

Research integrity and ethics...

...are obviously big issues these days. Indeed, a growing number of rather spectacular cases of unethical behaviour and research misconduct have surfaced during the last couple of years; the most prominent must surely have been the Hwang stem cell fraud.

However, there are many who believe that these few spectacular cases only represent the “tip of an iceberg”. Among them is, for instance, Ian Halliday, former President of the European Science Foundation (ESF), who recently commented, “What I heard confirms what I personally believe is beyond the anecdotal level. There is pretty much more widespread misconduct on a low level which is not criminal but cutting corners, and which is done under pressure.”

More than ten years ago *Laborjournal*, the German language predecessor and sister journal of *Lab Times*, reported on the “Hermann-Brach case” of cancer research data manipulation. Since then we have amassed extensive experience in investigating various allegations of research misconduct. This has not only included clear cases of data fabrication and manipulation but also plagiarism or coerced senior authorship. The majority of alleged misbehaviour cases, however, couldn't be given such a clear label and were finally rated as “consciously sloppy” or as a sort of misuse of power and position. Furthermore, a substantial portion remained in the broad and nebulous grey area spanning between honesty and dishonesty. How do you judge, for example, someone who consciously “massages” results and makes exaggerated claims in order to pretend a higher significance of his otherwise low quality work?

All in all, we therefore have to agree with Mr. Halliday's comment expressed in September at the first World Conference on Research Integrity in Lisbon, Portugal.

This event was initiated and organised by the European Science Foundation (ESF) and the U.S. Office for Research Integrity (ORI) as “a global effort to tackle the issue head on”. Before tackling something, however, the real severity of the problem has to be analysed. The results in this case were sobering! The participants finally came to agree that, on a global scale, research misconduct and misbehaviour are still on the increase.

What can be done to combat this? Lay down formal ethics codes for scientists? This would obviously have no or very little effect. Germany's main funding body, the German Research Foundation (DFG), for example, already issued guidelines on safeguarding good scientific practice back in 1998 and demanded, “universities and other research institutes wishing to apply for DFG funding must establish rules to safeguard good scientific practice at their institutions in accordance with recommendations 1 to 8 of the guidelines”. Regardless, misconduct seems to have since increased in Germany.

There appears to be a distinct lack of alternative ideas to “tackle the issue”; at least the calls to adopt such ethical codes have not only increased but also recently become louder. U.S. bioethicist Nancy L. Jones, for example, said earlier this year, “Medical practice and human subject research is influenced by the Hippocratic tradition but no similar code of ethics has been formalised for the life and biomedical sciences. Like the Hippocratic oath, a code of ethics for the life sciences can provide a continual standard to shape the ethical practice of science.”

In addition, only a few weeks ago the British government's chief scientific advisor, David King, launched a “universal ethical code for scientists” at the British Association for the Advancement of Science's annual festival in York. The code comprises the following seven principles:

- ▶ Act with skill and care, keep skills up to date;
- ▶ Prevent corrupt practice and declare conflicts of interest;
- ▶ Respect and acknowledge the work of other scientists;
- ▶ Ensure that research is justified and lawful;
- ▶ Minimise impacts on people, animals and the environment;
- ▶ Discuss issues science raises for society;
- ▶ Do not mislead; present evidence honestly

What is one supposed to deduce from this? First of all, these principles leave one perplexed. Don't scientists already know that they

should be honest and fair to their fellow scientists, avoid conflicts of interest, keep up with the literature in their field, as well as that their actions have implications for the public? In a weblog discussion on the code the following comment echoes what many are thinking, “I believe that a code of ethics will have only a minimal effect on reducing misconduct. The ethical scientists know perfectly well what is acceptable and what is unacceptable in their practice of science. The fraudsters will continue to commit their unethical deeds.”

And Julia Heathcote from the University of London added in her blog “The Ethical Palaeontologist”, “Perhaps we could go for a pithier slogan: ‘Don't be a dick!’ It sums all seven points up, it alliterates nicely, and it'll have about as much effect on scientific practice in the UK and around the world.”

It's a harsh word. But well, we have to admit, we agree...

The Editors

