Editorial

Fraud in research

An unfortunate, yet recently documented, problem in medical research is fraud. There is no reason to expect that the scallywags and phonies who perpetrate fraud in research are confined to the medical field. Undoubtedly, there is fraud in dental research also.

Cheating is cheating, whether it be mild, such as asking to have one's name attached to a research project without just cause, or severe, such as fabricating the results of a funded research study involving human subjects that may have implications for the health care of thousands of patients.

Any form of cheating is particularly offensive when it takes place in the scientific healthcare field since it has such enormous negative implications for other people. These people trust and rely upon physicians and dentists for their healthcare. This trust is under fire.

Why do professionals cheat? Personal profit, in terms of promotion or tenure at a university, financial gain, or simply fame, is probably the most common reason. Perhaps others feel a misguided sense of accomplishment as they see their names on a dozen or more papers presented at the same international research meeting. Cheaters violate the trust between themselves and coworkers; between themselves and their superiors or employers; between themselves and funding agencies; between themselves and future researchers who may waste years of resources on wild goose chases as a result of their acceptance of fraudulent data; and, tragically, between themselves and the general public.

When I recently read the fascinating story behind the discovery of the acquired immunodeficiency syndrome (AIDS) virus, I couldn't help but feel an acute sense of disappointment — disappointment that such a crucially important discovery should have been tainted by scandal and professional jealousy. The inate trust that I had in the high-powered researcher who was the leader of the American team was shattered.

The Chicago Tribune published a fascinating piece of investigative journalism by John Crewdson documenting a tawdry scientific dispute between the American scientist Robert C. Gallo and the French researcher Luc Montagnier of the Pasteur Institute in Paris ("The great AIDS quest — Science under the microscope," November 19, 1989). The dispute was eventually resolved in a politicial decision made at the highest levels of the US and French governments. Thus was written the "definitive scientific history" of the discovery of AIDS in which the American and French researchers were forced to share the credit equally for this discovery.

Neither one, of course, wanted to share. But Gallo "had been for nearly 3 years trying to steal the credit for discovering the cause of AIDS" and had patented a blood test for AIDS from which enormous royalties would accrue. The Pasteur Institute had formally challenged in court the patent on the blood test for AIDS that had been developed in Gallo's laboratory.

The story, so ably woven by Crewdson, is well worth reading. In it he documents what may turn out to be the greatest case of scientific theft in the history of medical research. The story is of a scientist on the wrong track of a potential Nobel-prizewinning research project who "discovers" essentially the genetic twin of a virus discovered earlier by the French team led by Montagnier. This virus had been shared with Gallo, in the spirit of scientific collegiality, by the French several months before Gallo's "discovery." The French had shared — the Americans had stolen and the credit is shared.

As Crewdson documents, Gallo's story is replete with "misstated data and secret experiments, phantom viruses and disappearing genes, unreproducible results and muddled lab notes, mislabeled cultures and misleading photographs." Not the stuff from which a Nobel prize is awarded — I hope.

Any deliberate misrepresentation of research data for whatever reason, whether in medicine or dentistry, hurts everyone who uses the data for further research or for patient treatment decisions. Severe sanctions should be applied to those who would use research dishonestly for personal gain.

Richard J. Simonsen, DDS, MS Editor-in-Chief