Is research fraud deliberate?

Is research fraud / serious misconduct in medicine deliberate or inadvertent? This is clearly an important question and one that is subject to a lot of controversy. Many researchers seem to believe that fraud is always either the result of some kind of psychiatric condition, or just at one extreme of a spectrum of inadvertent error. How do we find out? We could ask fraudulent researchers, but would probably not get honest answers.

The ingenious study by Steen published in this issue points towards fraud often being deliberate (see page 113). Steen’s sample are all papers retracted from the PubMed database between 2000 and 2010. He divides these up in papers retracted due to error and papers retracted due to fraud and hypothesises that if fraud is deliberate then we can expect that “... fraudulent authors target journals with a high impact factor (IF), have other fraudulent publications, diffuse responsibility across many co-authors, delay retracting fraudulent papers and publish from countries with a weak research infrastructure.”

He finds that the statistical analysis of the data confirms the first 4 of the 5 hypotheses, but not the last one. It turns out that there is “…significantly more fraud than error among retracted papers from the USA ($\chi^2$ 8.71; p<0.05) compared with the rest of the world.” And the US can hardly be said to have “a weak research infrastructure.” This last finding may perhaps reflect the extremely competitive nature of the US research environment.

These results do not show that all research fraud is deliberate, but they strongly indicate that fraudulent researchers’ publication practices are fully compatible with research fraud being deliberate and intentional and not merely inadvertent.

Should doctors be on facebook?

Moubarak et al have surveyed residents and fellows at a large French university hospital concerning their use of Facebook and how they thought being on Facebook might influence doctor-patient relationships (see page 101). Most of their respondents (75%) had a Facebook profile with some personal data in the profile and 61% of those who had a profile had changed the privacy settings from the default to more restrictive settings. They also found that if a patient requested them as a Facebook ‘friend’ 85% would automatically decline and the remaining 15% would decide on an individual basis. A majority of respondents (76%) considered that the doctor-patient relationship would change if a patient had access to their doctor’s Facebook profile.

This study adds to the growing number of studies of the ethical problems raised by new social media. But are these ethical problems radically new, or are they just new versions of old problems? In one sense there seems to be nothing new here. The village doctor always moved in the same social circles as the more affluent and socially important of his patients and was as socially close or even closer to them than most people are to their Facebook ‘friends’. In another sense these problems do seem to be genuinely new(ish) because they are part of an ongoing and fastly moving renegotiation of the meaning and practices of privacy in the cyber age.

Mitochondrial genome modification

Nuclear transfer is a possible reproductive option for women who are carriers of mitochondrial mutations. By nuclear transfer they can combine their healthy nuclear DNA with healthy mitochondria from another woman. This would be a kind of germ-line genetic modification.

Germ-line genetic modification is often seen as more objectionable than somatic cell genetic modification (see page 97). The paper by Bredenoord et al analyses how we should evaluate mitochondrial genome modification. The authors first argue that changing the mitochondria by nuclear transfer is not substantially different from changing the nuclear DNA. Both kinds of changes change the (genetic) identity of the future person. After having established this conclusion they go on to argue that what matters morally is not whether the procedure is identity affecting, but whether it safeguards the future child’s right to an open future. Many kinds of nuclear transfer aimed at preventing the transmission of mitochondrial mutations do safeguard an open future and should therefore not be seen as ethically problematic.

Honourable mention for our blog

A US web-site has compiled a non-ranked list of “50 Excellent Ethics Blogs Every Science Student Should Read” the JME blog is on the list, together with many other interesting blogs. We take that as a tribute to the hard work of our bloggers Iain Brassington and David Hunter. You can find the list at http://www.mastersdegree.net/blog/2010/50-excellent-ethics-blogs-every-science-student-should-read/.