

British scientists in 'last chance' appeal

[LONDON] Last-minute efforts are being made to ensure that Britain's new Labour government includes a significant increase in science funding in its eagerly awaited comprehensive spending review.

The outcome of the review is likely to provide a public spending framework for at least the four years up to the next general election. Many in the research community therefore view it as a last chance to secure a commitment to enhanced support over this period.

Last week, the pressure group Save British Science launched a campaign, modelled on similar movements in the United States and Japan and intended to build public support for its case, to persuade the government to double its spending on research and development over the next ten years.

The move coincided with a report from the House of Commons Select Committee on Science and Technology, which calls for an urgent injection of at least £410 million (US\$684 million) for university laboratories and research equipment to stave off what it calls the "crisis" in university research.

John Battle, the junior minister for science, has already voiced his support for the efforts by Save British Science to secure more funding for research. Officials at the Department of Trade and Industry point out that

several recent funding decisions already point in this direction. For example, the annual budget announced last month by Gordon Brown, the Chancellor of the Exchequer, included the announcement that the government is to provide £20 million towards a new £50 million 'University Challenge' fund. The fund will provide seed capital to help universities to turn research results into commercial products.

Further contributions to this fund, whose creation was proposed by the committee headed by Lord Dearing that reported last year on the future of British universities (see *Nature* 388, 413; 1997), will come from charitable foundations. In particular, the Wellcome Trust and the Gatsby Trust have already promised support.

Last Friday, Battle also announced that the government has agreed to provide an extra £4.5 million to three programmes in space technology. These include £500,000 for a design study into a science satellite intended to demonstrate the new technologies needed for future collaborative exploration into deep space. They come on top of a £21.2 million package of investments in three programmes by the European Space Agency, announced last month and covering satellite multimedia links and Earth observation.

But the amounts of money involved in the decisions announced so far have been relatively small in terms of the government's overall expenditure on research and development, which totals about £2.6 billion a year. The key funding decisions will depend on the outcome of the spending review, set up shortly after the Labour party won the general election last May.

A key focus here will be the extent to which the government is prepared to provide additional funds to pay for the refurbishment of university laboratories, widely considered to be a top funding priority.

"There was an investment in infrastructure from the 1930s to the 1960s, but as we went into the 1970s, the investment dried up," Dave King, professor of chemical engineering at the University of Cambridge, said at the launch of the Save British Science campaign last week. "Many of us are working in laboratories that have not been refurbished since then, and indeed would not pass current health and safety standards." Save British Science argues that doubling investment in research over the next ten years "is not an ambitious objective, but a necessary one".

Addressing the decline in funding for infrastructure was also one of the main conclusions of the House of Commons select committee report published last week. The report is a response to the Dearing inquiry, which was set up by the previous, Conservative, government.

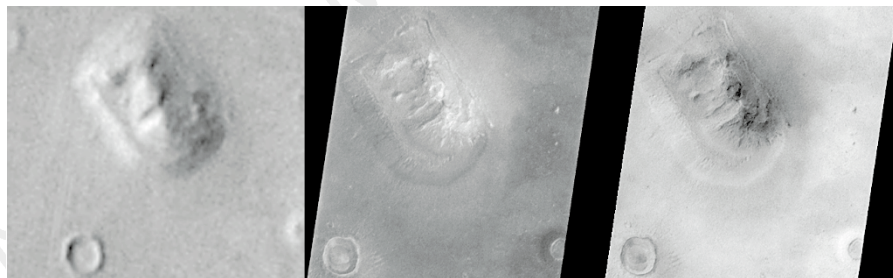
The Dearing committee recommended a £500 million fund providing low-interest loans to help universities to rebuild research infrastructure. The fund would be set up with money from both the state and the private sector. But the select committee rejected this suggestion, believing it to be unworkable. Members instead called for a cash injection from the government of between £410 million and £430 million.

The committee's report says it is the government's job to fund basic research infrastructure. It quotes witnesses from industry who argue that industry would be unwilling to contribute to a fund it could not control and from which it would receive no measurable benefit. The report says: "Until the financial state of universities improves... it would be absolute folly to encourage them to borrow money." Under-investment in research infrastructure is undermining researchers' ability to attract private-sector funding, the report adds.

Michael Clark, the committee chairman, says that major industry witnesses who came before the committee told how university scientists were knocking on their doors for access to advanced research equipment. "Ten years ago, it used to be the other way round," he says.

David Dickson & Ehsan Masood

NASA critics silenced as Mars loses face



Now you see it, now you don't: Mars Global Surveyor has shown the famous 'face' to be a rocky mesa.

[WASHINGTON] In youth the chin was strong, the gaze steady. Now, more than 20 years later, the Face on Mars does not appear to be its old self. The Mars Global Surveyor (MGS) snapped two new photos (centre and reversed at right) of the much-touted 'face' — actually a mesa of resistant rock in the Cydonia region of Mars — during a close pass of the planet last Sunday (5 April).

The new image was taken from a range of 444 km; each picture element has a resolution of 4.3 metres. Where some had imagined eyes, lips and a nose in the 1976 Viking picture (left), there now appear peaks, ridges and other features that show the face to be a natural geological formation.

The MGS is attempting several such targeted observations before resuming aerobraking operations in September to

lower its orbit. And for the US space agency NASA, taking the picture was a relatively simple way to silence conspiracy theorists who claimed that it had been trying to cover up evidence of the former presence of an 'intelligent' being on the planet.

But targeting small objects with Surveyor's fixed-view camera is "technically very challenging", says Michael Ravine of Malin Space Science Systems in San Diego, California, whose camera took the image.

Last week's attempts to photograph the much smaller Viking landers and Mars Pathfinder were not as successful. The camera track missed the Pathfinder and Viking 1 altogether, and the Viking 2 image was overexposed. But the MGS team will have two more chances before the end of April to get it right.

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