

Brown and Drayson call for research debates

In recent speeches, both the Prime Minister and the Science Minister have called for public debates on science research priorities.

In the service of humanity

In the 2009 Romanes lecture, Gordon Brown said that he wanted to 'show that science matters to society and promote even more vigorously a positive public debate about the proper use of science in the service of humanity.'

He argued that, in the past, dominant media coverage had 'served the cause not of legitimate progress, but of fundamentalism' and went on, 'I believe we have learnt lessons from this – and we are now seeing a better, more balanced debate with the public.'

Academic freedom

Brown told his audience: 'After all, the public are the investor and so we need their support for scientific research and discovery. But in return for that our scientists get the academic freedom from which great things happen.'

'The downturn is no time to slow down our investment in science but to... focus on developing it as a key element of our path to recovery,' he said.

Picking up the theme of public investment in research, Lord Drayson told the Foundation for Science and Technology in a recent lecture that he wanted to 'spark a debate' on the principles of science policy, asking 'Has the time come for the UK... to make choices about the balance of investment in science and innovation to favour those areas in which the UK has clear competitive advantage?'

Peer review

He said he wanted decisions to be based on 'a consensus – between the private and public sector; between academia, government and business... Peer review, the judgements of the science community and the independence of the research councils are all key to our continued success,' he said.

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However, Don Braben of University College London, author of *Scientific Freedom: The Elixir of Civilization*,¹ told *People & Science*,

If your research is directed towards understanding something we do not understand, then you've not yet raised any ethical implications. It is quite proper for the public to be consulted about what use we make of results, but understanding, itself, is ethically neutral.'

'You cannot justify fundamental research on economic or social grounds... You cannot have blue skies research and peer review. They are contradictions... The research councils do not engage in debate on these issues. They say they do, but they don't really do so.'

¹ Donald W. Braben (2008). *Scientific Freedom: The Elixir of Civilization*. London: John Wiley & Sons

Explain, please

Scientists' responsibility to explain their work to the public is often overlooked, says Christopher Reddy of the Woods Hole Oceanographic Institution. Writing in *Science*, Reddy says that universities 'should devise detailed guidelines for evaluating ... outreach, so that peers can recognize it when they see it.' See www.sciencemag.org/cgi/reprint/323/5920/1405.pdf

Heaven and Earth

Beautiful images of the Universe are being used to inspire people to learn more about astronomy. Visually impaired people are being included with special panels, prepared with support from NASA. The free *From Earth to the Universe* project of the International Astronomical Union is taking place in over 40 countries worldwide. See www.fromearthtotheuniverse.org/

Discovering science centres' impact

Frontier Economics has continued its research for government into the impact of science and discovery centres. It has analysed questionnaires from the centres and undertaken in-depth interviews with Thinktank, Intech, the Eden project, Explore-At-Bristol and Catalyst. As *People & Science* went to press, its report was imminent.

Nuffield consultation

The Nuffield Council on Bioethics is holding a public consultation on the ethical issues raised by online healthcare, telemedicine and commercial medical profiling technologies such as DNA testing and body imaging. A report will be published in spring 2010. The deadline for responses is 21 July 2009. See www.nuffieldbioethics.org/go/ourwork/personalised-healthcare/page_968.html

Actively confusing

Physical activity guidelines are too confusing. They're not helping people to know whether they are sufficiently active, according to new research.

Wide variations

Dylan Thompson of the University of Bath, Alan Batterham of the University of Teesside and colleagues looked at how different guidelines would classify the physical activity of a group of 90 men aged between 45 and 64. They found large differences in how many would be classed as sufficiently active to remain healthy.

Thompson told *People & Science*, 'Over the years there have been various physical activity guidelines published from a number of different organisations around the world. We found that even ostensibly small differences have a major impact.'

Small difference?

Batterham gave an example: 'Guidance from the Department of Health's Chief Medical Officer [CMO]... clearly states that we should do at least 30 minutes of at least moderate intensity activity on five or more days [per week]. Critically, these 30 minutes can be in one go or in bouts of at least 10 mins, such as 3 bouts of 10 minutes each day.'

Exercise that lasts for less than ten minutes at a time doesn't count towards the 30 minutes total, according to the CMO's guidelines. Batterham continued, 'With our data, if you ignore the requirement for the activity to be in bouts [of at least ten minutes then] 98 per cent of the sample are active. If you adhere to this detail, then only one in four meet the recommendation.'

The National Institute for Health and Clinical Excellence [NICE] guidance state that doctors should screen patients for meeting the recommendation, but they neglect to mention the [CMO's] requirement for minimum bouts of 10 minutes.

'We need a clear, unambiguous message for both practitioners and public. [We should] apply the same rigour... as to diagnostic tests for other health outcomes, as physical inactivity is an independent risk factor for many chronic diseases,' he said.

'We need to apply these guidelines without shortcuts,' Thompson added.

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NICE responds

In response, a NICE spokesperson told *People & Science*: 'The recommendations in the NICE guidance relate to ways in which professionals can work to increase activity levels in patients who would benefit and are based on the Chief Medical Officer's guideline for activity which is clearly referenced in the recommendations.'

Thompson countered: 'Primary care practitioners who apply the NICE guidelines as written and use the self-report measurement tool they propose will fail to identify who would benefit, as many people will be classified incorrectly as sufficiently active.'



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Sssh!

Liverpool University researchers say the media trivialises climate change: three years' total print coverage was equivalent to a month's worth of health coverage. Dr Neil Gavin believes the limited coverage is unlikely to convince readers that climate change is a serious problem that warrants immediate and decisive action.

Science in policy meeting

A symposium on the production, communication and use of scientific knowledge will take place on 15-16 June at Strathclyde. It will be hosted by the Public Interest Research Network and the Occupational and Environmental Health and Safety Research Group at Stirling University. More from Andrew Watterson at Stirling University.

No simple mental health formulas

Nordic politicians, researchers and the public have met in Iceland to discuss ways to treat mental illness. 'Despite popular belief, there is no consensus on the science,' says organiser Lars Fredén of the Nordic Research Academy in Mental Health. 'It's vital to have users' views on what's important,' he says.

Product of work

Ian Stewart, Professor of Mathematics at the University of Warwick, has won the Christopher Zeeman Medal. The medal recognises the contributions of academics in promoting mathematics to the public. It is jointly awarded by the London Mathematical Society and the Institute of Mathematics and its Applications.