

Editorial

New scandals – time to rethink the rules?

The scandal of the “biotechnology evangelist” erupted in Korea at the beginning of the new year: a commission from Seoul National University announced that it had proof that Dr Woo Suk Hwang, considered one of the world’s foremost experts on cloning by nucleus transfer, had manipulated the data concerning experiments in human cell cloning and the creation of eleven lines of stem cells from human embryos published in two different articles in the journal *Science* in 2004 and 2005.

Just a few hours later, news of another, in some ways even more sensational scandal arrived from Norway. Jon Sudbø, a doctor at the Institute for Cancer Research at the Norwegian Radium Hospital in Oslo, had literally fabricated all the data in a study of 908 patients – also fictitious – documenting the role of several anti-inflammatory drugs in preventing cancer. The results had been published in *Lancet* in October of last year. Dr Jon Sudbø, quite renowned in his field, also admitted that the results published in two articles on *New England Journal of Medicine* in April 2004 and on *Journal of Clinical Oncology* in March 2005 had no basis in fact.

The two news items caused quite a stir in the mass media. On more than one occasion they were referred to – in no uncertain terms – as pathological cases that were cause for alarm. But is this alarm truly justified?

While instances of dishonesty may be less common in the “Republic of Science” than in other areas of human society, history tells us that there are bad apples among scientists as well. In that sense, the Hwang and Sudbø stories are hardly news.

At the same time, the two stories demonstrate that the scientific world still has antibodies against deviant behaviour. After all, it was an investigation by Seoul University itself that exposed Woo Suk Hwang’s misconduct, and it was the very hospital in Oslo where Jon Sudbø worked that confirmed his fiasco.

So, everything is in order then? No, not exactly – for a number of reasons, all interconnected.

The Hwang and Sudbø scandals occurred in two sectors that are of major social – and media – interest: human biology and oncology. Because they are the focus of so much attention, incidences of misconduct in these areas of research generate a great deal of public comment. As a result, the scientific community’s system of self-regulation ought to be particularly vigilant and effective here.

It is precisely in the field of biomedicine that, over the past five years, governments and especially private companies – in America, Europe and, more recently, continental Asia – have invested the most research funding. If the entire scientific system is to maintain its credibility, the presence of these significant economic interests demands the utmost transparency and strictest regulations.

Yet the principal regulatory system used in the “Republic of Science” and, in particular, in the system of science communication – namely, peer review – failed in both scandals that broke in early 2006. It did not identify two outrageous cases of manipulation in areas of major interest in cutting-edge research. The frauds were exposed outside the system of peer-review.

Perhaps it is time for the scientific community to begin thinking about new rules and new methods to protect its integrity and credibility.

Translated by Sophie Schlondorff.

Pietro Greco