

Edited by Colin Macilwain
 news@ResearchResearch.com
 Tel: 020 7216 6510
 Fax: 020 7216 6501
 Unit 111, 134-146 Curtain Road, London EC2A 3AR

We are not going to the moon

The government has lately been sending out mixed messages about science policy in general and its approach to space science in particular.

On the one hand, well-publicised cuts at the Science and Technology Facilities Council will leave UK astrophysicists bereft of access to facilities with which they have been involved for 15 years (*see views, p16,18*).

On the other hand, science and innovation minister Ian Pearson is telling the BBC that it is time for Britain to revisit its eminently sensible 1986 decision to get the hell out of manned space flight (*see news, p6*).

That decision has relieved Britain of 22 years of direct involvement in the International Space Station, perhaps the largest white elephant in the history of space flight—which is saying something.

Pearson's comments reflected a modest but nonetheless consequential commitment made in the British National Space Centre's latest five-year plan, published on St. Valentines Day, to review the 1986 decision.

What can have occasioned this new direction? A charitable interpretation might be that the government is attempting to indulge NASA, with which Britain the next day announced a potentially fruitful collaboration, called MoonLITE. NASA remains a formidable technical partner for British space scientists but has, alas, been saddled by President Bush with a commitment to return astronauts to the moon, and one day to Mars.

However Pearson's comments suggest a more direct explanation. He says that the rest of the world is "on the cusp of a wave of new space exploration" and wants to "make sure that the UK does not get left behind". The main driver for this 'wave' is the posturing of the Chinese and Indian governments as they move to dangle the prospect that a few of their people will one day, briefly, gloriously and pointlessly perambulate the barren surface of the Earth's nearest neighbour.

Britain isn't alone in allowing this innocent pursuit of vanity to influence its science and technology spending plans. Japan has issued reluctant noises along the same lines. The burst of Chinese activity is also making it harder for US political leaders, such as Barack Obama, who have contemplated spiking Bush's manned spaceflight plans.

Specious patriotic arguments (how can the US *possibly* surrender this frontier to the Chinese?) thus emerge to shore up the real political heft behind these plans, which comes from aerospace contractors and their tens of thousands of employees in Florida, Texas and California.

The UK, thankfully, has no significant industrial constituency pushing the government to waste money on expensive human space flight projects. It also has no conceivable need to venture there in search of geopolitical prestige. If Britain foresees an Antarctica-style attempt by global powers to carve up territory in space and on the moon in the name of science then it should be using its influence at the UN if any—to head the scramble off, instead of rushing to take part in it.

Pearson, the STFC chief Keith Mason, and the rest of the government science apparatus should, meanwhile, concentrate their limited resources on areas of genuine national excellence, such as ground-based astronomy, and leave the "final frontier" to those with money to burn on it.

elsewhere

"Could we, in fact, instead of looking at a whole animal as our first line of analysis, look at individual cells?"

Francis Collins, director of the US National Human Genome Research Institute, on the possibility of replacing chemical toxicity tests on animals with tests on cells grown in the lab. BBC News online, 15/2/08.

"In order to apply this technology to clinics, we still have to study the safety of [induced pluripotent stem cells] in bigger animals such as monkeys. It will take years to do this."

Takashi Aoi, a stem cell researcher, on his advancements in reprogramming mouse skin cells into stem cells. The Daily Telegraph, 14/2/08.

"To control HIV immunologically the scientific community has to...do something that nature, with its advantage of 4 billion years of evolution, has not been able to do."

David Baltimore, president of the American Association for the Advancement of Science, explains why there has been little progress on AIDS vaccines, despite 25 years of intensive research. Financial Times, 14/2/08.

"The facilities in Edinburgh were not suitable for expansion. The buildings are old and people are sitting on top of each other."

Stem Cell Sciences, Edinburgh-based biotech company, on why it is leaving the city in favour of expanding its operations in Cambridge. The Scotsman, 15/2/08.

"I am dismayed by what appears to me to be yet one more instance in which knowledgeable persons in the field of bioterrorism are not being brought in and consulted on what might be real problems and what are purely spurious problems."

DA Henderson, of the University of Pittsburgh's Center for Biosecurity, after a geneticist was fined \$500 for supplying bacteria to an artist. The Scientist, 11/2/08.

decade

"The funding changes were made on the basis of strategic decisions, rather than a straight reflection of the assessment exercise."

Ben Mifflin, director of the Institute of Arable Crops Research, on the Biotechnology and Biological Sciences Research Council's strategic grants awarded to its institutes following a performance review. IACR's funding was reduced.

Research Fortnight, 25 February 1998