sustained in all nuclear-energy operations. Third, the problem of radioactive-waste management must be addressed in a way that is both technically adequate and politically acceptable. Fourth, tight barriers must be in place against leakage of nuclear-explosive materials from nuclear-energy systems into the hands of terrorists or proliferant nations. It is possible that these formidable conditions can be met. We ought to be trying. But they are not met as of today. Until they are, the role that nuclear energy will be able to play in reducing carbon emissions from the energy sector will remain uncertain.

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Defining Scientific Misconduct

IN HIS EDITORIAL "NEXT STEPS IN THE SCHÖN affair" (18 Oct., p. 495), Donald Kennedy appropriately discusses the need for further actions, by many parties, to try to prevent future instances of misconduct like the one described in our report (*1*) on the Schön affair. In his conception of the issues, Kennedy sees scientific misconduct and professional responsibility (the coauthor responsibility issue discussed in our report) as closely linked—"a distinction without a difference."

The issue is not so simple. As used in our report, the term "scientific misconduct" carries a precise definition, contained in the U.S. Federal Policy on Research Misconduct (*2*). Although "misconduct" may sound mild, it entails the most egregious offenses that can be committed in scientific research: fabrication, falsification, or plagiarism that is intentional or reckless. However, as is no doubt clear to all readers of our report, the committee strongly believes that even when coauthors are not guilty of scientific misconduct, they have a broader responsibility, and we welcome the ongoing discussion of this issue. We only wish to point out that there are important distinctions to be made between scientific misconduct and our broader responsibilities as scientists.

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1. See www.lucent.com/news_events/researchreview.html.
2. See www.ostp.gov/html/001207_3.html.

Should Coauthors Share Liability?

ACCORDING TO DONALD KENNEDY'S Editorial "Next steps in the Schön affair" (18 Oct., p. 495), "The hard question is this: If the benefits of authorship are enjoyed jointly and severally by all the authors, shouldn't the liability be shared in the same way?"

Actually, this is not a hard question at all; the answer is "no."

First, if the coauthors signed their names to a fraudulent paper in the sincere belief that it reported honest data, then they were the victims of a fraud, not its perpetrators. Second, the coauthors were not the only ones who sought to enjoy benefits from these fraudulent publications. Among others, editors who publish "high-impact" papers in their journals also get a share of the glory and advancement in their careers.

However, none of these beneficiaries acted unethically; they all believed the data to be honest, and they were all victims of a squalid deception. For this reason, none of them deserves to be stoned by the scientific community. Enough handwringing—resist the temptation to blame the victim.

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A Proposal for Transparency

THERE IS AN EASY, CHEAP, AND RESPONSIBLE way to link credit for published papers with responsibility for their contents, and I am surprised that it was not mentioned in Donald Kennedy's otherwise excellent editorial on the Schön affair ("Next steps in the Schön affair," 18 Oct., p. 495). This is for journals to publish for the reader a brief list of what the authors agreed had been their contributions—what part of the work reported each author actually did (*1*). My colleagues and I proposed this and devised a successful system that has since become common practice among the big medical journals, which were long ago forced to deal with irresponsible authorship and the phenomenon of multiple fabricated studies and coauthors disappearing whenever problems were raised (*2*). This system was devised to link credit to responsibility, transparency being a goal of science. The Beasley committee, in investigating Schön, would have had a far easier time, and been more convincing in their assessment, had they been able to see in print what Schön and his colleagues had asserted they had actually contributed to the work at the times when their joint papers were submitted. Then the committee, like the readers, would have plainly seen that the coauthors did nothing. *Nature* agreed to adopt this rule, but to make it voluntary. Because we all like credit without accountability, needless to say, almost no authors took up *Nature*'s offer. I now hope that both *Science* and *Nature* will change to this system, if only to remind authors that a scientific publication is, in Joshua Lederberg's words "an inscription under oath, a testimony" (*3*).

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3. J. Lederberg, *Scientist*, 8 February 1993, p. 10.

Response

WHAT MY EDITORIAL ACTUALLY SAID WAS, "That sounds like a distinction without a difference." What I had in mind was that to most people, under most circumstances, scientific misconduct and professional responsibility really are linked. For example, most institutional rules hold failures of professional responsibility by scientists to be sanctionable. Under such rules, research misconduct would surely lead to sanctions, and has. I would agree with Beasley and his colleagues that although all research misconduct entails failure of professional responsibility, not all failures of professional responsibility constitute research misconduct.

It is easy to agree with Phillips that victims shouldn't be blamed. I find it harder to accept a world in which coauthors enjoy benefits but never have to accept risks. Rennie offers an ingenious way to finesse that problem, but it would make for complex (and costly) presentation in the journals.

DONALD KENNEDY

Nature Versus Nurture Redux

IN PATRICK BATESON'S REVIEW OF *THE Blank Slate* ("The corpse of a wearisome debate," Books *et al.*, 27 Sept., p. 2212), he attacks the book's author, Steven Pinker, on three levels. First, Bateson argues that Pinker has set up a caricature of