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# **UK NATIONAL ACTION PLAN**

On researcher mobility and careers within the European Research Area

DECEMBER 2009

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# INTRODUCTION

From Lord Drayson to the National Action Plan on researcher careers and mobility in the european research area.

For Europe to fulfil its economic potential and address the great challenges of our times, it must invest in research. That includes creating an environment in which the brightest young people choose research careers.

Our institutions need not only recruit talent wherever it exists; they must also provide attractive working

conditions and equip researchers with the broad skills and experience necessary to develop their careers, such as working abroad and moving between academia and industry. National governments need to back these opportunities.

For these reasons, the United Kingdom strongly supports the careers and mobility pillar of the European Research Area initiative. Together with the UK research base, the Department for Business, Innovation and Skills has created this UK National Action Plan.

The UK already has one of the most open science communities globally, with our universities enjoying a high level of autonomy. For several years, our research institutions have been working to address issues such as skills training, workforce diversity and closer relations between academia and industry.

Such initiatives are all described in the Plan, alongside case studies which may be of interest to European partners. At the same time, it outlines areas where we are seeking to improve.

I look forward to seeing progress achieved across Europe on this important subject through close collaboration among institutions and nation states.

**Lord Drayson** 



# UK NATIONAL ACTION PLAN ON RESEARCHER MOBILITY AND CAREERS WITHIN THE EUROPEAN RESEARCH AREA

## KEY BACKGROUND CONDITIONS AND INSTITUTIONS

The UK research base is already one of the most open in the world both as regards recruitment of researchers and scientific collaborations (over 40% of UK scientific papers now have one or more non-UK co-authors), these aspects being mutually reinforcing. The UK Government is committed to encouraging this openness in its support to the science base. In addition to its overall role in funding research through national funding bodies and support of the UK's seven Research Councils, the UK Government funds a number of dedicated fellowship schemes (Newton International Fellowships, Dorothy Hodgkin Fellowships) which seek to attract the best early career researchers from around the world to UK institutions.

UK Higher Education Institutions (HEIs) and Public Sector Research Establishments (PSREs) already enjoy a high level of autonomy, creating a very diverse sector able to respond to new scientific needs and opportunities quickly and effectively. In order to ensure high standards in their approach to researcher careers and mobility they have taken a series of initiatives as follows:

- The key instruments setting out policy on researcher career and mobility issues in the UK are the Quality Assurance Agency for Higher Education (QAA) *Code of Practice* and *The Concordat to Support the Career Development of Researchers (The Concordat).*
- The *QAA Code of Practice* was revised in 2004 and a special review was undertaken in 2005-06.<sup>1</sup> The *Concordat* was launched in 2008 and was signed by (among others) the funding bodies, research councils and Universities UK (on behalf of higher education institutions).<sup>2</sup>
- The *Concordat* and the *QAA Code of Practice* (which includes a joint skills statement) have been mapped on to the principles set out in the *European Charter for Researchers* and *Code of Conduct for Recruitment of Researchers*<sup>3</sup> and are the mechanisms through which the charter and code will be delivered in the UK.
- Responsibility for implementing the *Concordat* rests with individual HEIs and research organisations, as well as the researchers themselves. In addition, Universities UK, representing 133 UK HEIs, through their executive heads (vice-chancellors and principals), is a signatory to the *Concordat* on behalf of all member HEIs. The *Concordat* has also been endorsed by the UK Research Base Funders Forum representing the major public and private funders of public research in the UK. Overseeing implementation of the *Concordat* is a strategy group chaired by Sir Ivor Crewe and representing all the major signatories and supporters.
- The strategy group has appointed a full time implementation coordinator based at Universities UK. The post is co-funded by the funding bodies and the research councils. The coordinator is responsible for measuring progress towards implementing the seven principles of the *Concordat* and reporting on implementation across the UK.
- The coordinator works closely with Vitae<sup>4</sup> which is also funded by the UK research councils. Vitae supports the implementation of the *Concordat* at national level by championing the personal, professional and career development of doctoral researchers and research staff in HEIs and PSREs.

<sup>1</sup> See http://www.qaa.ac.uk/academicinfrastructure/codeofpractice/

<sup>2</sup> Further information at the Concordat website: http://www.researchconcordat.ac.uk

<sup>3</sup> See http://ec.europa.eu/eracareers/pdf/am509774CEE\_EN\_E4.pdf

<sup>4</sup> See www.vitae.ac.uk



- Vitae works with HEIs and PSREs to provide specific support for doctoral researchers and research staff. It also champions the common needs and interests of all researchers; supports their development needs; and undertakes research to build the evidence base necessary for policy development in this area.
- The HE sector can monitor the experience of their early career researchers through the Postgraduate Research Experience Survey and the Careers in Research Online Survey which are made available to all UK HEIs, either yearly or two yearly.
- The UK higher education sector funds the Equality Challenge Unit (ECU) which supports the sector to realise the potential of all staff and students (including researchers) regardless of race, gender, disability, sexual orientation, religion and belief or age, to the benefit of those individuals, HEIs and society.
- HEIs have benefited from a dedicated funding stream (known as Roberts Funding) to support the actions designed to enhance skills development amongst researchers provided for under the Joint Skills Statement and the *Concordat*.
- Through its membership of the European University Association's Council for Doctoral Education (EUA-CDE), the UK engages with and influences European developments relating to training and skills development for postgraduate researchers. The EUA-CDE comprises over 150 of Europe's top universities, of which 15 are UK institutions the largest representation from a single country. Vitae is also a member. The Council constitutes the central forum for Europe-wide discussion on key issues surrounding the provision and development of doctoral programmes. These currently include issues of particular concern to the UK, such as university-business collaboration and the status of the professional doctorate.



# **OPEN RECRUITMENT AND PORTABILITY OF GRANTS**

#### CURRENT UK PRACTICE

UK research institutions have full autonomy in setting their own recruitment policies for researchers within the context of European rights to freedom of movement, national immigration law (where relevant for non-EU citizens) and other relevant legislation. These policies are often publicly available on their websites. In consequence UK HEIs currently recruit staff and researchers on a worldwide basis. Universities UK estimates that 20% of staff at UK HEIs come from outside the UK, half of these from elsewhere in the EU while the overall figure for researchers is even higher. Some 35% of Vitae's 2009 Careers in Research On-line Survey responses came from non-UK researchers. At post-graduate level some 40% of doctoral candidates come from outside the UK.

This openness is supported by a series of initiatives:

- The *QAA Code of Practice* and *Concordat* stress the importance of recruiting, selecting and retaining researchers with the highest potential to achieve excellence in research (Precept 6 and Principle 1 respectively) and the need to promote diversity in all aspects of the recruitment and management of researchers (Precept 6 and Principle 6).
- UK academic and research sectors benefit from a dedicated web-based recruitment site (www.jobs.ac.uk). The advertisements posted there are accessible worldwide and the site is subscribed to by the major research actors in the UK, as well as European, North American and Commonwealth Universities.
- Many UK research institutions (152 registered organisations as of 11/08/09) also advertise vacancies through the EURAXESS jobs website.
- The UK is signatory under the Euraxess Services Network's Declaration of Commitment with the British Council serving as the UK's Bridgehead Organisation (BHO). The EURAXESS-UK portal is now live and adheres to the European Commission's guidelines. Two HEIs (the Universities of Durham and Dundee) have signed up to be EURAXESS Local Contact Points, and work is ongoing to sign up more.<sup>5</sup>
- Vitae has undertaken a survey of the employment taken up by UK doctorate holders after graduation (including analysis of international mobility and inter-sectoral mobility). This analysis, What Do Researchers Do?, was published in June 2009 and breaks data down by subject as well as by subject groups. Its main conclusion is that a significant proportion of doctorate holders are employed in both public and commercial research as well as in other innovative wealth creating sectors.<sup>6</sup>
- In September 2009 Vitae published the results of the 2009 Careers in Research Online Survey.<sup>7</sup> CROS will provide valuable UK-wide statistics on recruitment and development of research staff.<sup>8</sup>
- Individual UK research councils have bilateral arrangements which allow for grant portability with specific partner research funding bodies both within Europe and beyond.

As such, BHOs act as coordinators at national level of the network and liaise with the European Commission, national governments and other organisations. They act also as a link to the Steering Group for each country. The British Council, as the BHO, is encouraging individual universities to become Local Contact Points. The Local Contact Points support the staff of their own institution by providing assistance to researchers coming to or leaving the institution. They offer hands-on-support on matters with mainly a local dimension and are often in face-to-face contact with the researchers and/or their families.

<sup>6</sup> Vitae (2009), What do researchers do? First destinations of doctoral graduates by subject, www.vitae.ac.uk/wdrd

<sup>7</sup> Vitae (2009), Careers in Research Online Survey (CROS) 2009: Analysis of aggregated UK results, www.vitae.ac.uk/cros

<sup>8</sup> See http://www.vitae.ac.uk/policy-practice/167-142951/Careers-in-Research-Online-Survey-CROS-2009-available-online.html



- A major UK research funder, the Wellcome Trust, operates a scheme to support outstanding researchers, either medically qualified or science graduates, who wish to establish a research career in an academic institution in selected European countries: Croatia, Czech Republic, Estonia, Hungary, Poland, Slovakian Republic and Slovenia.9
- The Wellcome Trust also funds collaborations between researchers in countries with developed market economies and those in the UK or Republic of Ireland. Furthermore, researchers who have a track record of Wellcome Trust funding as a principal investigator, co-investigator or fellow may apply directly for support without needing a UK-based collaborator.
- The British Council runs bilateral exchange programmes with France, Germany, Netherlands, Belgium, Italy, Poland and Portugal, aimed at encouraging scientific collaboration and the mobility of early-career researchers. These are matched-funded by national partners.
- The fellowships offered by the research councils as well as other research funders have worldwide visibility and significant recognition within their target subject communities both in the UK and beyond. The majority of the fellowships are open to UK and overseas candidates regardless of nationality, and are assessed in competition with each other. Many research council fellowships have a strong international element as international collaboration is actively encouraged as part of the process of building an international reputation. Many awards include the option to undertake research training outside the UK. A survey of fellows' nationalities suggests that, depending upon the discipline, between 20% and 50% of all research council fellows are from outside the UK.
- The Engineering and Physical Sciences Research Council (EPSRC) and the Deutsche Forschungsgemeinschaft (DFG) have an agreement to promote the mobility and networking of researchers. It is possible for a principal investigator moving to an academic post at a German university to have the grant transferred to the German university. As with a transfer in the UK, the written agreement of both original and new universities as well as the EPSRC is required. The DFG operates a reciprocal arrangement for staff at a German university moving to one in the UK.<sup>10</sup>
- The Economic and Social Sciences Research Council (ESRC) has recently launched schemes which encourage international stays during doctorates, and which provide funding to support internationalisation projects.

<sup>9</sup> See http://www.wellcome.ac.uk/Funding/Biomedical-science/Grants/Fellowships-and-personal-awards/International-fellowships/WTX024868.htm

<sup>10</sup> For further information see: Universities UK (2008) Researcher mobility in the European Research Area: Barriers and Incentives

- UK public sector research institutions and HEIs will be encouraged to make the maximum use of the EURAXESS portal when they are advertising research posts.
- The relevant UK authorities will work with the Commission to develop a closer relationship between Jobs.ac.uk and the EURAXESS portal, ideally leading to full compatibility and sharing of content.
- Individual UK institutions already provide practical assistance through international
  offices to foreign researchers wishing to relocate to the UK for a period of work,
  e.g. help finding accommodation, provision of childcare, help setting up bank accounts,
  advice on local schools. A mobility portal (Euraxess-UK-www.britishcouncil.org/new/
  Euraxess-Home/) has been set up at the national level to provide advice and information
  that will help reduce the barriers to greater international mobility. Its operation will
  be further developed in the future.
- The UK Government has implemented the EC Equal Treatment Framework Directive 2007/8 in a way that requires UK public sector research institutions and HEIs to review and implement the actions necessary for the full implementation of the Directive in their policies and practices in recruiting and employing researchers.
- UK institutions will make further efforts to increase the level of international experience and encourage UK researchers to undertake international mobility and collaboration with partners elsewhere in Europe and worldwide in the context of schemes such as the Marie Curie mobility schemes and ERASMUS MUNDUS.
- From the academic year 2010-2011, four UK HEIs will participate in consortia offering doctoral degrees as part of ERASMUS MUNDUS.
- UK institutions will seek out and, where relevant, apply best practice drawn from other fields in the education sector which are involved in international mobility issues (e.g. at undergraduate level and masters/doctoral levels though the ERASMUS and ERASMUS MUNDUS programmes respectively).

# MEETING THE SOCIAL SECURITY AND SUPPLEMENTARY PENSIONS NEEDS OF MOBILE RESEARCHERS

### CURRENT UK PRACTICE

UK institutions offer pensions and social security provisions for mobile researchers in a variety of ways:

- The Universities Superannuation Scheme (USS) is a multi-employer superannuation scheme that covers academic staff at many (though not all) UK universities.
   Researchers working in the UK are recognised as a clearly eligible group whatever their national origins and many join the scheme. Researchers at other institutions are covered by other schemes (e.g. Teachers Pension Scheme or Local Government Pension Schemes).
- The USS is able to accept the transfer of pension rights for anyone transferring from within or outside the EU into their scheme (so long as the former scheme was a recognised overseas pension scheme).
- With regard to transferring out, the USS is willing to pay transfer values to all recognised pension arrangements, including recognised qualifying overseas pension schemes.
- The USS does not offer pensions advice, though it does provide a list of independent financial advisors to members of the scheme.
- If a member of a UK scheme is moved abroad for a short period (whilst remaining in the employment of a UK university) the Pensions Regulator allows for them to be treated as a seconded worker for (generally) up to five years. During this time they would benefit from all UK pension rights, including the ability to remain a member of a UK-based pension scheme.
- Universities UK is undertaking a long term examination of pensions provision in the UK university sector with the Guild of Higher Education and the Universities and Colleges Employers' Association.
- Within Government, the UK's Department of Work and Pensions (DWP) works to ensure that the EU level coordination of social security systems guarantees the rights of persons exercising their right to free movement i.e. that persons are not disadvantaged in terms of social security when they move from one EU country to another. The regulations provide for equality of treatment; aggregation of insurance periods; and the possibility to export benefits.
- DWP also works to ensure that comprehensive information is available regarding the rights and responsibilities of those wishing to move to another Member State, and where necessary, encourages them to make appropriate provision for themselves.



- Information on and transparency of international job opportunities is being reinforced in order to establish an environment which creates opportunities for worker mobility. Public employment services have a key role in this, in cooperation with the services provided by the European Employment Service (EURES). In the case of the UK, this involves the Jobcentre Plus service working with EURES and each year participating in more than 40 European job days throughout the European Economic Area to promote vacancies in the UK in occupations where there is a UK skills shortage. Many of these events are targeted at graduates and take place on university campuses.
- If an overseas researcher comes to the UK for a short period of time before moving on, they can participate in USS and receive pension rights which they have accrued in the scheme. These can either be preserved and held until such point they are payable at retirement, or transferred-out of USS to another pension arrangement – which may be back in their home country – provided it is a qualifying recognised occupational pension scheme.

- Relevant UK institutions will work to further develop the coverage and depth of advice on pensions and social security issues available both to mobile researchers coming to the UK and to potentially mobile researchers from the UK looking to move elsewhere. This advice might also be integrated with careers advice.
- Universities UK and others have suggested that the transferable skills training of researchers should encourage a greater awareness of pension rights and systems so they are empowered to manage their financial affairs more proactively. This advice might also be integrated with careers advice.
- UK institutions will seek to make use of flexibility around the definitions of posted or seconded workers (from the UK to other EU member states and beyond) to improve provision for mobile researchers within existing legal frameworks.
- UK institutions will also work with the relevant Government departments to further explore the scope for better transferability of pension rights within existing arrangements.
- The UK will collaborate with Hewitt Associates in their feasibility study into the possibility of a pan-European pension scheme for researchers being undertaken on behalf of the European Commission.

# ATTRACTIVE EMPLOYMENT AND WORKING CONDITIONS

### **CURRENT UK PRACTICE**

The UK has a very diverse research environment composed of autonomous HEIs, PSREs and private sector research establishments. The autonomy of HEIs and other institutions allows for diverse and flexible approaches to issues like remuneration (which allows for incentives based on research impact and support for activities such as knowledge transfer and teaching) and in other areas related to employment terms and conditions. HEIs have implemented the national Framework Agreement for the Modernisation of Pay Structures. This has been carried out 2004 onwards in partnership with the trade unions and this has provided the framework within which HEIs have addressed the need to assure equal pay for work of equal value. There are national agreements and guidance e.g. Joint Negotiating Committee for Higher Education Staff (JNCHES) guidance and reports, and these fit within the UK legislative framework on employment. JNCHES in particular serves as a tool for ensuring equal pay for researchers in the higher education sector. Under JNCHES higher education institutions are required to conduct equal pay reviews. Remuneration in so-called "shortage" scientific areas has been the subject of attention. In particular, RCUK commissioned specific research on salary and stipend issues in 2006 which sought to examine the impact of pay issues on recruitment in these areas. 11

A series of actions has been undertaken within the context of this diversity to ensure attractive employment and working conditions for researchers:

- UK institutions are signatories to the *Concordat*, which states that "Researchers are recognised and valued by their employing organisation as an essential part of their organisation's human resources and a key component of their overall strategy to develop and deliver world-class research... In particular, employers should ensure that the development of researchers is not undermined by instability of employment contracts. This approach should be embedded throughout all departmental structures and systems" (Principle 2) and that "The importance of researchers' personal and career development, and lifelong learning, is clearly recognised and promoted at all stages of their career." (Principle 4). In addition, "Diversity and equality must be promoted in all aspects of the recruitment and career management of researchers" (Principle 6). These principles are being implemented by HEIs and other research institutions.
- Vitae works with HEIs and PSREs to provide specific support for doctoral researchers and research staff. It also champions the common needs and interests of all researchers and undertakes research to build the evidence base necessary for policy development in this area.
- The UK HE funding bodies have encouraged action in this field. For instance, the Higher Education Funding Council for England (HEFCE) encourages HEIs to have formal human resources strategies and provides funding to support these under the *Rewarding and Developing Staff in HE* initiative; it also encourages institutions to develop recruitment and retention schemes.
- HEFCE has developed an *HE workforce framework*, which is intended to identify key issues and challenges in the sector and inform strategic planning at the institutional level; this is currently being revised in the light of ongoing research on staffing in English HEIs.



- The Scottish Funding Council (SFC) has supported the launch of the Scottish Research Career Co-ordination Forum which brings together research career professionals (including HR staff) and university senior managers to share best practice and to co-ordinate development activities. SFC explicitly recognises the contribution to early career researchers in its Research Excellence Grant funding model and continues to support international mobility through the Scottish Overseas Research Student Awards Scheme (SORSAS). SFC continues to support research career and mobility development through individual university launch events across Scotland.
- All HEIs in the UK are required to audit their practices in terms of their impact on staff
  and students, in terms of race, gender and disability. This includes assessing the impact
  of their policies and practices on the career progression of researchers. Where negative
  impact is identified, then procedures should be put in place to address that impact
  where possible.
- The Athena SWAN Charter, funded by the UK Resource Centre for Women in Science and the Equality Challenge Unit, recognises and celebrates good employment practice for women working in science, engineering and technology (SET) in higher education and research. Any university or research institution which is committed to the advancement of the careers of women in SET in higher education and research can apply for *membership*. The total number of awards to date is 53 (1 gold, 24 silver and 28 bronze).<sup>12</sup>
- Evidence has shown that women, particularly women with partners and children, face the greatest obstacles to their mobility in pursuing a career in scientific research. Initiatives to promote the role of women in science have therefore been important in helping women to break into scientific careers in the UK. The UK Resource Centre for Women in Science is the Government's lead organisation for the provision of advice, services and policy consultation regarding the under-representation of women in science, engineering, technology and the built environment (SET). It was launched in September 2004, and is funded by the Department for Business, Innovation and Skills (BIS). It works with employers; professional bodies; education institutions; women's organisations and networks; policy institutes; sector skills councils; the Government and many others to promote gender equality in SET. It offers tailored services and support for women at all career stages: including getting started, returning after a break, seeking promotion and aspiring to leadership.

- The University of Sheffield's Women Academics Returners' Programme (www.shef.ac.uk/hr/diversity/warp.html) provides a grant of £10,000 to women academics and researchers who return to work after maternity leave, to cover teaching duties or to support research activities. The university has committed over £1.5m to the programme. 54 women have participated to date. Prior to introducing the programme, nearly all female academics and researchers returned to work following maternity leave but nearly one in four of them would subsequently leave the university. Since introducing the programme, this proportion is now one in seven. The university estimates that the women who participated in the programme have subsequently generated over £6.2m in research income for the university, benefiting the university as well as their own careers.
- HEFCE has supported the development of a self-assessment tool for people management in HEIs. This self-assessment tool is intended to enable institutions to assess their own progress in people management, while providing assurance to stakeholders that they are supporting continuous improvement.
- Vitae have produced a series of six briefing documents providing guidance and case studies on implementing the *Concordat* principles.<sup>14</sup> These are targeted at different stakeholders within higher education, e.g. human resources, senior management and principal investigators.
- The Vitae report of the 2009 Careers in Research Online Survey (CROS) provides evidence of researchers' job satisfaction, how valued they feel and whether their contributions are recognised. It explores researchers' views of institutions' approach to equality and diversity policies and practice.
- The Universities of Birmingham, Bristol, Derby and Leeds have come together with funding from HEFCE to transform staff wellbeing across higher education. This is a new initiative that is designed to:
  - find out what work is being done in staff wellbeing across the sector
  - help institutions learn about staff wellbeing from each other
  - share best practice
- There are a number of funding schemes for postdoctoral scientists who have recently decided to return to high-quality research after a career break.
- The Wellcome Trust provides the holders of its non-clinical research fellowships with significant salary enhancements which are awarded in addition to the fellows' basic pay as set by their employing institutions.<sup>15</sup>

<sup>14</sup> Vitae (2009) Concordat briefings to engage stakeholder groups http://vitae.ac.uk/policy-practice/56351/Concordat-briefings-to-engage-stakeholder-groups-.html

<sup>15</sup> See http://www.wellcome.ac.uk/Funding/Biomedical-science/Grants/Fellowships-and-personal-awards/Basic-biomedical-fellowships/WTD004380.htm

- The UK HEI sector will take additional evidence-based actions to address the continuing problem of high levels of "attrition" of female researchers over the course of the career cycle.
- The revised version of the HEFCE HE Workforce Framework will build on the results of surveys of the UK research base workforce to develop recommendations to HEIs on researcher careers issues.
- The Concordat Strategy Group will shortly send a survey to all UK HEIs asking them to describe how their own policies and practice promote the seven principles of the *Concordat*. A report will be published in 2010. The UK has in principle reached agreement with the European Commission that this survey will be the basis of a UK process that is equivalent to the objectives of the 'HR Strategy for Researchers Incorporating the Charter and Code'.
- Vitae is currently undertaking a research study designed to explore the implementation of legislation on fixed-term employment within research oriented universities. 

  This will examine how universities and researchers themselves have responded to changes in the fixed-term employment legislation and will contribute to the knowledge base in implementing the *Concordat* principles.
- Vitae, in collaboration with Sheffield University, is also undertaking a national survey
  which aims to collect information that will help to illustrate the current researcher
  labour market, recruitment processes and trends, as well as career development of
  people with doctorates within non-HE organisations. Results will also be shared with
  HEIs to improve the current training and development programmes in order to enhance
  the employability and skills of doctoral graduates.
- Career development is taken account of in some research council grant schemes (e.g. EPSRC first grant; BBSRC new investigator and ESRC grants). Further work in this area and its visibility will form part of the research councils' implementation of the *Concordat*.



# ENHANCING THE TRAINING, SKILLS AND EXPERIENCE OF EUROPEAN RESEARCHERS

## **CURRENT UK PRACTICE**

The UK Government has recognised for some time that researchers need to acquire high quality skills which will enable them to be flexible and employable in a wide range of situations. HEIs and research establishments also should take adequate account of the need both to develop the careers of researchers and to work effectively on the transfer of knowledge. According to Lord Leitch, in his review on skills, which reported to the UK government in December 2006, "higher level skills are the key drivers of innovation, entrepreneurship, management, leadership and research and development." <sup>17</sup>

In order to meet these requirements, UK institutions have developed a number of strategies:

- The Concordat states that "Researchers are equipped and supported to be adaptable and flexible in an increasingly diverse, mobile, global research environment" (Principle 3) and recognises the need to support researchers in developing professional skills that they will need to be both effective researchers and highly skilled professionals in whatever field they choose to enter. Signatories to the Concordat have also committed to ensure that "the importance of researchers' personal and career development, and lifelong learning, is clearly recognised and promoted at all stages of their career." (Principle 4).
- Actions on career development and the acquisition of broader skills by researchers in the UK have been underpinned by a separate funding stream ('Roberts funding') over and above the direct funding which research institutions receive to undertake research projects. This funding (committed to 2010/11) is currently distributed to universities through RCUK, on behalf of the research councils for the researchers they support.
- The Higher Education Funding Council for England (HEFCE) in conjunction with the
  other UK funding bodies is currently conducting a consultation exercise on a new
  framework for assessing the quality of research the Research Excellence Framework
  (REF) which will be used to allocate research block grant funding in future. One
  proposal is that the REF should explicitly assess the impact that university research
  departments have made on the economy and society. The REF will also seek to
  facilitate greater mobility of researchers between academia and research users (such
  as business and policymakers).
- Vitae has been very active in supporting the activities of universities in the skills field, particularly in the sharing of good practice. In addition the Rugby Team, a sector-led group with an interest and expertise in this area, currently considers ways to evaluate the effectiveness of skills development in early career researchers on behalf of the UK HE sector.<sup>18</sup>
- The QAA Code of practice includes a joint statement of skills that doctoral research students funded by the research councils are expected to develop during their research training.<sup>19</sup>

<sup>17</sup> Leitch Review of Skills (December 2006), Prosperity for All in the Global Economy: World Class Skills - Final Report

<sup>18</sup> The Rugby Team's mission is to 'propose a meaningful and workable way of evaluating the effectiveness of skills development in early career researchers'. www.vitae.ac.uk/rugbyteam

<sup>19</sup> Joint Statement of the UK Research Councils' Training Requirements for Research Students www.vitae.ac.uk/jss



- HEIs and other research institutions continue to stress the importance to researchers of acquiring transferrable skills. The *Concordat* underlines that "individual researchers share the responsibility for the need to pro-actively engage in their own personal and career development, and lifelong learning." (Principle 5).
- HEFCE's "Higher Education Innovation Fund" (HEIP) is designed to support and develop a broad range of knowledge exchange activities which result in economic and social benefit by providing funding for projects designed to engage and support links between HEIs, businesses and the wider community – thereby also raising researcher skills.
- The other funding bodies also operate funds with similar objectives. The Higher Education Funding Council for Wales' Third Mission Fund supports activities that stimulate and direct the application and exploitation of knowledge to the benefit of the social, cultural and economic development of society. In Northern Ireland, a regional version of HEIF has been adopted as the province's primary funding tool for promoting knowledge transfer activities and is supported by "Connected", a ground-breaking funding initiative (the first of its kind in the UK) involving collaboration between the region's higher and further education sectors which is aimed at identifying and meeting the knowledge transfer needs of businesses and the wider community in a coordinated and holistic fashion. In Scotland Knowledge Exchange is supported through the Knowledge Transfer Grant (sfc.ac.uk) and through SPIRIT (Strategic Priority Investments in Research and Innovation Translation) and specifically targets SMEs through the innovation voucher schemes for universities and for colleges and via the business-university connecting organisation, (Interface www.interface-online.org.uk).
- A growing number of UK Ph.D.s across all disciplines, including the arts and humanities, involve links with industry and business (many are jointly delivered between industry and an HEI). This enhances knowledge transfer from academia to industry and vice versa.
- There are also an increasing number of researcher jobs in industry which seek to improve knowledge transfer (e.g. through the Technology Strategy Board's Knowledge Transfer Partnerships). There have been opened to Europe-wide recruitment through linking the Knowledge Transfer Partnerships website www.ktponline.org.uk to the EURAXESS database.

- The chemistry departments of the Scottish universities have established ScotChem, a major new collaborative venture for the pooling and enhancement of resources for chemistry research in Scotland. It brings together the major players in research in chemical sciences through the creation of new structures to generate enhanced critical mass and enable joint access to major resources with the aim of strengthening links between academic and industrial research.
- The UK's Technology Strategy Board (TSB) sponsors Knowledge Transfer Partnerships (KTPs) along with 19 other government organisations. The scheme enables companies to obtain knowledge, technology or skills which they consider to be of strategic competitive importance, from the further/higher education sector or from a research and technology organisation. The knowledge sought is embedded into the company through a project or projects undertaken by a good quality individual recruited for the purpose to work in the company.
- The British Council has been offering career development workshops to early-career researchers who are being supported under our bilateral exchange programmes. The workshops have been run by Vitae and have proved very popular.
- In 2007, EPSRC provided £1.4M of funding to 28 organisations to support training and course development in the area of entrepreneurship with the aim of increasing awareness and encouraging innovative approaches to the exploitation of research. A collaborative project with several of the organisations and Vitae led to the 2008 report *Exploring intrapreneurship in researcher development.*<sup>20</sup>
- Wellcome Trust Sir Henry Wellcome Postdoctoral Fellowship awards provide a
  unique opportunity for the most promising newly qualified researchers (from the UK/
  European Economic Area (EEA) or with a relevant UK/EEA degree) to make an early
  start in developing their independent research careers, working in the best laboratories
  wherever they may be worldwide.<sup>21</sup>
- The 1994 Group institutions published a research report in January 2009 on the impact of the Roberts' career development and transferable skills funding. The survey found that in 1994 Group Institutions, the benefits of increased financial resources include:
  - More effective resource management and planning, which improved co-ordination of training provision;
  - Widened scope and extent of training programmes;
  - Greater engagement of researchers with skills development;
  - Greater support for supervisors and principal investigators;
  - Greater provision of researchers' induction;
  - Improved personal development planning and record keeping practices;
  - Increased researcher feedback and representation;
  - Better inter- and intra-university collaborations;
  - More researcher-led innovation:

<sup>20</sup> CRAC, Vitae (2008) Exploring intrapreneurship in researcher development http://vitae.ac.uk/policy-practice/375-63031/Feature-Enterprise-at-work—exploring-intrapreneurship-in-researcher-development-.html

<sup>21</sup> See http://www.wellcome.ac.uk/Funding/Biomedical-science/Grants/Fellowships-and-personal-awards/Basic-biomedical-fellowships/WTX033549.htm

- Extended networking and mentoring within the research community;
- Raised awareness of and skills in knowledge transfer; and
- Broadened employer engagement and researcher-specific careers' advice.
- The Researchers in Residence scheme, funded by the Wellcome Trust and the research councils, facilitates a mutually beneficial relationship between researchers and secondary school students by placing researchers (PhD and post doctoral) in secondary schools across the UK. This scheme offers researchers the opportunity to use their expertise as a researcher and develop their communication skills by going into a school or college and helping create quality experiences for the pupils. All Researchers in Residence are trained in how to communicate their research to non-specialists, and supported throughout the process.
- The Times Higher Education Supplement award for Outstanding Support for Early Career Researchers has been sponsored by RCUK and Vitae for four years and celebrates excellent support provided by UK HEIs in making research an attractive career path and helping early career researchers achieve their full potential. It provides an opportunity to highlight and showcase some of the ways in which UK research organisations are providing outstanding support for early career researchers.
- The University of St Andrews GRADSkills programme (a THES award winner) supports early career researchers in developing generic skills to enhance their research capabilities and widen their future employability. It provides a range of dedicated courses, workshops, on-line resources and training events throughout the year, including an annual conference called 'Research Futures'. Research Futures aims to raise awareness of the opportunities for researchers to become more involved in policy development; move between academia and industry; engage with wider audiences; be innovative and entrepreneurial; access national and international awards and funding; undertake cutting-edge research, and acquire the skills required to succeed in these areas.
- Vitae has developed a range of resources to support universities in enhancing the
  personal, professional and career development of researchers. These include: training
  programmes, such as 'Effective researcher', 'Broadening horizons', 'Advancing in
  academia', 'Part-time researcher'; a database of training resources and materials;
  and a database of trainers and developers. Vitae also hosts a database of practice,
  where institutions can share examples of how they provide professional and career
  development opportunities for researchers. Currently there are over 600 examples of
  good practice.
- The Rugby Team has published an update report on the implementation of their Impact Framework,<sup>22</sup> which provides an overview of known evaluation activity relating to researcher training and development, mapped against the framework. It presents evidence that researcher training and development activity:
  - improves research outputs, grant writing success, fellowship success and performance in research;
  - enhances the postgraduate researcher and supervisor experience;
  - enhances employability; and
  - enhances and increases the public understanding and outreach activity of researchers.

- The Teaching and Learning Research Programme (TLRP) received funding from (HEFCE), the Department for Children, Schools and Families (DCSF), the Welsh Assembly Government, Northern Ireland Executive and the Scottish Government. The TLRP projects have been influential in system-wide initiatives within and beyond the UK and the findings cover all sectors of education including preschool, each phase of school, further and higher education, workforce development, apprenticeships and lifelong learning. They have affected England's review of teaching and learning methods for the future 2020 Vision, the recent curriculum reviews in Scotland and Northern Ireland and the Pedagogic Strategy in Wales.
- Impacts: Success in Shaping Public Policy and Services, the third in Research Councils UK's (RCUK) series of publications celebrating the impact of research, was published in July 2009. The publication provides a variety of case studies highlighting how research provides a vital evidence base to inform public policy and services, as well as showcasing the benefits that research brings to society and the economy. It provides examples of collaborative training and placements.

- The UK will build upon existing structures to strengthen the focus on developing researcher skills across the board and will further develop the evidence base underpinning action in this field.
- The Secretary of State for Business, Innovation and Skills, Lord Mandelson, has recently announced a review into postgraduate provision in the UK. The review will be led by Professor Adrian Smith, the Director General of Science and Research, drawing on expertise from universities and business and will report in early 2010. Following the outcomes of the review, the UK Government will consider the future development of a comprehensive policy framework for postgraduate study, encompassing both taught and research masters as well as studies at doctorate level.
- Regular reporting on the implementation of the Concordat will consider how the sector has taken forward and implemented each of the seven principles of the Concordat which will include the provision and take-up of transferable skills training and experiences of researchers.
- Vitae is developing a 'Researcher development framework' for planning, promoting and supporting the personal, professional and career development of researchers in higher education. It will incorporate the Research Councils' Joint Skills Statement within the framework. The framework will describe the knowledge, skills, behaviours and personal qualities of researchers and encourage researchers to aspire to excellence through achieving higher levels of development. These will be collected under four domains:
  - professional and intellectual attributes;
  - personal effectiveness;
  - research organisation and governance; and
  - impact and influence.
- RCUK is undertaking a longitudinal cohort study of doctoral graduates to understand better the career pathways and provide evidence of the contribution of doctoral graduates on the economy, culture and society in the UK. It includes a survey three and a half years after graduation, followed by qualitative projects with both doctoral graduates and their employers.
- UK HEIs and other research institutions will be encouraged to map the impact of the careers of researchers in their research plans.

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