## **REF MUSTN'T UNDERMINE COLLABORATIVE SCIENCE**



Rob Wilson MP Shadow Minister for Higher Education

HEFCE Chief Executive David Eastwood was right to boast last month that "The RAE gave the UK much to celebrate and the world much to envy." The 2008 RAE has demonstrated to the world that UK universities are producing a huge amount of internationally leading research. Perhaps the most interesting aspect of the review was that world-class research was evident throughout the UK's diverse set of institutions and not just found in the 'elite' collection of Russell Group Universities. For example, 5% of the University of Winchester's research was assessed as 'world-leading' and vet Winchester was only established as a university in 2005 and the University of Hertfordshire jumped from 93rd in 2001 to 53rd in the RAE league table. Overall, 49 institutions showed some form of world-leading (4\*) research, 16 universities had either 4\* or 3\* work in all

their submissions and 118 institutions had at least 50% of their research rated either  $3^*$  or  $4^*$ .<sup>1</sup>

Research in the UK sector is demonstrably in good shape and HEFCE needs to ensure in March that funding follows the highest quality research wherever it is found. But soon, when the dust has finally settled and funding for research has been announced, the 2008 RAE will fade into a distant memory and universities will start to prepare their strategies for the next assessment in 2014. The newly proposed Research Exercise Framework the Government has announced will be based on a metric system that includes assessing the quantity of citations.

It is of concern however, that many academics have criticised the new assessment model. They believe that if it's not carefully introduced it will do little to encourage collaboration between disciplines and may even prevent the assessment of quality research remaining at the heart of the evaluation process.

This concern has even been confirmed by HEFCE's own advisors. When responding to whether citation analysis provides an objective measure of research quality they said a resounding "No. Bibliometric

indicators measure impact rather than quality".<sup>2</sup> Additionally, a report published by researchers at the University of Wolverhampton's School of Computing and Information Technology that studied the citation level between monoand multi-discipline research found that regardless of quality "the major difference between mono-disciplinary and multidisciplinary indicates higher citation for mono-disciplinary." This trend was most apparent in many of the sciences, on average the level of citation for mono-disciplinary articles was more than double that for multidisciplinary articles for health, physical and life science research. But most affected was multi-disciplinary research in astronomy, physics and chemistry. Papers in astronomy and physics received 4.2 times fewer citations than those in single-subject journals and chemistry papers in multidisciplinary journals received 3.7 times fewer citations. As a result, the report's lead academic, Mike Thelwall, told the Times Higher that the findings should "put a spanner in the works"<sup>3</sup> for the REF.

Interdisciplinary research is vital if human-kind is to rise to the world's foremost problems. Research institutes that focus on strategies to combat 'grand challenges' rather than 'grand disciplines' are at the centre of this. The Walker Institute at my local University, Reading, is a great example because it brings together expertise from a wide range of disciplines in order to produce a better understanding of future climate change. The Wellcome Trust funds the Sanger Institute which brings together sciences to further our knowledge on genomes. Institutes such as these, which place key problem-solving at the centre of research are at the forefront of innovation. It would be a huge shame if our wonderful universities are unable to also contribute to the challenges multi-disciplinary research can solve because the REF unintentionally prevents, or discriminates against this practice taking place at our institutions.

The 2008 RAE proved that our universities are world class research institutions, but if Ministers fail to listen to the concerns of academics the sector's 'world-leading' reputation will, like the RAE, become a fading memory.

- 1 Times Higher http://www.timeshighereducation.co.uk /story.asp?sectioncode=26&storycode= 404786&c=2
- 2 HEPI: 2007; Evaluating and funding research through the proposed Research Excellence Framework

3 *Times Higher* http://www.timeshighereducation.co.uk /story.asp?sectioncode=26&storycode= 403796

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