

Expert Group highlights future employment opportunities in research

The Expert Group on Future Skills Needs (EGFSN) today (Monday 6th September, 2004) predicted future demand for increasing numbers of researchers in enterprise and public research organisations.

A study on the supply and demand for researchers and research personnel in Ireland was undertaken by the EGFSN and Forfás to inform the development of the recently published report, "[Building Ireland's Knowledge Economy - The Irish Action Plan for Increasing Research and Development to 2010](#)". The study outlines that based on current trends, Ireland may experience a shortage of at least 3,600 researchers over the period to 2010. The main areas where shortages of researchers are projected to emerge are in ICT and biotechnology / pharmaceutical related disciplines.

"The message for firms, individuals and societies today in an increasingly competitive, global and knowledge-based economy is - innovate or fall behind . Ireland has made significant strides in increasing investment in public research and development in recent years demonstrating Government's commitment to the drive towards a knowledge-based economy," said Anne Heraty, Chairperson, the EGFSN.

"It is vitally important to ensure that Ireland can build further on its investment in R&D and take full advantage of the opportunities that our improving R&D base provides. Increasing our capability to support the development of high value products will rely on the availability of a good supply of high quality researchers. A skills shortage in this area would limit our ability to take advantage of growth in critical research activity in these sectors. Action needs to be taken to ensure this does not happen," she continued.

Background

EU Heads of State at Barcelona in 2002 agreed a target for Europe of 3% gross expenditure on R&D (GERD) as a percentage of GDP by 2010. In response, the Tánaiste and Minister for Enterprise, Trade and Employment, Ms. Mary Harney, TD, established a High Level Steering Group in 2003, under the auspices of the Inter Departmental Committee on Science, Technology and Innovation, to develop an Action Plan for Ireland.

In this report, a target for Ireland of 2.5% GERD as a percentage of GNP by 2010 is proposed. In order to meet this target, the study by the EGFSN and Forfás projects that a minimum of 8,000 additional researchers will be required over the next six years. Based on current trends, Ireland should be in a position to supply 4,400 of these. However, there is expected to be a shortfall of approximately 3,600 researchers over the period to 2010.

Balancing Future Supply of Researchers with Demand

While Ireland has for many decades trained excellent researchers, most of these have worked abroad due to a lack of career opportunities at home. In recent years, the substantial increase in Government funding for research has accelerated the trend toward a more sustainable research system. Ireland now needs to sustain and increase the annual supply of researchers from the third level sector. It needs its researchers to return to Ireland to work in enterprise and in the public research organisations. Ireland also needs to further develop as an attractive location for researchers from the EU and non-EU countries to come to live and work.

Recommendations

- increase the numbers of researchers produced through existing third-level system, particularly in areas relating to the ICT, biotechnology and pharmaceutical sectors
- increase funding for postgraduate research by the research funding agencies (this includes all funding agencies with a role in postgraduate training e.g. HEA/PRTL, SFI, IRCSET, IRCHSS, etc.) particularly in light of recent work undertaken by the HEA which identifies that stability and sustainability of research funding is a key factor in ensuring the supply of researchers
- greater targeted resources for funding scholarships through the research councils and an aggressive expansion of the cooperative funding mechanism with enterprise piloted by The Irish Research Council for Science, Engineering and Technology (IRCSET) in 2004. IRCSET currently has financial resources to support only 20% approx. of the excellent graduates applying for support under the existing scheme
- improve the mobility of researchers both to Ireland at research and partner level and between the public and private sectors and through pilot schemes to fund researchers to pursue R&D /proof-of-concept /prototype studies

Recommendations cont'd

- build on the IRCSET postdoctoral fellowship that has encouraged many new qualified researchers to enter the Irish system at the more junior levels
- continue to attract world renowned researchers to Ireland through Science Foundation Ireland
- ensure the retention of researchers in research careers by ensuring clear career paths, improved status and recognition and improved remuneration both in the public sector and industry
- Promote the return of researchers to the workplace after a career break through such measures as targeted fellowship programmes

The report can be downloaded in full at <http://www.skillsireland.ie>