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## Mentoring Young Scientists Is An Ethical Imperative—And A Pragmatic Necessity

Reprinted from *THE SCIENTIST*® 6(24):12, 7 December 1992.

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In the Profession section of this issue, Liane Reif-Lehrer explores a subject whose importance cannot be overstated. She declares that, as scientists, we have an ethical duty to the research community. The “Golden Rule” she discusses involves mentoring and other forms of support as a means of repaying our debts to the world of science in which we have thrived. I agree that this is a valuable way for us to express our gratitude to the community that engendered our individual successful careers.

In any human pursuit—professional or otherwise—one’s achievements rest upon some early inspiration and support from others. The responsibility to help those who are now struggling as we once did seems to be just and reasonable.

However, given the array of challenges now confronting the science community, it is pertinent to reiterate that “paying back” is a pragmatic as well as an ethical necessity.

National Science Foundation director Walter Massey eloquently describes (*Science* 258:1177-79, 1992) his relationship with—and lasting debt to—three scientists. Without their encouragement, he might well have drummed himself out of a career that eventually led to

his eminence as a physicist and an administrator.

Emotionally inspiring as they are, however, Massey’s reflections emerged not within the context of a personal memoir, but as part of an exhortation to his audience that we strive toward doing a better job of attracting minorities into science and engineering. The gut feeling is evident in his article, but the objective is pragmatic to the core. He addresses at least two perplexing problems facing today’s science community: According to some experts, we may be in for a period when demand for researchers far exceeds supply; and we are not doing a good job of attracting young people—minorities and others—to follow science careers. The causal link between these two problems is neither crystal clear nor documentable at present. But it is indeed clear that if we progress toward remedying the latter problem, the former is bound to become less weighty.

Massey’s reminiscence underscores the value of mentoring—passing the torch of knowledge and experience from one generation to the next. Mentoring is the major way in which scientists can nourish the taproot upon which future scientific

achievement depends for its growth and full flowering.

Intellectual and creative support through personal mentoring is but one way of paying back. Reif-Lehrer discusses several others. However, in these days of funding shortages, material support, by those in a position to give it, is another possibility. Donations of equipment, reprints, book and journal collections, and other in-kind contributions are bound to help younger scientists who find themselves wanting.

As a publisher, I hope that this newspaper will eventually reach every aspiring young scientist, whether in high school or college, and I will pursue any reasonable means of achieving this goal. I often wonder how my career path might have been affected had *The Scientist* been available to me as a youngster

in high school and college. But of course, the number of different possible career paths in science has grown immeasurably in 50 years. Disseminating the inspiration and career-shaping information that *The Scientist* provides is one way that I have found to pay back my debt to the community.

It is satisfying for me to know that personal success has positioned me to deliver this kind of gift. My satisfaction stems, of course, from my ethical conviction that extending the nurturing hand is the good and proper thing to do. It stems much more, though, from the certainty of my belief that, for all scientists of achievement or financial success, paying back is not just an option but a crucial necessity for science's and society's future well-being.