

We urge the Editor of the *European Journal of Cancer* to communicate all the comments he has received related to our research so that they may become part of the public record of data on the Two-County trial, and add to the many important inconsistencies that have already been documented for this trial.<sup>4,6,7</sup>

\*Peter C Gøtzsche, Jan Mæhlen, Per-Henrik Zahl  
 Nordic Cochrane Centre, HS Rigshospitalet, DK-2100 København Ø, Denmark (PCG); Department of Pathology, Ullevål University Hospital, Oslo, Norway (JM); and Norwegian Institute of Public Health, Oslo, Norway (P-HZ)  
 pcg@cochrane.dk

PCG did a systematic review of the breast screening trials, which questioned the value of screening. JM and P-HZ declare that they have no conflict of interest.

- 1 Tabár L, Fagerberg CJ, Gad A, et al. Reduction in mortality from breast cancer after mass screening with mammography: randomised trial from the Breast Cancer Screening Working Group of the Swedish National Board of Health and Welfare. *Lancet* 1985; **325**: 829–32.
- 2 Zahl PH, Gøtzsche PC, Andersen JM, Mæhlen J. WITHDRAWN: Results of the Two-County trial of mammography screening are not compatible with contemporaneous official Swedish breast cancer statistics. *Eur J Cancer* 2006; March 9 (Epub ahead of print).
- 3 International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals: writing and editing for biomedical publication. <http://www.icmje.org> (accessed June 16, 2006).
- 4 Zahl P-H, Gøtzsche PC, Andersen JM, Mæhlen J. Results of the Two-County trial of mammography screening are not compatible with contemporaneous official Swedish breast cancer statistics. *Dan Med Bull* 2006; **53**: 438–40.
- 5 International Association of Scientific, Technical & Medical Publishers. <http://www.stm-assoc.org/home/> (accessed Oct 9, 2006).
- 6 Gøtzsche PC. On the benefits and harms of screening for breast cancer. *Int J Epidemiol* 2004; **33**: 56–64.
- 7 Gøtzsche PC, Nielsen M. Screening for breast cancer with mammography. *Cochrane Database Systematic Rev* 2006; issue 4: CD001877.

## Research misconduct: learning the lessons

“The bulk of Jon Sudbø’s scientific publications are invalid due to the fabrication and manipulation of the underlying data material.”<sup>1</sup> This harsh conclusion sums up the investigation of a Norwegian researcher’s complete scientific production. The investigation was started after a paper in *The Lancet* was shown to be based entirely on fabricated raw data.<sup>2,3</sup> Several papers by the same author, published in journals such as *The New England Journal of Medicine* and *International Journal of Cancer*, were found fraudulent by the Investigation Commission.<sup>1</sup>

Fraud and misconduct have been shown to occur in medical research all over the world.<sup>4</sup> Single cases, such as the Hwang Woo-suk case in Korea<sup>5</sup> and the Sudbø case in Norway, receive enormous media attention, leaving a series of questions behind. “How could this happen?” is normally the main question within the research community. “Why did this happen?” should perhaps be asked more often.

There is increasing awareness about errors and mistakes in clinical medicine. The safety culture in high-risk businesses, such as the aviation and oil industries, has been seen as an example for medicine.<sup>6</sup> Learning from adverse events is a way to improve quality. The same can be said of learning from incidents in medical research.

What lessons can be learned by the revealed cases of scientific fraud for researchers, research institutions,

scientific journals, and other parties? Is a more detailed bureaucratic regulation of research the inevitable consequence? Can misconduct be prevented through information campaigns? And who is really responsible for the quality of published research?

These questions, and many others, will be discussed at a 1-day international conference in Oslo, Norway, on Dec 8. The conference is organised by *The Lancet*, the Norwegian Electronic Health Library/Norwegian Knowledge Centre for the Health Services, and the Norwegian Medical Society. The programme and registration form can be found online.

\*Magne Nylenna, Richard Horton  
 Norwegian Electronic Health Library/Norwegian Knowledge Centre for the Health Services, St Olavs plass, N-0130 Oslo, Norway (MN); and *The Lancet*, London, NW1 7BY, UK (RH)  
 magne.nylenna@helsebiblioteket.no

- 1 Report from the Investigation Commission appointed by Rikshospitalet–Radiumhospitalet MC and the University of Oslo January 18, 2006. June 30, 2006: [http://www.rikshospitalet.no/content/res\\_bibl/6876.pdf](http://www.rikshospitalet.no/content/res_bibl/6876.pdf) (accessed Nov 14, 2006).
- 2 Sudbø J, Lee JJ, Lippman SM, et al. Non-steroidal anti-inflammatory drugs and the risk of oral cancer: a nested case-control study. *Lancet* 2005; **366**: 1359–66.
- 3 Horton R. Retraction—non-steroidal anti-inflammatory drugs and the risk of oral cancer. *Lancet* 2006; **367**: 382.
- 4 Lock S, Wells F, Farthing M, eds. *Fraud and misconduct in biomedical research*. London: BMJ Books, 2001.
- 5 *The Lancet*. Writing a new ending for a story of scientific fraud. *Lancet* 2006; **367**: 1.
- 6 Barach P, Small SD. Reporting and preventing medical mishaps: lessons from non-medical near miss reporting systems. *BMJ* 2000; **320**: 759–63.

For programme registration see <http://www.dnms.no>