

UK research funding

Is the UK still committed to basic biology research?

In early March the Higher Education Funding Council for England (HEFCE), the agency responsible for the distribution of almost £8 billion (US\$11.3 billion) of government funds for the academic year 2009–10, unveiled provisional funding allocations for research (£1.57 billion) and teaching (£4.78 billion). The budget, which accounts for roughly half of the funding at many UK universities, benefited from a 5.6% real-term increase. Awards for research are largely allocated according to the results of an evaluation of British universities carried out by the HEFCE every few years. The 'Research Assessment Exercise' (RAE) represents a thorough peer review evaluation of 52,400 researchers from 159 institutions. Although benchmarking against international research is not formally pursued, the international nature of the review process guarantees impartiality, and the RAE is well respected in the UK and abroad. Indeed, Enric Banda, President of Euroscience, suggests that central and southern Europe would benefit from adoption of similar achievement-oriented schemes. The latest RAE results, released last December, showed an increase in top-rated researchers in universities other than the two dozen that usually attract 80% funding (17% of researchers achieved the highest rating, and 37% the second highest; at least half the researchers from 118 universities fell into the top two categories). As a result, some worried that funding would be spread too thin to sustain world-class research, or that high priority subjects or application-oriented research would be favoured, while others worried that lower-ranked, but nevertheless valuable, research would fail to get support altogether. Universities are still evaluating the funding allocations, but it appears that while traditional top performers such as Cambridge and Oxford retained the bulk of research funding, several received real-term cuts, while the 24 'new universities' created in the 1990s increased their funding share from 0.9 to 3.2%. At first glance, HEFCE seems to have remained true to its goal of "supporting and rewarding excellence in research of all kinds, in all subjects, wherever it may be found. This includes research that bridges traditional discipline boundaries, and applied and practice-based work, as well as purely curiosity-driven enquiry".

Meanwhile, the UK government has decided to abandon the RAE scheme (apparently to save on the £12 million costs) in favour of a 'lighter touch' programme, the Research Excellence Framework, which will rely much more on bibliometrics, rather than peer review. We have discussed the inherent limitations of impact factors previously, in particular when comparing fields of dramatically divergent sizes and research activities (neither a good measure of the quality of an individual research programme). Comparisons against international benchmarks would help, but impact-factor related assessment already informs funding in many countries (the US may be an exception). Importantly, this move may encourage research in fashionable fields and application-oriented research over that in 'blue skies' and niche areas. While this move could save a few million, it may result in a less informed distribution of billions. It remains to be seen how far HEFCE will go in retaining independent expert reviews in the finalized assessment strategy due this autumn.

Much of the remaining research funding is awarded by seven UK Research Councils. Like HEFCE, these are independent of direct political

control. The Biotechnology and Biological Sciences Research Council (BBSRC) with an annual budget of £420 million, is the council responsible for most of the funding for the basic biological sciences and many cell biologists are among the 1,600 senior researchers it supports.

Last autumn, the BBSRC announced significant changes, which will come into force with the grant round now under evaluation: the number of research committees have been reduced to four with a wider remit and a more flexible set of experts drafted *ad hoc* to reflect the applications received. At the same time, ten new research and policy priorities came into effect. BBSRC stated that this list will "overarch all its activities", and notably many of the topics have societal and economic relevance: ageing, bioenergy, environmental change, crop science and global security. The more basic topics are rather focused: technology development, bionanotechnology, systems biology and synthetic biology. These topics are juxtaposed with policy keywords including economic and social impact, reduction in animal research and international collaboration. The council will complement these by issuing occasional 'highlight notices'. Some are concerned that the council that has traditionally supported the basic biosciences is *en route* to a more applied and narrow remit, and foresee starving for areas not readily supported by the medical charities. These concerns may yet be proven moot: BBSRC Chief Executive Douglas Kell assured that "the four new committees will take in the whole BBSRC remit, which is not changing, but will be bigger and more flexible. These changes are not about forcing researchers to work in industry. We want to encourage researchers to think about the strategic focus of their applications". A more streamlined grant evaluation system is to be welcomed. However, basic research, including the blue sky variety without immediate applications, has served the UK well in maintaining its status as a global research leader and it is to be hoped that research priorities will also be interpreted with considerable flexibility by the BBSRC.

Further reading: Connotea.org/user/ncb/tag/ukresearchfunding

Turning points

A series of essays describing pivotal events in the careers of cell biologists.

This month's issue of *Nature Cell Biology* presents the first in a new series of short autobiographical essays by leading scientists entitled "Turning Points". The articles offer a historical perspective of the career of the author and feature a first-hand recounting of a pivotal event that shaped their scientific future. Events may be as diverse as the unexpected generosity of a colleague, a move to a new destination or even arguments with peers that triggered a shift in research direction or led to the development of a new concept. We hope that the series will highlight some of the stories that are part of the folklore of cell biology — tales often recounted at the bar or beach during conferences, but which seldom find an audience in a more formal context. As such, we hope they will prove inspirational to scientists early in their career. The series launches on p364 with an account from Gottfried Schatz on how he was inspired to embark on a career devoted to studying mitochondria. The authors will be drawn from fields that are represented within the journal. If there is a particular cell, molecular or developmental biologist whom you would like to see featured in this series, please send your suggestions to cellbio@nature.com