

nature medicine

VOLUME 4 • NUMBER 10 • OCTOBER 1998

A duty to publish

Two years ago, the biomedical community learned that the drug company Boots Co. had funded University of California San Francisco (UCSF) researcher Betty Dong to conduct a trial on whether its expensive thyroid drug Synthroid was more effective than several cheaper alternatives. When Dong prepared a paper showing that it was not, Boots forced her to withdraw the paper that had already passed peer review and was in press. Even more shocking, UCSF, who considered the work valid, stood by and let them do this. Now Toronto's revered Hospital for Sick Children (HSC) seems to be mired in a similar controversy (see page 1095). These latest events sound a warning bell to biomedical research institutes and pharmaceutical companies alike.

In response to requests from its clinicians and scientists, the HSC has finally announced an investigation of a clinical trial funded by the pharmaceutical company Apotex. The company funded the hospital to test the effectiveness and safety of deferiprone, an iron chelator proposed as a treatment of iron overload in thalassemia major. When the principal investigator of the study, Nancy Olivieri, started to obtain results that the company did not want to hear, the trial was abruptly terminated and Olivieri allegedly threatened with legal action.

There is so much to be gained by honest and open industry-academia partnerships: Researchers receive the funding and other resources they need to do their work and to publish results on which they build their reputations, and the companies benefit from the access to patients and the proximity to and expertise of respected academic institutions. The anti-HIV drugs that have improved and extended the lives of many are the fruits of pharmaceutical-academic partnerships. But occasionally the relationship collapses, exposing a clash of ideals, as in the case of Apotex and the HSC. As soon as Nancy Olivieri,

a physician and renowned expert in blood disorders, began suspecting that the drug she was giving to her young patients was losing effectiveness, and, even worse, might be toxic, she sought to alert both patients and the scientific community. The company's reaction was to demolish her interpretation of the data and to threaten legal action against her.

Toronto's Hospital for Sick Children is a large, influential and highly respected institute with a mandate to "help children all over the place." Yet the hospital administration completely failed to support the efforts of Olivieri in doing what she believed was best for her patients. Fortunately, she had the courage to stand on her own against the company and publish the work.

The Boots and Apotex cases have many similarities. In both, the principal investigators signed contracts agreeing not to publish the study's results without the written consent of company's officials—a mistake that probably should be chalked up to inexperience and naivete. In both cases, the administration only started responding and taking responsibility for their actions after the issues came to the attention of the public. Dong and colleagues finally published their results in *The Journal of the American Medical Association*, whereas Olivieri and colleagues published their work in a recent issue of *The New England Journal of Medicine*—both peer-reviewed journals. In contrast, Boots scientist Gilbert Mayor presented a contradictory interpretation in a journal of which he was the associate editor, and Apotex published their findings as a meetings abstract.

Instead of hiding behind the issue of a scientific dispute, and regardless of what the contracts said, the UCSF and HSC administrations should have stood by their faculty who were clearly acting in the interests of the public. Above all, they should have supported the scientists' right to publish and

allowed the peer-review process to decide on the science.

Although these are extreme cases, there is some evidence that whereas the private sector may not determine what is published, it may affect how results are made public. In a 1994 survey by researchers at Carnegie Mellon University, thirty-five percent of the scientists in their sample had signed agreements whereby the sponsors could require that information could be deleted from publications, and fifty-three percent agreed that publication could be delayed. Thirty percent agreed to both limitations. In a 1995 study (appearing in the same issue of *JAMA* as the paper by Dong and colleagues), researchers at Harvard Medical School found that almost twenty percent of 2,100 life-science faculty reported delays of more than six months in the publication of their research results, twenty-eight percent of which were due to delayed dissemination of undesired results. (The study did not determine who made the decision to delay.) Universities should have systems in place to ensure that faculty are not allowed to sign contracts with companies, and that they never cede publication rights.

The stereotypical view would cast the commercial player as the profit-greedy enterprise out to line its pockets, and the hospital administration as bravely battling for the best for its patients. But with so many examples of productive and important commercial-academic partnerships, this never has to be the case—both profit from the best science giving rise to the best medicine. It is then difficult to decide what is more shocking: that companies should seek to suppress research, or that the academic institutions should stand back and do nothing. Einstein said, "The right to search for truth implies also a duty: one must not conceal any part of what one has recognized to be true." Both Apotex and HSC alike should consider their duty.