

A judgement fit for prime time

Last week's verdict on a celebrated case of scientific misconduct describes a series of misconceived accusations, ill-considered evidence and faulty judgements. But researchers should hesitate before taking too much comfort from the outcome.

AMONG those who worry about the public understanding of science are a few naive souls who believe that things would get better if researchers featured in soap operas. But when science itself becomes high drama, with intellectual cut-and-thrust tinged with soapy charged emotions, the sang-froid of television executives has been known to turn, well, lukewarm. Now, as a worthy successor to 'Life Story' (a superb dramatization of the Watson-Crick discovery), comes a story-line from the US Department of Health and Human Services (DHHS): 'Research integrity adjudications panel, subject: Thereza Imanishi-Kari'.

Equivalent in length to three-quarters of an issue of *Nature*, the document (see page 719) represents the climax of a ten-year saga in which the perceived roles of individuals and organizations have shifted from the villainous to the heroic, and vice versa. Those involved are gifts to script-writers: a congressman apparently determined to show that scientists cannot police themselves; a Secret Service forensic department instructed by him to spend on laboratory notebooks more time, as it turns out, than they have ever spent on a threat to a president or on an illicit nuclear arms transfer; an accuser whose past motivation and character as a scientific colleague are open to question; an investigative body — the Office of Research Integrity (ORI) of the National Institutes of Health (NIH) — whose capacity for objective and intelligent judgement now stands implicitly condemned; a Nobel prizewinner who felt forced to resign from a university presidency over the affair, withdrew the disputed paper of which he and the accused were co-authors, and then retracted his withdrawal; and the immunologist whose reputation now stands triumphantly restored: Dr Imanishi-Kari.

The new judgement follows others reached less legalistically by the Massachusetts Institute of Technology, Tufts University, the NIH and the US Attorney's Office of the District of Maryland, all of which backed the accused against allegations by Margot O'Toole that Imanishi-Kari had falsified data to support the conclusions of a paper published in *Cell*. And it appears to vindicate those who warn against outsiders becoming involved in the policing of scientific conduct: witness Secret Service conclusions reached "without an appreciation of the bigger picture".

That conclusion would be premature. There are fierce debates in progress in the United States about how academic institutions might in the future be required to change their approach to scientific misconduct (see the latest counter-attack launched by Kenneth Ryan, chairman of a congressionally mandated panel set up to look at the issue, reported on page 719). The secretive way in which universities as distinguished as Harvard handle misconduct investigations (see *Nature* 377, 569; 1995) does not inspire confidence that publicly funded academics are subject to sufficient sanctions to deter wrongdoing.

But the biggest question now hangs over the ORI. Scandalously, it was the DHHS Research Integrity Adjudications Panel, the final point of appeal in such cases, that provided the first opportunity for Imanishi-Kari to confront the evidence and witnesses on which ORI based its 1994 judgement that she had committed misconduct, barring her from receiving federal funds for 10 years. That evidence, and the way in which it was deployed by the ORI, is repeatedly dismissed in the adjudication. But this was not explicitly

a trial of the ORI, and the roles of individuals in the ORI are not discussed. That is a major gap in the script that needs to be filled by the NIH and the DHHS, and conclusions about the ORI's future reached, before some confidence in the integrity of public judgements of misconduct can be restored. □

New dawn in Italy?

The new Italian research minister should be the first for some time to make a difference.

WE have seen it all before: a new Italian research minister pledging to introduce dynamism into the country's bureaucratic and over-centralized research and university systems, where, for decades, favouritism and acceptance of mediocrity have reigned hand in hand. Italy's scientists have watched a steady procession of research ministers ineffectively come and go with every short-lived government. They might be forgiven for wondering why Luigi Berlinguer should succeed in bringing about the necessary revolution where others have failed.

But there is something different this time. This government is not simply a reshuffle of the same old people, and parliament is awash with new faces. Old networks appear to have been broken, making real change possible. That is an opportunity to be seized.

As a seasoned politician, Berlinguer knows that he can make progress not only by creating new laws but also by pursuing the implementation of old ones. In that spirit, his main target is a law that has been gathering dust for six years, which would decentralize the CNR, Italy's research council which runs 350 institutes and research centres. Allowing institutes to develop their own rules and distribute their own budgets will help them on the road to greater efficiency. Because Berlinguer is prepared to make important personnel changes, he is attacking the huge inertia within the CNR, from its top rungs of political appointees to its lower rungs of ill-informed civil servants, which has blocked that road for so many years.

Berlinguer should not shy away from new laws to deepen the reforms. The CNR's arcane system of committees, which decide how resources should be allocated between its research institutes and university centres, is in dire need of such change and should be opened up to the scrutiny of the wider international community. The electoral system by which committees are appointed serves only to maximize the tendency for members to defend their disciplines and be nice to their peers, at the expense of selectivity and tough decisions of priority. As a result, for example, no research institute is ever closed down, whatever its level of productivity.

Berlinguer must create a truly independent system of evaluation to help the CNR to decide more dispassionately where to concentrate its money. He should consider introducing something similar to the Max Planck Society's *Fachbeirat* system, where advisory groups comprising both national and international experts are appointed to each institute to advise it on its research plans and to submit an independent assessment of its achievements to the central headquarters. □