don't knows'. This area would repay further analysis.

## A vision for the future

Dr Peter Hawkins, Director, Windmills

*Janet Metcalfe introduced Peter Hawkins by drawing out some key messages from the conference. Researcher development was critical, both in the short and long term. Strategic vision would be needed, which implied the ability to move outside personal comfort zones. Peter then encouraged participants to reflect on ways in which they themselves could become more fulfilled and effective role models.*

Do you know your top skills? Are you maximising them for a purpose you feel passionate about? In the right place, with the right people? Have you been equipped with the career management skills you need? Very few of us can answer yes to all these questions. Yet that is our challenge in supporting researchers.

What can you do to change? We all lead busy lives and that gets in the way of planning and doing important things. What do you want to have achieved when you look back on your life? We all have highs and lows in our lives – but what do we take for granted in between? Valuing the seemingly ordinary can help us start to move towards our goals. Most of us have an unhealthy mix of working, learning, playing and giving in our lives. Envision the balance you would like in five years. Start to think about what you need to do to get there. What are the obstacles? Question those barriers. Are they real, or is your response to the problem the underlying obstacle? Who are your supporters, helping you achieve your goals? What sorts of other people do you need to find? Now think about the first step you need to take and commit to taking that plunge in the next week.

We have a crucial role with our researchers. If we don't practise what we preach, how can we help others?

# Workshop outcomes

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Further details of all workshops can be found at [www.vitae.ac.uk/vitaeconference2009](http://www.vitae.ac.uk/vitaeconference2009), direct links are provided below.

## Context, postgraduate researchers

Workshops in this strand were offered on the following topics:

- [So you're new to developing postgraduate researchers?](#)
- [Understanding the postgraduate researcher experience – results and messages from PRES 2009](#)
- [What do researchers do? publications – 'First destinations of doctoral graduates by subject' and 'Career profiles of doctoral graduates'](#)
- [The PhD experience and its impact on the retention of women in the sciences](#)
- [Doctoral employability: how do employers value the contribution of doctoral graduates?](#)
- [Latest European developments relating to postgraduate researchers](#)
- [Developing a postgraduate research strategy](#)
- [The Carnegie Initiative on the Doctorate](#)
- [RCUK doctoral cohort study: emerging themes](#)

These workshops explored UK and international developments in the postgraduate researcher agenda, brought into sharper focus by the forthcoming review of postgraduate education. Key discussion themes are summarised below.

### **A postgraduate research strategy?**

One outcome of the review of postgraduate education may be the development of a national postgraduate research strategy. Participants identified challenges and offered priorities. Who should be responsible for, and who should champion, postgraduate issues? It was vital to engage researchers themselves in strategy development. A major concern was getting the right balance between: the interests of different stakeholders (eg HEIs, government, industry); research output and development of the researcher; concentration and diversity of PhD training programmes. Debates about how to enhance postgraduate researcher training to meet current and future needs (eg interdisciplinarity, collaborative research, nurturing new areas) should be focused on the goal of achieving the right intellectual environment for training.

### **Doctoral employability**

The review of postgraduate education will build a picture of doctoral graduate impact using a variety of sources; workshops explored three of these:

- emerging themes from the RCUK doctoral cohort study
- Vitae publications 'What do researchers do?'
- work in progress exploring postgraduate value with employers

Preliminary analysis of the responses of the doctoral cohort who graduated in 2005, when surveyed in November 2008, found that over 40% were employed in the education sector. Around one in ten respondents were employed as research staff. Possible impact measures include salary. The research raises a number of questions that will require more detailed, qualitative research.

The Vitae publication 'First destinations of doctoral graduates by subject' shows stable patterns of first employment destination over the period 2003–2007 and is the first analysis of DLHE returns for doctoral graduates to enable useful comparison of different subjects within broad disciplines. This information is complemented by the sister publication 'Career profiles of doctoral graduates'.

The Council for Industry and Higher Education (CIHE) is conducting a project exploring how organisations value the contributions of their graduate, and postgraduate recruits. It is becoming apparent that some employers value postgraduate researchers using some non-financial criteria or measures, such as innovation and knowledge.

### **Improving postgraduate researcher experience and opportunity**

Several workshops highlighted encouraging progress in, as well as challenges for, enhancement.

PRES data shows much consistency over three years (2007–09 surveys), with a visible growing trend of respondent satisfaction on most indicators. In the area of opportunities for skills development, it is possible to detect particular progress regarding part-time researchers. Career attitudes have a noticeable impact: students who are more career focused agree they are encouraged to think about their career and professional development.

Surveys by UKRC in the disciplines of chemistry and molecular bioscience have found that a larger proportion of women than men are deterred from remaining in research beyond their doctorate. There remain gender issues associated with doctoral supervision and career development, which can leave women feeling unsupported and unenthused.

The transformation of research degrees in many European countries has reached a stage of exciting diversity, but unanswered questions. How portable are qualifications when eligibility for doctoral degrees varies from country to country (eg whether a Masters is required prior to the doctorate)? A major barrier to career mobility as perceived by UK researchers remains competence and confidence in language learning.

The Carnegie Initiative on the Doctorate (US) reminds us of our key goals: to support doctoral candidates to be more fully developed as researchers and to be more successful, and adept at change, in their careers. Best practice in effecting change at departmental level includes student-centred programme review, and understanding ways to encourage faculty buy-in.

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## Practice, postgraduate researchers

Workshops in this strand were offered on the following topics:

- [Establishing the positive impact of Roberts development activities on completing doctoral researchers: variation by gender and by domicile](#)
- [Running a blended PGR poster competition – spreading a PGR poster competition around the world](#)
- [Postgraduate experiential learning: structure, support and evaluation for postgraduate work-based placements](#)
- [A case for formalising skills development frameworks: The Postgraduate Certificate of Professional Development \(Researchers\) at the University of Ulster](#)
- [Development of an innovative well-being assessment for postgraduate researchers and its use to drive change](#)
- [Not by brains alone. The benefit of providing emotional support to the doctoral researcher](#)
- [Online tools to support postgraduate researchers, in particular those undertaking part-time and distance research](#)
- [Building the UK's capacity for innovation through interdisciplinary collaboration and knowledge exchange](#)
- [The use of an e-portfolio to promote reflective practice and skills development in postgraduate researchers](#)
- [Collaborative doctoral education: university-industry partnerships for enhancing knowledge exchange](#)

These workshops enabled participants to hear about enhancement initiatives in researcher development from around the UK and beyond and share their current and emerging practice. Themes included: different forms of research collaboration; imaginative use of online tools; emotional support and well-being. Several workshops variously addressed assessment and impact, giving participants practical support in developing effective ways to evaluate the success of their activities and evidence the difference made by researcher development.

## Context, research staff

Workshops in this strand were offered on the following topics:

- [So you are new to developing research staff?](#)
- [Funders' response to the Concordat](#)
- [What's good for me in the Brussels' initiatives on researchers' careers?](#)
- [Concordat benchmarking process: an overview of HEIs' strategic responses to the Concordat](#)
- [Researchers, fixed-term employment and universities: understanding the law in context](#)
- [Careers in Research Online Survey \(CROS\) results – sharing the data](#)

Implementation of the Concordat was the central theme. Across various workshops, participants explored progress on, and contributed to the development of, most of the Concordat benchmarking projects:

- understanding the research staff cohort
- exploring the experiences of research staff through CROS
- HEI approaches to embedding career development for researchers in HEI strategies
- reviewing the use of fixed term contracts
- views and perceptions of principal investigators
- funders' responses to the Concordat

Key themes are summarised below.

### **Funders' support for Concordat implementation**

Participants asked funding signatories for a consistent approach and to share good practice. To help with institutional implementation, it was crucial to incentivise PIs to support the development of their research staff and to engage with management training. Current project-based funding did not incentivise people development. Examples of good practice from institutions should be collected and disseminated, highlighting qualitative evidence in order to help gain buy-in.

### **HEI benchmark reporting on Concordat strategies**

Participants gave feedback on a draft survey to examine HEI strategies for Concordat implementation. The workshop recommended that the Concordat Implementation Strategy Group consider the following suggestions: the survey should have an introductory, context-setting section; it should include free text answers; invite examples of good practice; use a 'traffic light' system instead of 'tick box' answers, to enable recognition of work in progress (amber light). There was much overlap with Roberts reporting and a merger of the two reporting processes could be further explored.

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## **Sharing CROS data**

The published aggregate data was considered very useful for enabling comparison with local HEI results. The next step was to share information on analysis of particular questions, via the CROS user group. There was much interest in the potential for further analysis and participants made several suggestions for follow-up work.

## **Employment contract issues**

Benchmarking project research suggests that most UK HEIs now have a thought-through policy response to the changes in fixed-term contract legislation. These responses vary considerably both in the nature of practice and the way in which they are presented. It may be that the issue of fixed-term versus open-ended contract is becoming less important than the quality of the particular position.

## **European developments**

EU policies aim at improving universities' human resource policies and practices to make them more attractive employers for researchers. The EU Charter and Code (2004) has made uneven progress, leading to recent moves to develop a simple Charter and Code implementation mechanism that is more concrete and visible and hence more attractive to researchers. The chosen instrument is an 'HR policy' scheme for HEIs, involving self-assessment and periodic external validation. National equivalents, such as the Concordat, may be accepted. The European Commission is also investigating the feasibility of an EU pension fund for researchers that would allow them to contribute to the same fund throughout periods of work in different EU countries, and, in parallel, comply with respective national legislation.

## **Practice, research staff**

Workshops in this strand were offered on the following topics:

- [Affecting change in research staff behaviour](#)
- [Implementation of the Concordat: HEI case studies](#)
- [Researcher development: working with international research staff](#)
- [Expanding our horizon: researcher development for academic staff](#)
- [Using Careers in Research Online Survey \(CROS\) 2009 to benchmark and develop provision for researchers at an institutional level](#)
- [Equipping research staff for planning and managing their lives and research careers](#)
- [Research matters – creating career pathways?](#)
- [Changing research management cultures with the next generation of research leaders: developing an understanding of personality differences using MBTI](#)

These workshops shared a wealth of practice, much of it related to HEI implementation of the Concordat. Case studies illustrated, for example, successful examples of institutional codes of practice, cross-institutional project teams, VC engagement, and faculty-level awareness-raising. Several workshops focused beyond research staff at engaging PIs and academic staff, both critical for embedding the Roberts agenda. Participants variously learned about development techniques such as coaching and mentoring, the Myers-Briggs Type Indicator and development centres. A strong equalities and diversity thread included, for example, support for the careers of those with carer responsibilities, and international staff.

# Workshop outcomes

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## Context, all researchers

Workshops in this strand were offered on the following topics:

- [The Researcher Development Framework: project update](#)
- [Evaluation from the beginning – an introduction to evaluating researcher training and development](#)
- [Roberts reporting made easy: a guide for anyone new to reporting to RCUK on the implementation of the Roberts review](#)
- [Exploring the career trajectories of 'newly qualified researchers'](#)
- [The role of researcher development in knowledge transfer](#)
- [How professionalised is the research career?](#)
- [The value of an external assessment of the Roberts agenda](#)

Assessment – variously at national, institutional, programme and individual researcher level – was a major feature of these workshops. Workshops also explored various aspects of research careers: early transitions; the developmental continuum of the research professional; and the increasing importance of knowledge transfer in research. Key discussion themes are summarised below.

### Assessment: the national picture

An external assessment of the Roberts agenda would be valuable. It would need to feed into the BIS review of postgraduate education. Given the timescales, such a review would focus on assessing the value of existing evidence, gathered by means of a 'call for evidence' and evaluated by an independent panel.

Institutional Roberts reporting provides annual monitoring information (and a huge dataset for an external assessment). For 2009 reporting, HEIs will be asked to additionally record their evaluation processes (mechanisms and use of resources). Participants welcomed the idea of RCUK visits to the institutions receiving the most Roberts funding.

### Assessment frameworks

The Researcher Development Framework is based on wide empirical data. Its structure, design and flexibility as a tool were welcomed. It needs to be accompanied by very clear guidelines on its use. There was much interest in the forthcoming consultation phase.

The model of the 'extended professional' offers an alternative perspective on the use of frameworks. It employs a continuum ranging between 'restricted' and 'extended' professional.

The Rugby Team Impact Framework is proving a useful tool to guide institutions' evaluation activity. Participants considered how to market the outcomes of their researcher development better within their institutions. They also discussed possible boundaries between institutional and national evaluation activity.

## Research careers

Traditional notions of a 'professional' do not fit with research as a profession. Professionalism may be becoming developmentalism. Researchers who have a career plan (beyond their current and next posts) are more developmental than those who do not.

Participants discussed how the Concordat can address the issues of fragmented transition from doctorate to employment. There are equity issues with the transition phase into HE employment and non-HE employers' awareness of doctorates varies hugely.

The increasing focus by government and the research councils on understanding the impact of the research they fund has increased the importance of knowledge transfer in delivering both economic and societal benefit. To engage researchers with developing skills for KT we need to sell the benefits in language that is meaningful to them.

## Practice, all researchers

Workshops in this strand were offered on the following topics:

- [Pathways – from small beginnings...](#)
- [Engaging researchers with enterprise](#)
- [Researchers – leading through community engagement](#)
- [Developing skills to engage the wider public in research activities](#)
- [Accredited approaches to developing researchers as leaders](#)
- [Institutional collaboration on training provision](#)
- [Integrating technology into researcher training](#)
- [Intrapreneurship in researcher development](#)
- [Discovering the career profiles of researchers](#)
- [What do you evaluate? – techniques for prioritising evaluation activity](#)
- [Making the most of Vitae programmes and resources](#)
- [How to handle career development discussions with researchers – a practical guidance approach for non-careers advisors](#)

These workshops enabled participants to engage with a range of imaginative initiatives in researcher development. Many workshops were linked to RCUK priority themes (eg public engagement and enterprise skills). Several workshops had a guidance theme.. Participants could explore how diverse approaches such as; using accredited programmes, integrating technology, and collaborating across institutions could help enhance provision and strengthen sustainable programmes.

# Postscript: key issues

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The conference speakers, workshops and discussions raised issues relating to the long-term future, the next year or so and the immediate actions that need to be taken.

In the longer term, it has become clear that we need to be planning for what is currently an unimaginable future. Technological advances are changing the nature of how research is undertaken, issues are raised relating to IP, to collaboration, to engaging the public in community-owned projects and to how our personal and institutional responses match a generation of people who will use advanced technology intuitively.

Alongside this, many speakers raised the importance of multidisciplinary and interdisciplinary research, and the implications for institutional structures, rewarding staff, publication, the Research Excellence Framework, and the future skills set of researchers.

We therefore need to be developing people with the skills and mindsets to embrace an unimaginable future – agility, imagination, curiosity, and excitement were all cited. We will look to see how we can build such attributes into the new researcher development framework that is being developed by Vitae and the Rugby Team.

We now have some important opportunities for shaping the future. The postgraduate review led by Professor Adrian Smith will identify whether we need to develop a UK strategy for postgraduate education. The review is considering the attractiveness of postgraduate study in the UK compared with other countries; whether there should be a widening participation agenda for masters and doctoral qualifications; the benefits of postgraduates to the economy and society; and whether the needs of businesses and the academy are being met. Vitae is responding to the current call for evidence. The Research Excellence Framework will address the wider impact of research and the research environment – including provision for postgraduate researchers and training and development of research staff. At the point where there is a question mark over the future of Roberts funding, it is encouraging that the REF will introduce new measures that highlight how institutions support their researchers. This could help us keep researcher development high on agenda of HEIs.

The ultimate aim is to embed researcher development in the 'normal business' of universities. We have to acknowledge that at some time ring-fenced funding will end. How and when should transition be organised to keep the focus on this agenda? The Research Councils have been scoping an external evaluation of progress and future scenarios. Further information will be available soon.

2009–10 promises to be another busy year for Concordat activities. As speakers highlighted, the Concordat is only words unless we implement it. A survey of HEIs will take place shortly to ascertain the engagement and provision made for good management of research staff. This survey will also enable UK institutions to demonstrate their commitment to the European Charter and Code for researchers, ensuring no duplication of efforts is needed.

Finally, the immediate priority and consistent theme of the conference is evaluation, evidence and impact. The 'Rugby Team Impact Framework: one year on' report starts to show far ranging impacts of investment in researcher development. The national analysis of the Careers in Research Online Survey and an analysis of the skills development results from the Postgraduate Research Experience Survey both highlight strong engagement by researchers in their careers and areas for further improvement. At this time of policy review, it has never been more important to be able to demonstrate the value of our work on research outputs, researcher careers, economic prosperity and society.



Incorporating the UK GRAD Programme and UKHERD

Vitae builds on previous work by the UK GRAD Programme and UKHERD. Vitae is supported by Research Councils UK (RCUK) and managed by CRAC: The Career Development Organisation and delivered in partnership with regional Hub host universities.

The role of Vitae is to work with UK higher education institutions (HEIs) to embed professional and career development in the research environment. Vitae plays a major role in innovating, sharing practice and enhancing the capability of the higher education sector to provide professional development and training of researchers.

Our vision is for the UK to be world-class in supporting the personal, professional and career development of researchers.

To achieve our vision we have four aims:

- **Building human capital** by influencing the development and implementation of effective policy relating to researcher development
- **Enhancing higher education provision** to train and develop researchers
- **Empowering researchers** to make an impact in their careers
- **Evidencing the impact** of professional and career development support for researchers

For further information about the range of Vitae activities go to [www.vitae.ac.uk](http://www.vitae.ac.uk) or contact [enquiries@vitae.ac.uk](mailto:enquiries@vitae.ac.uk)

Vitae c/o CRAC, 2nd Floor, Sheraton House, Castle Park, Cambridge, CB3 0AX