

**Higher Education Research Group**  
**Working Group on Researcher Careers**  
**Draft Framework Document**

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## 1. BACKGROUND

### 1.1 IRISH GOVERNMENT RESEARCH STRATEGY

The aim of the Government's Strategy for Science, Technology and Innovation (SSTI) 2006 – 2013 is that "Ireland by 2013 will be internationally renowned for the excellence of its research, and will be at the forefront in generating and using new knowledge for economic and social progress, within an innovation driven culture." This is further underpinned in the Framework for Sustainable Economic Renewal "Building Ireland's Smart Economy" which prioritises investment in research and innovation and aims to develop Ireland into the innovation and commercial capital of Europe.

World class research and world class people are at the heart of a national system of innovation. The SSTI has two interlinked goals, first to build a sustainable system of world-class research teams across all disciplines and second to double the number of PhD graduates by 2013.

Attracting sufficient numbers of people into research will be key to attaining these two goals and this is recognised by the Government in its Framework for Sustainable Economic Renewal which highlights the need to attract high calibre researchers into the Irish system. The SSTI has identified the lack of an attractive career structure for researchers as a major barrier to enticing people into research. It states "*The development of more visible career paths will make science more attractive and has the potential to give Ireland a competitive advantage in the international market for top researchers.*" The SSTI also identifies the increased movement of researchers between the higher education sector and industry and the public sector as essential to developing Ireland as a location of choice for world class research.

The Higher Education Research Group (HERG), which was established under the SSTI, established a working group to focus specifically on the development of career paths for researchers in the higher education domain. The Group comprises representatives from relevant Government Departments, Higher Education Institutions and funding agencies and has consulted with all relevant stakeholders. Further details on the Group and its terms of reference are outlined at Appendix 1.

The Advisory Science Council has also examined the area of researcher careers and it published a report in October 2008 entitled "Towards a Framework for Researcher Careers"<sup>1</sup>. This report proposes a strategy to develop a career structure for researchers across the three sectors - higher education, enterprise and the public sector - and its recommendations have been a key input to the considerations of the HERG working group.

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<sup>1</sup> [Towards a Framework for Researcher Careers - Advisory Science Council - An Comhairle Eolaíochta | www.sciencecouncil.ie](http://www.sciencecouncil.ie)

## 1.2 EUROPEAN CONTEXT

Growing research capability is a core component of the European Union's drive to become the most competitive and dynamic, knowledge-driven economy. The creation of a European Research Area in 2000 has become a central pillar of the EU 'Lisbon Strategy' for the creation of sustainable growth and jobs. A key development has been the adoption of the EU objective to devote 3% of GDP for research.

The EU has also identified the development of an attractive researcher career and increased researcher mobility as key elements in achieving a dynamic knowledge intensive economy. Addressing these key challenges is essential to attracting and retaining the human resource necessary to power the R&D upon which a knowledge intensive economy can be built.

The 'European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers'<sup>2</sup> sets out the roles and responsibilities of researchers, their employers and funders and was adopted by the European Commission in 2005. Increased take-up of the Charter's principles by member states is identified as a key mechanism in the creation of a world class European research system.

In 2008, the European Commission issued a Communication "Better Careers and More Mobility: A European Partnership for Researchers". There is a requirement for Member States to adopt a National Action Plan setting out specific objectives and actions based on the following priority actions –

- Open recruitment and portability of grants
- Meeting the social security and supplementary pensions needs of mobile researchers
- Attractive employment and working conditions
- Enhancing the training, skills and experience of European researchers

The Department of Enterprise, Trade and Employment is undertaking a consultation process in this regard.

As workers are increasingly likely to have a variety of jobs during their career, a 'flexicurity' approach is being considered at EU level as the way to effectively combine a flexible labour market with a high level of employment and income security<sup>3</sup>. The flexicurity concept reflects the need for individuals to have employment security rather than job security as fewer people have the same job for life. A strong emphasis on generic and transferable skill training will ensure that researchers are employable across a variety of jobs and hence they benefit from the flexibility of upward mobility as well as the security of finding new employment resulting from increased skills and investment in training.

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<sup>2</sup> [http://ec.europa.eu/eracareers/pdf/am509774CEE\\_EN\\_E4.pdf](http://ec.europa.eu/eracareers/pdf/am509774CEE_EN_E4.pdf)

<sup>3</sup> Towards Common Principles of Flexicurity: More and better jobs through flexibility and security. European Commission, 2007

### 1.3 RESEARCH IN IRELAND

Public funding for research in Irish Higher Education Institutions has increased significantly over the last ten years. Higher Education R & D expenditure, the majority of which is provided from public sources, increased from €200m in 1998 to an estimated €660m in 2007<sup>4</sup>, while the numbers graduating with PhDs grew from 808 in 2005 to an estimated 1,100 in 2008<sup>5</sup>. Significant developments in the last decade include the introduction of the Programme for Research and Development in Third Level Institutions and the establishment of Science Foundation Ireland and the Research Councils, and adoption by Government in 2006 of a whole of government Strategy for Science, Technology and Innovation.

There are a number of Departments/Agencies supporting research in Higher Education, including –

- Department of Education and Science/Higher Education Authority,
- Department of Enterprise, Trade and Employment/Science Foundation Ireland & Enterprise Ireland
- Department of Health and Children/Health Research Board,
- Department of Agriculture, Fisheries and Food/Teagasc & the Marine Institute,
- Department of Communications, Energy and Natural Resources,
- Department of Environment, Heritage and Local Government/EPA,

There are significant variations in the funding instruments used by these bodies and the conditions attaching to them.

In general, researchers in HEIs are employed by the institution, although the HEI is usually dependent on a third party, the research funding body, for salary funding. Without the certainty of continuing funding and given the limited number of tenured positions available in higher education institutions, HEIs have been using fixed purpose and fixed term contracts for employing research staff. It became common for a researcher to hold several short-term contract positions or even stay on short-term contracts for the duration of their research career.

There is also a fourth party involved in the employment of researchers – the Principal Investigator (PI). In the past, whilst the researcher was employed by the HEI, it was the PI, in effect, who was responsible for setting the terms and conditions of employment (including remuneration) of the researcher. This has given rise to significant variations in contract conditions both within and between HEIs. The importance of more standard contracts has been recognised by HEIs and contracts are now formally agreed with the central involvement of Human Resources (HR) Departments at institutional level.

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<sup>4</sup> Forfás Science Budget 2008

<sup>5</sup> HEA

#### **1.4 THE NEED FOR A RESEARCHER CAREERS FRAMEWORK**

There is currently no national researcher career structure in operation in Ireland for the estimated 3,000 contract researchers in the third level sector. The number of researchers in the Irish higher education system has increased significantly in the last decade. Currently less than 30% of contract researchers obtain a tenured position in a HEI and as the number of researchers increase the percentage of researchers finding employment outside the higher education sector will increase further. This expansion and the flow of researchers out of the academic system and into the services, enterprise and public sector needs to be managed in a sustainable way.

The mobility of researchers facilitates the transfer and sharing of knowledge between academia, enterprise and business thereby promoting a culture of innovation and enabling Ireland to achieve its aim of building a Smart Economy and Society. The development and implementation of an attractive structured career path will be imperative to developing the SSTI goal of a world class research system in terms of retaining the best researchers in Ireland and attracting the best researchers, both Irish and international, from abroad. Developments within the EU to improve the career development and mobility of researchers and the introduction of the Protection of Employees (Fixed Term Workers) Act 2003 (FTWA) add further impetus to the need for a change in the way researcher careers are structured in order to provide appropriate employment conditions for contract researchers.

The development of a career structure for researchers should incorporate clear definitions of titles, a performance development and appraisal system and continuing professional skills development. Progression within this structure must be based on a transparent, open and competitive process.

## 2. NATIONAL RESEARCHER CAREER STRUCTURE

### 2.1 Title Structure

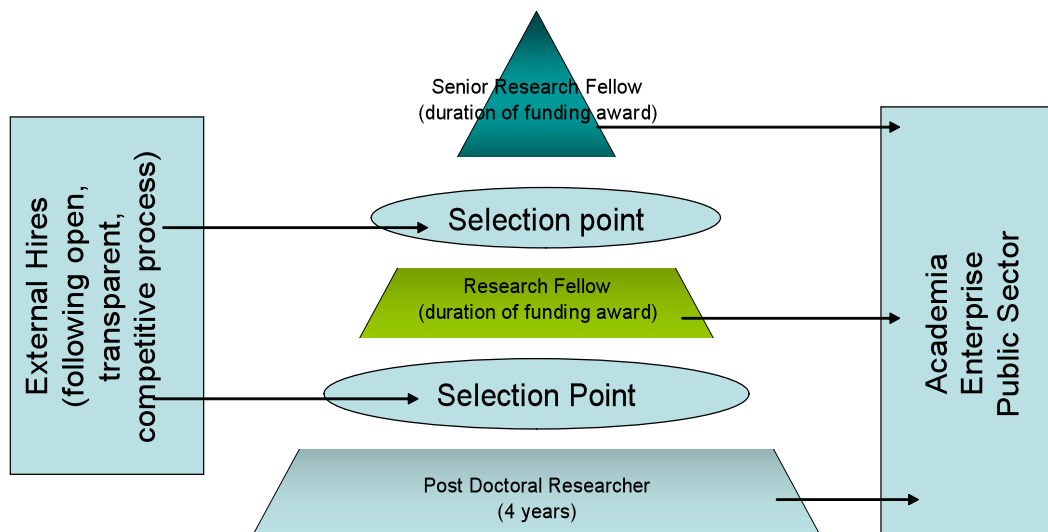
Researchers are defined as ‘professionals engaged in the conception and creation of new knowledge, products, processes, methods and systems and also in the management of the projects concerned’ (OECD 2002). Traditionally the term ‘Postdoc’ referred to an early stage researcher who had recently finished a PhD and was working on contract until they gained a permanent academic position. However, as it has become common for a researcher to hold several short-term contract positions or even stay on short-term contracts for the duration of their research career, the generic term Postdoc is misleading as it refers to a wide range of researchers at different stages in their career.

In order to provide clarity around the roles and responsibilities of researchers at different stages of their careers, it is proposed that a career title structure, consisting of three titles as outlined below, should be adopted by all third level institutions and funding agencies. The career structure will be pyramidal, with fewer researchers becoming a Research Fellow and Senior Research Fellow. The number of positions available will be dependant upon the number of competitive research awards made by the research funding agencies at these levels.

The attainment of a higher title within the structure will be based on successfully obtaining a competitive research award through *an open, transparent, competitive, peer-reviewed and performance-based process*. Given the limited number of Research Fellow and Senior Research Fellow awards available, the implications are clear that for most researchers their career paths will be in the public sector, enterprise, services or academia. Inter-sectoral mobility is possible at all levels.

It is acknowledged that there is currently a large cohort of researchers in the system who have been employed on successive contracts, some of whom may already have attained contracts of indefinite duration (CID). It is proposed that the positions of these researchers are examined by the individual HEI with reference to relevant employment legislation, including the FTWA and the HEA Information Note on “*Research Staff and the FTWA*”. It is also important to note that these researchers are eligible to apply for academic positions and competitive awards from the various funding bodies.

**Recommendation 1: HEIs and funding agencies should adopt the proposed career title structure**



## 2.2 POST DOCTORAL RESEARCHER

This title will apply to newly qualified postdoctoral researchers and will be considered as an internship phase as the researcher will have dual goals in terms of the research project and their own career development. The researcher will be mentored by a Principal Investigator (PI), either one who has secured funding for the position or who is named as a mentor on the award that the Postdoctoral researcher has secured (e.g. Research Councils). It is envisaged that, in general, a researcher would hold the Post Doctoral Researcher title for a period of up to four years and it may be undertaken in more than one HEI<sup>6</sup>. This is in line with the recommendations of the Advisory Science Council report<sup>1</sup>. All Postdoctoral researcher positions should be advertised externally.

The primary focus of the Postdoctoral Researcher will be research however a particular emphasis during this stage should be placed on gaining experience in grant writing and acquiring generic and transferable skills (including project management, business skills and postgraduate mentoring/supervision). International and intersectoral experience is highly desirable and mobility would be strongly encouraged. Post Doctoral Researchers should develop a career development plan to map out their research and career goals and should be evaluated through a systematic

<sup>6</sup> It is acknowledged that not all early stage researchers will spend exactly 4 years as postdoctoral researchers - some may spend less if they successfully obtain a higher level award, and some may spend more depending on the terms of the funding award. However, HEIs and funding bodies must take cognisance when considering postdoctoral positions that this period is deemed to be an internship phase with career development a key goal.

and continuous professional development and appraisal system. HEIs must ensure that sufficient support and guidance is provided to postdoctoral researchers during this phase of career development and that from the start of the contract they clearly outline the expectations and options available to the postdoctoral researcher upon completion of this phase.

### **2.3 RESEARCH FELLOW**

The Researcher Fellow title would be awarded to individuals who have personally secured their own independent external research funding inclusive of their salary following an open, transparent and competitive selection process by the research funding body or who have been appointed by the HEI following an open competition\*. The Research Fellow would still be associated with a Principal Investigator who would act as their mentor and facilitate access to research infrastructure.

This Researcher must have a track record of high quality peer reviewed publications, be experienced in post graduate supervision and have project management experience. Knowledge transfer and commercialisation experience should also be taken into consideration.

The Research Fellow may also have some teaching and mentoring duties. Research Fellows should be evaluated through a systematic and continuous professional development and appraisal system.

### **2.4 SENIOR RESEARCH FELLOW**

The highly prestigious and competitive Senior Research Fellow title would be awarded to individuals who have personally secured their own independent, external research funding, inclusive of salary, following an open, transparent and competitive selection process by the research funding body or who have been appointed by the HEI following an open competition\*. The Senior Research Fellow would be completely independent with access to their own research infrastructure. A very small number of positions with this title will be available.

This Researcher would have substantial experience in research and project management, a track record of high quality peer reviewed publications, and an excellent track record in obtaining research funding, including larger funds for research teams and infrastructure. Knowledge transfer and commercialisation experience should also be taken into consideration.

The Senior Research Fellow may also have some teaching and mentoring duties. Senior Research Fellows should be evaluated through a systematic and continuous professional development and appraisal system.

*\* this title may also be awarded to researchers who have been independently assessed and selected by a research funding body as part of a successful project grant application.*

### **3. CAREER DEVELOPMENT AND RECOGNITION**

#### 3.1 Career Development

Researchers must be encouraged to take responsibility for their own career development in the knowledge that for most researchers their careers will lie outside academia. All researchers should have a personal career/research-development plan to highlight specific research project goals and milestones, and to enable them to explore various career options and identify any further skills/experience that they may need. This is in line with a life-long learning approach for researchers at all stages of their career. HEIs should support researcher career development through the provision of advice and appropriate structures which will enable researchers to manage their own careers. In addition, sufficient support and training must be given to the PI, who plays a pivotal role in an early stage researcher's career development, to ensure that they are equipped to be an effective mentor.

**Recommendation 2: All researchers should prepare a career/research-development plan at the start of a contract.**

**Recommendation 3: Principal Investigators should have a formal role in the mentoring and management of researchers. Sufficient support must be given to the PI to ensure that they are fully equipped to be an effective mentor.**

#### 3.2 Performance Appraisal

Formal performance appraisal systems for contract researchers have not been developed on a large scale in HEIs. In line with procedures for permanent employees, researchers should have regular formal progress and review meetings which assess progress on the research project itself, but also ensure that career development requirements are identified and monitored. Career/research-development plans should reflect the outcomes of this appraisal process. This will provide researchers with direction for their future careers.

**Recommendation 4: A systematic and continuous professional development and appraisal system, similar to that used for permanent HEI employees, should be introduced in HEIs and managed by HR Departments.**

#### 3.3 Skills Development

It is acknowledged that researchers are primarily employed and funded to carry out a specific piece of research. However, these researchers must also be given the opportunity to plan their careers and acquire generic and transferable skills which will prepare them for career opportunities either within or outside the higher education sector. The majority of those who enter as postgraduate researchers will not gain permanent employment as an academic or researcher within higher education institutions. A strong emphasis on generic and transferable skill training will ensure that researchers are highly adaptable and employable across a variety of jobs and will be particularly crucial in equipping researchers with the appropriate skills for the enterprise, services and public sectors. A balance needs to be achieved between time spent on research and time spent up-skilling, this will vary depending on the stage of

career that the researcher is at and guidelines to identify best practise in this regard should be developed.

Examples of skills that are relevant to researchers include lecturing/tutoring, grant and journal writing, leadership and mentoring skills, budgeting, project management, business administration, negotiation, communication skills, intellectual property, technology transfer and entrepreneurship. Transferable skill training is currently being developed through structured PhD initiatives in the majority of the HEIs and similar opportunities should be made available to researchers.

The majority of researchers are already involved in activities other than “pure research” such as teaching, mentoring and lab administration and management. These are essential attributes for all researchers and their experience should be formally recognised and taken into account by HEIs during evaluation processes. Transferable skills training should also be formally recognised.

Grant writing is an essential skill that successful researchers need to develop. Currently, contract researchers may make a significant contribution to a funding application that they are not named on or gain any recognition for. It would be highly beneficial if significant contributions made by contract researchers were acknowledged on funding applications. In addition, the successful leverage of funding should be formally recognised and taken into account by HEIs during evaluation/promotion processes.

**Recommendation 5: Researchers at all levels should be encouraged to engage in continuous professional development. The percentage of time spent on this should reflect the career development needs of the researcher at that stage. Guidelines need to be established within institutions, and in consultation with funding agencies, on the amount of time a contract researcher should spend on activities outside the funded research.**

**Recommendation 6: HEIs and funding agencies should provide opportunities for researchers to acquire generic/transferable skills. HEIs should consult with funding agencies and relevant end users (enterprise etc.) on the course design for transferable/generic skills training.**

**Recommendation 7 Funding Agencies should allow contract researchers that have made a significant contribution to a funding application to be named on the application as a significant contributor.**

**Recommendation 8 Experience and skills developed should be formally recognised and taken into account in performance appraisal systems.**

### 3.4 Mobility

Mobility, both geographical and sectoral, is an important element in a researcher's career as it facilitates professional development and consolidates and widens their potential career prospects. It has been suggested that the increased availability of funding and researcher positions within the Irish HEI system has resulted in some decrease in the mobility of Irish researchers in recent years.

Mobility is also highly desirable for the research system as a whole as it is an important means of enhancing scientific knowledge through the development and transfer of research competencies, and the promotion of excellence in research. In terms of international mobility, initial employment abroad does not indicate a loss to the Irish research system but rather their continued progression in a successful researcher career. Attracting the best researchers back to Ireland after they have gained international experience will ensure that the Irish system will remain internationally competitive. Several programmes already promote the international mobility of researchers, including the EU funded Marie Curie programme.

Employers and funding agencies must also recognise the value of inter-sectoral mobility as an important means of enhancing scientific knowledge and the professional development of researchers. Mobility experience in all sectors should be fully valued and should be formally acknowledged during evaluation processes.

Open recruitment conditions have been identified as a key to attracting the best research talent and are a significant incentive to those considering or remaining in a research career. A transparent, open and competitive-based recruitment process where vacancies are advertised internationally as well as nationally will ensure that institutions are able to attract and select the best qualified researchers with the highest potential to achieve excellence in research.

**Recommendation 9 : Mobility experience should be encouraged, facilitated and fully valued and acknowledged within the researcher career framework.**

**Recommendation 10: A transparent, open and competitive-based recruitment process where vacancies are advertised nationally as well as internationally will ensure that institutions are able to attract and select the best qualified researchers.**

### 3.5 Gender

Women are underrepresented at senior levels in the Irish research system. Measures are needed to encourage a critical mass of women researchers at all levels of research. There are a number of initiatives to date in this area:

- Women in Technology and Science (WITS) was established in 1990 to actively promote women's participation in science and technology
- TCD's Centre for Women in Science & Engineering Research (WiSER) seeks to develop sustainable practices to ensure that women can compete in research on an equal basis using their scientific expertise, knowledge and potential.

- SFI's Young Women in Engineering Scholarship which aims to attract more high-achieving young women into third-level education in engineering disciplines.

**Recommendation 11 : The HEIs should address barriers to participation among female researchers and should develop specific policies such as flexible working arrangements and other research supports. HEIs and funding agencies should examine best practise in this regard.**

### 3.6 Formal Agreement on Principles for Career Support and Management

Some countries have developed formal agreements between the research funding bodies and higher education institutions that facilitate the development of an attractive and appropriate career structure for researchers, for example the UK<sup>7</sup> - see Appendix 3 for Agreement principles. It would be anticipated that such an agreement would consist of a set of principles for career support and management and also set out the expectations and responsibilities of researchers, their managers, employers and funding bodies. It would also specify the desired outcomes/competencies of researchers at each level of the title structure.

**Recommendation 12 : The development of an agreement between the employers and funding bodies to support the career development of researchers should be explored.**

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<sup>7</sup> The Concordat to Support the Career Development of Researchers – An agreement between the Funders and Employers of Researchers in the UK, 2008 <http://www.researchconcordat.ac.uk/>

#### 4. EMPLOYMENT LAW

The implications of all aspects of employment law and, in particular, the Protection of Employees (Fixed Term Workers) Act 2003 (FTWA) must be taken into account by HEIs in their role as employers.

Many researchers in HEIs are employed on short term contracts as their salaries are generally not funded from core resources, but from competitive research grants sourced from a variety of research funding agencies. Without third party funding, the HEIs may lack the capability to pay researchers. The development of sustainable approaches to research careers will require the central involvement of the HR Departments within HEIs in the management of the cohort of research staff within the institutions.

The FTWA aims to improve the quality of fixed term work by ensuring that workers on fixed term contracts are not treated less favourably than comparable permanent employees e.g. remuneration, leave entitlements, pension provisions etc. Furthermore, the Act provides that, subject to a number of exceptions, an employee can no longer be employed on two or more continuous fixed term contracts extending beyond four years. An employee with successive fixed term contracts may be deemed to have a contract of indefinite duration. It should be noted that successive contracts are permitted under the Act provided that there are specific objective grounds for doing so and these are stated in the researcher's contract at the beginning of their employment.

The Department of Finance's 'Guidelines on Best Practice for the recruitment and management of fixed-term employees in the Irish Civil Service', (December 2008) states that "It is essential, therefore, that the management of fixed-term contracts includes a system of monitoring to ensure that contracts are (i) compliant with the Act (and other legislation as appropriate) and (ii) do not become Contracts of Indefinite Duration (CIDs) through oversight."

The HEA issued an Information Note in January 2009 to all HEIs on "*Research Staff and the Protection of Employees (Fixed Term Work) Act 2003*" which provides the following advice in relation to contracts for research staff:

- (1) When first appointing a fixed-term employee the employer must inform employee in writing of the conditions determining the contract (fixed term; fixed purpose/task; specific event). The written contract should include:
  - Start date
  - Finishing date/or other objective ground for finishing contract
  - purpose of job (linking researcher to specific project/grant/scholarship etc – if possible)
  - reference to non application of Unfair Dismissals Act

At renewal of contracts the employer must inform the employee in writing, no later than the renewal date, of the objective grounds justifying the offering of another fixed term contract and why a CID is not being offered.

(2) If a researcher is on a first contract it is important to review it immediately to ensure it (if possible)

- Links the researcher to a specific grant/research project
- Has an end to the contract with objective condition(s) such as an end date, completion of project or other specific event
- Has an Unfair Dismissals Act exclusion clause.

**Recommendation 13 : HEIs must ensure that all contracts are issued, with the involvement of the HR Department and that contracts are very clear in relation to both their purpose and duration and where relevant, objective grounds are clearly outlined justifying successive contracts.**

## **5. FUNDING STRUCTURES**

There are significant differences in the duration of contracts and levels of remuneration across the various funding agencies. Implementing a researcher career structure will need consensus between funding agencies on the career titles and funding mechanisms used to facilitate these. The implications of recent employment law, most notably the FTWA, and the costs associated with career development are also matters for further consideration. There is a need for consultation and cooperation between HEIs and funding agencies in this regard and funding programmes will need to ensure coherence with the proposed researcher career structure and to ensure social costs are provided for and career development is supported.

There is currently a lack of a clear remuneration framework for researchers. The adoption of an agreed set of job titles, differentiated on the basis of objective standards of skills and competencies, will provide the basis for the future development of a transparent remuneration framework to be associated with the job titles. The development of such a framework will take place in the context of Government policy on pay and staffing numbers and will be subject to approval from the Department of Education and Science and the Department of Finance.

**Recommendation 14 : Research funding bodies should review their programmes to ensure consistency with the proposed researcher title structure.**

**Recommendation 15 : Funding mechanisms to support the career development of researchers and provide for relevant social costs should be examined.**

**Recommendation 16 : Research funding bodies, in consultation with HEIs, should submit proposals to the Department of Education and Science on a salary structure appropriate for researchers employed in HEIs, which can be adopted on a national basis. The implementation of a salary structure for researchers employed by the HEIs will require the prior approval of both the Department of Education and Science and the Department of Finance.**

## **6. IMPLEMENTATION STAGES**

**1. The following recommendations, some of which are already being addressed, will be formally implemented following the adoption of this report –**

- **The career title structure as detailed in section 2.1 will be adopted on a national basis by HEIs and funding bodies in line with recommendation 1.**
- **Funding bodies will allow contract researchers that have made a significant contribution to a funding application to be named on applications in line with recommendation 7.**
- **HEIs will ensure that recruitment processes are transparent, open and competitively-based (recommendation 10) and that all contracts issued are in line with recommendation 13.**
- **In line with recommendation 14, research funding bodies will review funding programmes to ensure consistency with the proposed researcher title structure.**

**2. HEIs should establish career development initiatives in their institution in line with recommendations in Chapter 3.**

**In line with recommendation 12, DES will establish a working group, comprising HEIs and funding bodies, which will be tasked with developing an agreement in relation to the career development of researchers based on the recommendations in chapter 3 of this report.**

**3. Research funding bodies, in consultation with HEIs, will commence discussions on the development of a salary structure in line with recommendation 16. Any proposals will be subject to the approval of the Department of Education and Science and the Department of Finance.**

**4. The recommendations outlined in this report will be monitored by the HERG. It is proposed that this framework should be reviewed in approximately two years, following adoption, to examine implementation and developments across the sector.**

### **RESEARCHER CAREERS WORKING GROUP**

In January 2007, the Higher Education Research Group (HERG) was established under the SSTI and at its first meeting it established three working groups, one of which was set up to focus on career paths for researchers in the higher education domain.

The Working Group is chaired by the Department of Education and Science (DES), and comprises –

- employers represented by the Irish Universities Association (IUA), the Institutes of Technology Ireland (IOTI) and Teagasc.
- funders and promoters of research represented by Science Foundation Ireland (SFI), the Irish Research Council for Science, Engineering and Technology (IRCSET), the Health Research Board (HRB) and the Irish Research Council for the Humanities and Social Sciences (IRCHSS).
- the Higher Education Authority (HEA) – as a funder and policy advisor - and Forfás.

The work of the group has included presentations from – HEI employers, funders and researchers. Following the presentations, submissions were invited from members of the working group to seek to identify possible and, practical options to address the various issues raised.

### **Terms of Reference**

#### **Introduction**

The Higher Education Research Group (referred to hereafter as ‘the HERG’) has been established as a key implementation structure for the national Strategy for Science, Technology and Innovation (referred to hereafter as ‘the Strategy’). Specifically the HERG will work to develop solutions which address barriers that may hinder progress in the attainment of the objectives of the Strategy. In order to assist it in its work, the HERG has approved the convening of several working groups to be composed of key stakeholders from the higher education and research domain.

One of the groups, the HERG Research Careers Working Group (referred to hereafter as ‘the Group’) has been set up to focus specifically on career paths for researchers in the higher education domain. The Strategy highlights the absence ‘...of an attractive career structure for people interested in doing research’ as a factor that is hindering engagement with research as a career. The Strategy also states that an emphasis needs to be placed on sustainable research career development rather than just focusing on early stage careers.

#### **Scope and Guiding Principles**

The scope therefore of the Group will be career progression within the Higher Education (HE) sector.

The work of the Group will be guided by the need to firstly, retain and/or attract back to Ireland, a significant proportion of those trained in the Irish system, recognising at all times the benefit of international experience to researchers in their careers and secondly, to attract excellent researchers to Ireland at all stages of their careers. The work will cover careers for researchers in the Science, Engineering, Technology, Humanities and Social Sciences domains.

The focus of the group will be on the development of a clear and broadly consistent path for career progression across the HE sector and will, as a principle, be informed by Government Pay Policy.

This work will complement the work of the Advisory Council for Science Technology and Innovation (ASC) on research careers. The scope of the latter work will cover research careers in the public and private sector, look at mobility between sectors and consider international practices in the domain. Furthermore the ASC will examine attitudes to research as a career.

### **Objectives**

Working with the relevant stakeholders the Group will:

- Review statistical information on contract researchers in the HE system.
- Seek to identify, and gauge the effect of, factors impacting on the creation of a career in research in HEIs, for example, remuneration, contract duration, career path, gender and diversity and supports.
- Consider whether and what options might improve the position and specify these options.
- Draw up a report for the consideration of the HERG detailing the current and outlining possible options.

### Extract from the SSTI on Researcher Careers

The SSTI states following -

“Human resources, in the form of sufficient numbers of suitably educated, high quality people, are essential to the achievement of the objectives for the research base. This has implications both for education at all levels up to and including undergraduate (to ensure a ‘pipeline’ of people interested in and qualified for a career in science or engineering<sup>11</sup>) as well as for the country’s ability to attract mobile international research talent. One factor which impinges on both these issues is the availability of an attractive career structure for people interested in doing research. The development of more visible career paths will make science more attractive and has the potential to give Ireland a competitive advantage in the international market for top researchers.

The recent five fold increase in national investment in research, together with the progress that has been made towards the development of a state of the art infrastructure and the growing integration of higher education research with enterprise and sectoral research, provide the foundations to differentiate Ireland as a highly stimulating place to conduct research. However, overall Ireland does not yet have a sufficiently high profile as a location of choice for world class research. This makes the recruitment of the best researchers from abroad a continuing challenge.

Under this strategy we therefore need to further differentiate Ireland by developing attractive research career paths. Flexible career paths are required to reduce the reliance on two-year post doctoral contracts. Emphasis will be placed on sustainable career development rather than only focusing at early stage careers. Currently, little opportunity exists for systematic career development within the HE sector. The Advisory Science Council will be requested to examine, and come forward with proposals to the IDC on, this key issue.

In addition, this strategy places a heavy emphasis on growing business expenditure on R&D. As well as building strong HE based research teams, the movement of researchers from the HE sector to industry and the growth of collaboration between companies and research institutions through the development of industry led networks and competence centres are priorities.

Within the HE sector, in the longer term, more of the top PIs will have to be incorporated into tenured posts in the universities. The wider programme of modernisation and reform of the higher education institutions and programmes of voluntary early retirement to provide for “new blood” will be especially important. The Strategic Innovation Fund announced in Budget 2006 will play a vital role in this regard.”

### **Building sustainable system of research teams**

In order to build a sustainable system of world class research teams across all disciplines, the number of science, engineering, economic and social science researchers in Higher Education Institutions (HEIs) and the public research system is being significantly increased by 2013. This is broken down as an increase in Principle Investigators (PI) by 350, Researchers (PhD+) by 1050, Research Assistants by 350, and Technicians by 350.

The SSTI suggested the following structure for a research team:

#### **Science, Engineering and Technology**

- 1 Principal Investigator
- 3 Postdoctoral
- 5 Postgraduate
- 1 technician/research manager/assistant

#### **Humanities and Social Sciences**

- 1 Principal Investigator
- 2 Postdoctoral
- 3 Postgraduate

**The Concordat to Support the Career Development of Researchers – An agreement between the Funders and Employers of Researchers in the UK, 2008**

Key principles:

1. Recognition of the importance of recruiting, selecting and retaining researchers with the highest potential to achieve excellence in research.
2. 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.
3. Researchers are equipped and supported to be adaptable and flexible in an increasingly diverse, mobile, global research environment.
4. The importance of researchers' personal and career development, and lifelong learning, is clearly recognised and promoted at all stages of their career.
5. Individual researchers share the responsibility for and need to pro-actively engage in their own personal and career development, and lifelong learning.
6. Diversity and equality must be promoted in all aspects of the recruitment and career management of researchers.
7. The sector and all stakeholders will undertake regular and collective review of their progress in strengthening the attractiveness and sustainability of research careers in the UK.