

Guest Editorial

Science, Lies, and the Ultimate Truth

If there is any specimen lower than a fornicating preacher, it must be a shady scientist. The dissolute evangelist betrays his one revealed Truth, but the scientist who rushes half-cocked into print, or, worse yet, falsifies the data, subverts the whole idea of truth. Cold fusion in a teacup? Or, as biologists (then at MIT) David Baltimore and Thereza Imanishi-Kari claimed in a controversial 1986 article that the National Institutes of Health has now judged to be fraudulent, genes from one mouse mysteriously "imitating" those from another? Sure, and parallel lines might as well meet somewhere or apples leap back up onto trees.

Baltimore, the Nobel laureate and since 1990 president of Rockefeller University, has apologized, after a fashion, for his role in the alleged fraud, and many feel that the matter should be left to rest. He didn't, after all, falsify the data himself; he merely signed on as senior scientist to Imanishi-Kari's now discredited findings. But when a young postdoctoral fellow named Margot O'Toole tried to blow the whistle, Baltimore pooh-poohed O'Toole's evidence and stood by while she lost her job. Then, as the feds closed in, he launched a bold, misguided defense of the sanctity of science.

What does one more lie matter anyway? Politicians "misspeak" and are forgiven by their followers. Pop singers have been known to dub in better voices. Literary deconstructionists say there's no truth anyway, just ideologies and points of view. Lies, you might say, are the great lubricant of our way of life. They sell products, flatter the powerful, appease the electorate and save vast sums from the IRS. Imanishi-Kari's lie didn't even hurt anyone: no bridges fell, no patients dead.

But science is different, and the difference does define a kind of sanctity. Although we think of it as the most secular of human enterprises, there is a little-known spiritual side to science, with its own stern ethical implications. Through research, we seek to know that ultimate Other, which could be called Nature if the term didn't sound so tame and beaten, or God if the word weren't loaded with so much human hope and superstition. Think of it more neutrally as the nameless Subject of so much that happens, like the It in "It is raining": something "outh there" and vastly different from ourselves, but not so alien that we cannot hope to know Its ways.

When I was a graduate student in biology—at Rockefeller, where Baltimore also earned his PhD—I would have winced at all this metaphysics. The ethos of the acolyte was humility and patience. If the experiment didn't succeed, you did it again and then scratched your head and tried a new approach. There were mistakes, but mistakes could be corrected, which is why you reported exactly how you did things, step by step, so others could prove you right or wrong. There were even, sometimes, corners cut: a little rounding off, an anomalous finding overlooked.

But falsifying data lay outside our moral universe. The least you could do as a scientist was record exactly what you observed (in ink, in notebooks that never left the lab). The most you could do was arrange the experimental

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Editors' note: A plethora of research findings, manufactured biomaterials, diagnostic devices, chemotherapeutic agents, and other "improvements" and "advances" descend on us from all directions. They besiege our eyes, ears, and minds, demanding our attention. The subliminal (and sometimes direct) message is that, unless we pay heed, we will not be current and on the cutting edge of our profession. This editorial, reprinted from Time, is an incisive reminder that we would all do well to look, listen, and think a little longer before swallowing whole these newly hatched scientific "truths."

circumstances so as to entrap the elusive It and squeeze out some small confession: This is how the enzyme works, or the protein folds, or the gene makes known Its message. But always, and no matter what, you let It do the talking. And when It spoke, which wasn't often, your reward, as one of my professors used to say, was "to wake up screaming in the night"—at the cunning of its logic and the elegance of its design.

This was the ideal, anyway. But Big Science costs big bucks and breeds a more mundane and calculation kind of outlook. It takes hundreds of thousands of dollars a year to run a modern biological laboratory, with its electron microscopes, ultracentrifuges, amino-acid analyzers, PhDs and technicians. The big bucks tend to go to big shots, like Baltimore, whose machines and underlings must grind out "results" in massive volume. In the past two decades, as federal funding for basic research has ebbed, the pressure to produce has risen to dangerous levels. At the same time, the worldly rewards of success have expanded to include fat paychecks (from patents and sidelines in the biotech business) as well as power and celebrity status. And these are the circumstances that invite deception.

Imanishi-Kari succumbed, apparently, to the desire to make a name for herself and hence, no doubt, expand her capacity for honest research. But Baltimore is a more disturbing case. He already has the name, the resources and the power that younger scientists covet. What he forgot is that although humans may respect these things, the truth does not. What he lost sight of, in the smugness of success, is that truth is no respecter of hierarchy or fame. It can come out of the mouths of mere underlings, like the valiant O'Toole.

And if no one was physically hurt, still there was damage done. Scientists worldwide briefly believed the bogus "findings" and altered their views accordingly or wasted time trying to follow the false lead in their labs. Then there is the inevitable damage from the exposure of the lie: millions of people, reading of the scandal, must have felt their deepest cynicism confirmed. If a Nobel laureate in science could sink to the moral level of Milli Vanilli or a White House spin doctor, then maybe the deconstructionists are right and there is no truth anywhere, only self-interest masked as objective fact.

Baltimore should issue a fuller apology, accounting for his alleged cover-up of the initial fraud. Then he should reflect for a week or two and consider stepping down from his position as president of Rockefeller University and de facto science statesman. Give him a modest lab to work in, maybe one in the old Rockefeller buildings where the microbe hunters toiled decades ago. I picture something with a river view, where it is impossible to forget that Manhattan is an island, that the earth is a planet, and that there is something out there much larger, and possibly even cleverer, than ourselves.

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