

Will the regulator please stand up

It's time for the South Korean government to launch an investigation into how eggs were obtained for a ground-breaking stem-cell experiment.

Once again, Seoul National University's Woo Suk Hwang is this week being accused of possible impropriety in allegedly obtaining human eggs for the first experiment to derive human stem cells from a cloned human embryo.

His accuser this time is Gerald Schatten of the University of Pittsburgh, a long-time collaborator of Hwang's. In a statement on 12 November announcing that the collaboration will now end, Schatten cites charges, first aired in *Nature* in May last year, of "oocyte donation irregularities" at Hwang's laboratory (see *Nature* 429, 3; 2004).

There were calls for an investigation back then, but South Korea's handful of bioethicists had no leverage, and nothing happened (see *Nature* 429, 490; 2004). Much of the Korean media repeated and endorsed Hwang's denials. Far from launching an investigation, the government backed his research with generous funding and dedicated a postage stamp to him. Some politicians even pledged to spearhead a drive to win him a Nobel prize.

Stem-cell researchers worldwide were scarcely more critical, perhaps fearing that any suggestion that this high-profile research had rested on an unethical practice would stain a field that has enough controversy attached to it already. As the situation in Japan amply demonstrates, such fears can rapidly thwart research opportunities in this sphere (see page 262 of this issue).

Schatten's actions reopen the questions raised last year. Did the experiment use eggs donated by a graduate student or by a member of the research team? Did donors receive payment for their eggs? Hwang has vigorously denied these allegations.

But this time, it will be harder for the Korean authorities to ignore these questions. The Korean media is taking a more critical view. According to some reports, Ky Young Park, the president's adviser for science and technology, has already promised an investigation.

An investigation led by Park would be less than optimal, however, as she was a co-author on the Hwang paper (*Science* 303, 1669–1674; 2004). She subsequently described her role in the work as that of a 'bioethics consultant' — and told *Nature* that she hadn't given any thought to the ethics of egg donation.

Park's real role in the work remains something of a mystery. Almost anyone else would be better placed to investigate this episode, but it remains to be seen who will do it. The ministry of science and technology does not seem to be keen. As time passes, an inquiry may become more difficult to conduct.

A thorough investigation is nonetheless required, not just for the sake of scientific integrity in South Korea, but to help persuade sceptics worldwide that research on human embryonic stem cells is being done ethically. This field of research could yet prove to be immensely fruitful, but it requires strong public support.

Stem-cell researchers will now find themselves on the defensive in proving that they are ready to stick to strict ethical codes. Just when Hwang was tying together an international stem-cell network with his laboratory at its hub (*Nature* 437, 1077; 2005), these allegations will reverberate around the world of developmental biology.

To maintain public support for any controversial field of science, researchers need to follow strict ethical guidelines — and be seen to be doing so. If for whatever reason that doesn't happen, responsibility jumps up a level. It then becomes the job of regulatory bodies and funding agencies to ensure that researchers are brought to account. Is anyone in South Korea going to step up to the task? ■

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Heavy weather

Washington DC still doesn't seem to understand the threat posed by global warming.

Climate change is a political science, and a messy one at that. This issue of *Nature* includes overviews and opinions that shed light on how researchers and citizens are responding to the regional effects of climate change. But at any level, the field is beset with genuine scientific uncertainties and complexities. Politically, these challenges are compounded by confusion on the part of the public and manipulation by sceptics of global warming.

The United States, of course, is rife with both confused citizens and vocal sceptics. But it is also home to many of the world's leading climate scientists, and they are involved in a major attempt to take

the lead in this arena — an effort that now seems, unfortunately, to be foundering.

This week the US Climate Change Science Program held a workshop to assess its progress so far, and to look ahead to its future goals. The programme is supposed to produce 21 reports summarizing various aspects of climate science (see *Nature* 436, 890; 2005). These should represent the best consensus that science can offer, and are due to be signed off by the US government, with the White House being the final step in the approval process. But if the brief history of the project's first report is any guide, the exercise will be lucky if it ever reaches fruition.

Climate researchers had hoped that this week's meeting would showcase the science coming out of the first report, on temperature trends in the troposphere. The report had successfully undergone review by the National Research Council and was about to be posted on the web for 45 days of public review. After that, with any changes