Tainted Science?

"Ties That Bind: Do Corporate Dollars Strangle Scientific Research?" by Daniel Zalewski, in *Lingua Franca* (June–July 1997), 22 W. 38th St., New York, N.Y. 10018.

The image of the white-coated scientist in his ivory tower, disinterestedly pursuing knowledge for its own sake, has never been more at odds with reality. Today, researchers and universities patent everything from genes to vaccines, and most scientists rely on grants from industry, in addition to federal support. Is the profit motive leading scientists astray? asks Zalewski, a senior editor at *Lingua Franca*.

A recent study by Sheldon Krimsky, a professor of environmental policy at Tufts University, shows how common conflicts of interest are. Scrutinizing 789 articles in leading scientific journals, he found that in onethird of the cases at least one author had a vested interest in the research. The interests included "owning a patent directly related to the published work; being a major stockholder or executive in a company with commercial interests tied to the research; or serving on the board of directors of such a company." Only one of the 268 articles included a disclosure statement. So what? say many scientists. "There's a real trumping up of this issue," maintains Boston University's Kenneth Rothman, editor of the journal Epidemiology. It's the science that counts, he says, not who did it or who funded it.

But others have concluded that disclosure is a good idea. In 1995, the National Institutes of Health adopted regulations obliging researchers who get federal funds to reveal their financial interests in companies to their universities. The rules grew out of a controversy that began with a *Journal of the American Medical Association (JAMA)* article in 1988 heralding a Genentech heartattack medication called TPA. *Newsday* then revealed that at least 13 of the researchers involved were long-time Genentech stockholders, some to the tune of \$100,000. The scientists angrily denied that their financial interests biased their work. But after "several conflicting studies," Zalewski says, "the medical community today remains divided" over their findings.

JAMA now demands disclosure from prospective authors, as do *Science*, the *Lancet*, and the *New England Journal of Medicine*.

Scientists and editors, Zalewski says, now confront "an even more troubling phenomenon: industry's manhandling of manuscripts during the period before publication." Scientists who receive industry funding typically agree to keep their research results confidential until any possible patents are secured. Firms naturally want to examine a researcher's data before publication, Zalewski says, and "it appears they often use the opportunity to suggest, or even demand, alternative ways to frame data." Recently, four of the major authors of a study of a hypertension medication quit to protest pressure along those lines from the drug's Swiss manufacturer.

Some scientists say the problems are exaggerated. "Collaboration between science and industry is crucial, particularly in the medical realm," says JoAnn Manson, a professor of medicine at Harvard University. "This is how the public gets safe and effective therapies." Trading these in for "some fairy-tale vision of academic purity," she says, would make little sense.

Catching Criminals Early

"Interaction between Birth Complications and Early Maternal Rejection in Predisposing Individuals to Adult Violence: Specificity to Serious, Early-Onset Violence" by Adrian Raine, Patricia Brennan, and Sarnoff A. Mednick, in *The American Journal of Psychiatry* (Sept. 1997), American Psychiatric Assn., 1400 K St. N.W., Washington, D.C. 20005.

Efforts to prevent young people from turning to violent crime should begin when they are still in the womb. That's the conclusion Raine, a professor of psychology at the University of Southern California, and his colleagues draw from their study of 4,269 Danish males born between 1959 and 1961.

Elaborating on an earlier, more limited

study they did, the authors find that boys who suffered both birth complications (such as a breech delivery or forceps extraction) and early rejection by their mother (as indicated chiefly by her attempt to abort the fetus or by her placing the infant in a public institution for more than four months during his first year) were more likely to com-