

The case of Joshua Lederberg demonstrates that a dedicated scientist's public activities can be very acceptable-- if he follows the rules. Lederberg is a , respected geneticist, chairman of the Department of Genetics at Stanford University School of Medicine, a winner of the Nobel Prize in medicine, and a member of the elite corps of "insider" scientists who serve frequently as advisors and consultants to government agencies. Yet, until recently (1966 to 1972), he also wrote a newspaper column, "Science and Man," for the Washington Post Syndicate.

His venture into the world of the popular press never met with the criticism he expected. On the contrary, he has had "very positive reinforcement," ~~from colleagues,~~ partly because colleagues feel "somebody has to do the job, and I'm getting it off their backs by taking it on for them." Second, he notes that he is doing it "at a level of rigor and respectability that meets their criteria." ~~Indeed, a number of people have told him they thought the major impact of his column was to make the communication of science more respectable.~~

III-40

For Lederberg, colleagues' standards happened to coincide with his own standards. He has always tried to keep his personality and personal life out of his popular communications, contrasting himself in this regard to most visible scientists. Rather than espouse a particular point of view or join one side of a controversy, he has tried to use the broad base of his expertise to bring important subjects to the ^{public's} reader's attention. His mission, he says, has been to establish a more thoughtful, skeptical attitude in the reader, to elevate the public's level of interest in science and science's budget, and to improve the quality of cost-benefit analysis involved in science policy decision-making. One of his columns might describe a piece of basic research which appeared to be remote and abstract but turned out to have useful applications, or a development in genetic engineering which had important moral and political implications for the public to consider. Scientists could hardly fault his objectives or the reasoned, unemotional tone of his writing.

Lederberg also had the advantage of a virtually unshakable scientific reputation, assured by the Nobel Prize in 1958. By the time he began the column, he was at the stage in his career where non-research activities are increasingly acceptable, and he has continued to keep a hand in research.

*keeps**under control*

III 41

He ~~limits~~ public involvement by limiting travel and by accepting about one percent of "what's thrust" at him.

Half his time, he estimates, is ~~devoted to his administrative~~ *as a co-leader in major research projects,* ~~duties as chairman of the department,~~ a quarter to actual

~~research, the rest to socially oriented work.~~ Lederberg even maintains credibility as an insider while continuing his outside role, by rigidly segregating the two. Confidences he receives as a trusted insider are not taken to the public; issues raised with government officials were not brought up in his columns.

Lederberg's decision to write the column was as cautious and reasoned as the columns themselves. He dates the beginnings of his serious thoughts about public communication to a symposium in London in 1962 on "The Biological Future of Man." The conference brought home to him the fact that the public and its government were not getting the information they would need to deal with coming scientific advancements in genetic engineering and other fields. His thoughts germinated for four years, culminating in his arrangement to write for the ^{Washington} Post. In an unpublished manuscript, Lederberg describes how he came to write for the Post:

III 42

In January 1960, returning from a meeting on space research in Nice, via London, I found that my seatmate was Nigel Calder, whom I had already met very briefly as founder and editor of the English science news magazine, The New Scientist. The plane ride from Nice to London was a good occasion for us to discuss the problem of public information about science, for which I felt his magazine was doing a unique service. In October 1964, having exchanged a few casual thoughts in the meantime, he wrote what was to me a rather novel proposal, that I become a regular essayist for his magazine. This was particularly startling since my previous experience at popular writing had not been a very fruitful one, at least by editors' standards.

I had to say "no" to Calder's invitation but it did set me to thinking about the gap in communication between scientist and citizen and about the most appropriate format in which it would be possible for a scientist like myself to add a new kind of commentary about scientific advance. In other words, what kind of proposal would be so attractive that I would not refuse it, and then why not take the initiative myself?

III 43

After some thought I concluded that a regular, short column in a newspaper of wide, literate circulation could be the most effective channel that could be devised, at least for my own contribution to that gap.

During the next eighteen months I gradually put together some material for a prospectus for such a column and a few sample pieces. Fortunately, one of my associates knew some of the people involved in the management of the Washington Post, and helped to convey my material to them. In the course of time and with the particular interest of Mr. Howard Simons, who had just been elevated to Associate Managing Editor from having been a well-known science writer himself, the proposal for a weekly column was tentatively accepted and I have been enjoying this function ever since [to 1972].

III 44

Ultimately, Lederberg discontinued the column because he could not meet his own standards for public communication. Each week's writing raised a number of new ^{issues} ~~questions~~, until he developed a bewildering backlog of unanswered questions. He decided "I had done my bit. . . . I found myself becoming too preoccupied simultaneously with what ended up being over two hundred different issues that I had raised. . . . A lot of the material was off the top of my head, as good as anybody else's in this arena, but still didn't satisfy my own criteria for scholarship and depth." He did not have the reportorial temperament, he reflects, and could not do one article, then put it out of mind. Hardly a typical reporter in many ways, one might add, he remained very much a member of the scientific community.

Exhibiting once again the science community's sense that public activities should be limited, Lederberg concludes, "I think I've done more than my share in that regard." He does not expect to go back to a Post-type column again, but continues social involvement indirectly by advising other scientists interested in science-and-society issues.