

He supplies ammunition to fight commercialization of science

By Carol Cruzan Morton
GLOBE CORRESPONDENT

For 20 years, Sheldon Krimsky has been sounding the alarm about how corporate interests may corrupt the academic mission.

Science, especially, is supposed to be the source of open, free, and unbiased information. But Krimsky has collected enough evidence and anecdotes to fill a new book about science conducted by researchers who stand to profit from their work or whose research is funded by companies with even more at stake. The commercialization of university science will eventually deplete research conducted for the public good, such as identifying toxic dangers or environmental causes of disease, he argues in "Science in the Private Interest: Has the Lure of Profits Corrupted Biomedical Researchers?"

"The question I always get asked is, what difference does it make if the researchers are following the canons of good science?" Krimsky said.

The answer, Krimsky said, is that research funded by industry tends to be more pro-business than research funded by universities and government.

"This is a statistical result, it doesn't mean that every scientist who is sponsored by industry is going to produce results that are necessarily in favor of the industry's financial interest," he said. "But if you compare the industry-funded studies with non-profit and government funded ones, you get a skewing of the research toward proindustry conclusions."

The classic example: Studies done for tobacco companies that consistently find fewer health problems from smoking than studies funded by those without a financial interest in the outcome.

"It's true in the alcohol industry as well," Krimsky said. And the toy industry, he added, funds "studies which show that there's no relationship between toys and violent video games and children's behavior."

The Tufts University professor is certainly not the only person to take on possible conflicts in the scientific world, but his scholarship provides the data that many advocates use in making their case.

Even defenders of the commercial ties, who say they speed products to the market and appropriately reward researchers for their work, recognize the importance of Krimsky's data.

"He has been a voice of caution for decades," said Lita Nelsen, director of the technology licensing office at Massachusetts Institute of Technology. "Whether you agree or not, he makes you think. We take it seriously and manage [potential conflicts] with very strict conflict of interest rules. We don't have to give away our souls if we want discoveries to move from



GLOBE PHOTO/JODI HILTON

Tufts professor Sheldon Krimsky has written a book about science conducted by researchers who stand to profit from their work or whose research is funded by industry.

Sheldon Krimsky

Born: Brooklyn, N.Y.

Home: Cambridge

Education: Master's degree in physics from Purdue University, master's and doctorate in philosophy from Boston University

Least favorite subject in elementary school: Biology (too much to memorize)

Subject of first book: "Genetic Alchemy," a study of the genetics controversy in the 1970s when some scientists saw potential danger in recombining genes from different species.

Musical credits: Wrote talking blues song about anti-ecological strip mall blight of central Florida (performed only in front of family).

the library shelf to medicine bottles."

Krimsky's passion began when he was a junior faculty member at Tufts and a company tried to quash a report his students had prepared on the possible pollution of a local water well.

In what other ways, he began to wonder, did companies interfere with or try to direct scientific research?

First, he put together a national database to find out how many academic scientists were closely involved with the emerging biotechnology industry. He found that from 1985 to 1988 more than 800 biomedical and agricultural scientists had served on company advisory boards or had started their own companies. Topping the "Krimsky index" were MIT, Stanford, and Harvard, with 31, 20, and 19 percent of their biomedical faculties with formal business ties.

Next, Krimsky teamed up with a colleague at the University of California, Los Angeles, to find out if corporate involvement was evident in the scientific literature. They looked at one year of articles in the 14 top science and medical

journals published by 1,100 Massachusetts researchers. One in every three studies had at least one main author with a financial interest in the outcome of the study — either by acting as a scientific adviser to a related company, holding a patent or pending patent, or being a corporate officer or major stockholder.

In a third investigation, Krimsky and his UCLA colleague found only about 16 percent of the 1,400 most influential journals required authors to disclose financial conflicts. Only 300 out of 60,000 articles published in 1992 listed any potential conflicts of interest, and 66 percent of those journals had no disclosures.

"We were incredulous," Krimsky said. It amounted, he said, to a "don't ask, don't tell" policy among researchers and journal editors.

His work has had ripple effects across the scientific community and in the public perception of research.

"His contribution has been immense," said Drummond Rennie, adjunct professor of medicine at the University of California at San Francisco and an editor of the Journal of the American Medical Association. "He's worked for years on this and built a solid reputation. Instead of gassing off about it, he actually has data. In the end, the only thing that changes things is to keep saying it, publishing it, demonstrating it, lecturing on it, and gradually change people's views."

Many of Krimsky's most steadfast critics are the researchers he's pointing toward. Those critics say a check in the mail does not equate to a skewed result, and that a corporate-research relationship is not always bad.

"Industry needs scientists to create innovation and preserve high standards in technology, and they should be welcomed by the rest of the scientific community as participants in the public domain of science through publications, conferences, and patents," William A. Edelstein, a former researcher at General Electric, wrote in response to a recent magazine piece by Krimsky. "Challenge their work by all means, but please don't dismiss them simply because they work for a company. Unfortunately, too many academics have that prejudice."

Krimsky said he doesn't place all the blame on the scientists — but he's concerned about a university system that is allowing itself to be more and more compromised by corporate interests.

"The deeper issue requires a change in the incentive system," Krimsky said. "One that recasts the moral infrastructure of academic medicine so that journals can have a large reservoir of independent experts who have no financial links to the products and therapies they study."