

Summers' winter of discontent

The president of Harvard has learnt a painful lesson in public communication. The media and Harvard academics may have over-reacted to his comments about women in science, but there is an opportunity to benefit from the affair.

To judge from media reports last week, you would think that Harvard University's president Larry Summers had told everyone in a skirt to quit science, pack up their handbag and head home to the kids — clearly biologically incapable of rivalling men in this intellectually thorny field.

What Summers actually said has been harder to discern. There is no transcript of the speech he made at an academic meeting. But by most accounts, he talked about potential reasons why so few women reach top positions in science and engineering. And he at least raised the possibility that innate differences could play a part.

Whatever his actual words, the interpretation — that women suffer an inborn and insurmountable intellectual handicap in science — whipped up a firestorm of protest both on and off Harvard's (male-dominated) campus. Swamped by fuming letters and stinging media reports, Summers has released serial cringing apologies in which he emphasized his efforts to bump up the number of female scholars at Harvard — actions for which some staff, at least, give him credit.

His latest remarks are consistent with his reputation for making blunt and provocative comments. That hasn't gone down well at Harvard, where his radical plans for change have raised hackles since he took over in 2001 (see *Nature* 433, 190–193; 2005).

The latest debate about gender inequality has provided an opportunity to look afresh at the causes and potential solutions. Is there any evidence for innate differences in the sexes' cognitive abilities? Researchers say there is. One well-explored area is gender disparity in

processing spatial problems: men and women have been shown to use different areas of the brain to weave their way out of a virtual-reality maze (G. Grön *et al. Nature Neurosci.* 3, 404–408; 2000).

Unfortunately, this doesn't resolve the question in hand. Men's and women's brains may work in slightly different ways, but researchers cannot say for sure whether these disparities underlie differences in their exam performance or ability to scoop top academic jobs. By the time adolescents take tests or women are applying for tenure, it is difficult to tease apart possible contributory biological differences from the complex cocktail of other factors that could be holding them back. These include society's sexual stereotyping, dismal family support and old-fashioned discrimination. Summers also mentioned some of these in his speech.

The Harvard president needs to think more carefully before he speaks, even when, as here, the occasion is off the record. But the hullabaloo should not deter academics from discussing important if disquieting questions, both on principle and also in the hope of pinpointing causes and finding solutions.

The faculty at Harvard and other institutions should view this furore as an opportunity to highlight shortfalls in the system that handicap women, and demand that they be improved. Female scientists, engineers and mathematicians at Harvard might find this a good moment to ask for a promotion — and those outside its hallowed walls should mail in an application. With some concerted action, the fallout could be a boost for female scientists everywhere. ■

Data sharing for disasters

Last month's tsunami and its aftermath have highlighted a need for more science — and more effective sharing of data.

At last week's United Nations World Conference on Disaster Reduction in Kobe, Japan, space agencies discussing the applications of remote sensing received a lashing. They went there to highlight successes in using satellite images for disaster monitoring and rescue activities (such as December's tsunami), and to discuss the further development of their technologies. Researchers enthused about the use of satellite images to help dispatch rescue teams. For those whose houses were washed away, high-resolution 'before' and 'after' shots could even be used to claim property boundaries.

Impressive stuff, but is more high technology the answer? Remote sensing has so far not lived up to the promise that was attributed to it in the heady days when the projects were planned. The science has improved, but the dissemination of data has not.

Then there are the practical obstacles to using satellite data in the places where they are most needed — underdeveloped areas that have been hit by natural or other disasters. For example, wind speed and other cyclone-related data come in differently formatted tables and with different units, making them difficult to use in a crisis situation. These problems are not insurmountable but could make all the difference in a crisis.

To their credit, space-agency representatives recognized the problems and almost unanimously saw a need to push ahead with getting

more people using the data. But it is not clear how to move forward, with each side expecting the other to do more. Non-profit middleman companies, such as UK-based MapAction, can provide maps, and did so in Sri Lanka. Another solution would be to include in space-agency grants a requirement for local public outreach activities.

Claims that more high-tech solutions are required are questionable. Some proposals, such as expanding the use of satellites to give world-wide, real-time coverage of ocean surfaces, smack of scientific opportunism in the face of disaster — this must be avoided. Many of the problems that beset the Indian Ocean countries were not due to a lack of technological hardware. Many of the buoys, tide gauges and seismic stations that were in place were not put to proper use, partly because countries did not share effectively (see page 343).

Before the international scientific community sets out to right the wrongs of disaster preparedness and recovery, there needs to be an evaluation of what is already there and how it can be better used. New equipment to come on line in the Indian Ocean needs to be integrated to get the best results. Space agencies need to make sure that their satellite data get to the users. Countries on the Indian Ocean and elsewhere need to be encouraged to share data from their tide gauges and seismic stations as widely as possible.

In short, researchers must get data to where they are needed. ■