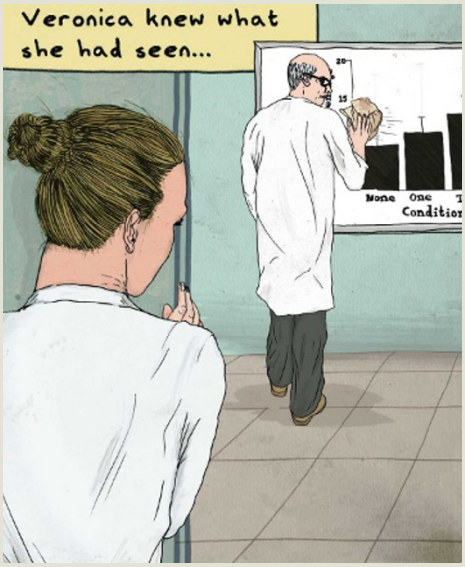
CORRESPONDENCE

These letters respond to the Commentary 'Repairing research integrity' by Sandra L. Titus, James A. Wells and Lawrence J. Rhoades (*Nature* **453,** 980–982; 2008).



J. TAYLOR

Integrity: Croatia's standards unusual in much of Europe

SIR — Sandra Titus and her colleagues argue that a failure to foster a culture of research integrity is the common denominator in scientific misconduct, which in the United States is much more prevalent than might be expected. But what would the results have been if the survey had been done in countries without the codes of good practice and procedures for handling allegations of misconduct laid down by the US Office of Research Integrity (ORI)?

Take Europe, where — apart from in Scandinavia, Germany, the United Kingdom and, to some degree, France — little or no regulation exists to control scientific misconduct. Individual cases of fraud can therefore be more easily hidden and may be far more common than in countries with established standards.

Horace Judson suggests that fraud is intrinsic in cultures "characterized by secrecy, privilege and lack of accountability" (*The Great Betrayal: Fraud in Science* Harcourt, 2004). These features are evident in some Spanish and Italian research organizations, for example, where cronyism is rife and transparency is obscured. Russia allegedly maintains a tolerant attitude towards violations of medical ethics, and Marek Wroński claims, perhaps too strongly, that an "old boys' network" protects scientists from accusation or prosecution in Poland (M. Wroński *Przegl. Lek.* **55,** 629–633; 1998).

In any case, the real extent of misconduct in Europe is largely unknown and inadequately investigated.

Countries from southern and eastern Europe, say, could well emulate the standards already in place elsewhere. In Scandinavia, for example, training in good research practice is mandatory for researchers, as it is in the Biomedical Research Park of Barcelona in Spain. Croatia deserves special mention: its leading medical journal has been cooperating with the ORI since 1999 and has initiated a dialogue on research integrity with the Croatian Science Ministry (M. Petrovecki and M. D. Scheetz *Croat. Med. J.* **42,** 7–13; 2001). The journal has taken the unusual step of creating a 'research integrity' editor, and the country has been actively teaching responsible research conduct since 1996.

Punishment makes no sense without prevention, and prevention is necessary because, as noted by Titus and colleagues, self-regulation is unlikely to be effective.

Xavier Bosch Department of Internal Medicine, Hospital Clinic, Villarroel 170, 08036 Barcelona, Spain
e-mail: xavbosch@clinic.ub.es

Integrity: juniors see leaders gain from calculated dishonesty

SIR — The survey by Sandra Titus and her colleagues of extramural scientists funded by the US National Institutes of Health indicates that many cases of scientific misconduct may not be reported to their institutions and that even fewer come to the attention of the government funding agency. They point out that institutional leaders have a strong financial incentive to silence the would-be whistle-blower, because a confirmed case of research misconduct can hurt the institution's reputation and impede the flow of its funding.

But in calling for more tutoring and stricter supervision of junior scientists, Titus and colleagues drastically oversimplify the nature of the problem. They assume that most scientific leaders behave with integrity in their own work, but somehow fail to pass this trait to those whose research they supervise.

On the basis of our own discussions with biomedical scientists at the predoctoral, postdoctoral and faculty level, we hold a different view. The academic and financial rewards of calculated, cautious dishonesty on the part of some scientific leaders are, we believe, all too apparent to the junior scientists they supervise. No amount of tutoring, stricter supervision or courses in research ethics will fix this problem.

We, the writers of this Correspondence, are the authors of a report written 21 years ago on misconduct in biomedical research (*Nature* **325,** 207–214; 1987).

Ned Feder Project On Government Oversight, 666 11th Street NW, Washington DC 20001, USA
e-mail: nfeder@pogo.org
Walter W. Stewart Lone Rider Trail, Austin, Texas 78738, USA

Integrity: misconduct by a few damages credibility for many

SIR — It is disturbing to read about the prevalence of misconduct described by Sandra Titus and colleagues. But, as scientists, we are trained to deal with reality, not to avoid or, worse, misrepresent it. The description of a scientist as honest should be a tautology.

An institution can keep its good name only by reacting vigorously against allegations of misconduct. It should publicly denounce practices such as data falsification, plagiarism and duplication of research results in different publications. Official statements should be issued, warning that misconduct allegations will be subject to formal investigation and the results made public.

Unfortunately, here in Brazil this is not common practice. If misconduct allegations are ever filed, official statements are usually vague and investigations can take several years. Whistle-blowers are typically frowned upon by their colleagues and officials at their institutions.

Even though we agree that regulatory offices cannot catch all misconduct events, we suggest that consideration be given to the creation of international 'offices of research integrity' to pursue universal standards of ethical behaviour. After all, the unethical behaviour of a few scientists can damage the credibility of many.

Paulo A. Nussenzveig, Renata Zukanovich Funchal Instituto de Física, Universidade de São Paulo, PO Box 66318, São Paulo, SP 05315-970, Brazil
e-mail: nussen@if.usp.br