My position remains as valid now as it was then. Lowered dose estimates, a higher sensitivity of the young, and the (apparently appropriate) adoption of the relative risk model increase the estimates of radiation cancer risk in Hiroshima and Nagasaki. It is nevertheless unlikely that we will ever be able to evaluate the effects of low doses of ionizing radiation on the basis of epidemiology. The most persuasive aspect of extrapolations is that statistical limitations as well as other uncertainties make it impossible to discern the effects of doses that are less than about 0.1 Gy. In animals exposed to moderate radiation doses, cancer incidences that are both higher and lower than those in the control population have been demonstrated with high probability. The latter phenomenon, sometimes termed "hormesis," has caused an increasing number of people to speculate that low radiation doses may pose a risk that is less than negligible. At present this position is neither more nor less unreliable than the claim of a proportional relation for doses below 0.1 Gy.

The postulate that this relation applies to cancers in humans (except for leukemia, where incidence is high and statistical uncertainty therefore lower) is merely an article of faith. In the absence of tangible information it may be adopted in stipulating "risks" in connection with radiation protection (*1*), but any claim that these risks are actual rather than nominal cannot be supported by science but only by "political science."

HARALD H. ROSSI
105 Larchdale Avenue,
Upper Nyack, NY 10960

REFERENCES

1. H. H. Rossi, "Limitation and assessment in radiation protection" (Lauriston S. Taylor Lecture No. 8, National Council on Radiation Protection and Measurements, Bethesda, MD, 1984).

Boston University/Chelsea Project

Bernard J. Fine's letter of 24 November 1989 (p. 984) concerning the unprecedented Boston University–Chelsea Public Schools collaboration is inaccurate and misleading. Fine does not discuss the events that led to the overwhelming passage of the project by the Massachusetts Legislature and the signing of the legislation by Governor Michael Dukakis on 13 June 1989. He also does not discuss what took place in Chelsea between the time of that signing and the writing of his letter.

Fine suggests that Boston University is raising funds to finance "costly innovations including capital improvements," and he goes on to state that little consideration has been given to what will happen when the university withdraws. In fact, Boston University and various Chelsea groups have closely examined the state funding mechanisms for school buildings and are holding extended public discussions of how the university can indeed provide needed resources to a public school system that has suffered a severe budget drought for many years. For example, the university is in the process of installing $600,000 worth of computer hardware and software in Chelsea's classrooms at minimal future maintenance cost to the Chelsea taxpayers.

Fine states that Boston University "has insisted on not being publicly accountable." Actually, the public meetings and other university activities in Chelsea have been lauded by citizens through letters to the local newspapers, letters, and calls to Chelsea's public officials and to the university, and by several strong comments made to the Governor's Oversight Panel at its meetings. Happily, some of the strongest letters and comments have been made by citizens who did not originally support the collaboration.

Fine is, of course, right to say that "Chelsea's problems go much deeper than its school system." Because all of us involved in the collaboration knew this long ago, Boston University built into its plan the need to work effectively with Chelsea's mayor and city officials as well as with the social service agencies, the health clinics, the churches, and other citizen's groups on community problems that bear on the quality of life generally and on education specifically. Boston University has followed through on its plans: examples include the new city-wide medical plan, the award-winning intergenerational literacy project (one of 52 chosen from 1300 proposals from around the nation), and cooperation with the mayor of Chelsea in response to his request for university assistance with the operations involving Chelsea's city finances.

PETER R. GREER
Boston University/Chelsea Project,
605 Commonwealth Avenue,
Boston, MA 02215

Milk Products: Surplus or Shortage?

The statement in the article concerning bovine somatotropin by Marjorie Sun (News & Comment, 17 Nov., p. 876) that the United States is "awash in surplus milk" needs clarification. While milk fat (butter) continues to be in surplus, the nation is currently experiencing a shortage of milk for fluid consumption and for incorporation into dairy products. There have been, in fact, only brief periods during the last year and a half when a surplus of milk has existed, except for cream and butter. As a result of the current milk shortage, the so-called Minnesota-Wisconsin price (to which most milk prices in the United States are pegged) for milk that is used for manufacturing dairy products (cheese, non-fat dry milk powder, and butter) has increased 24.7% from $11.12 per 100 pounds in May 1989 to $13.87 in October 1989. Most milk processors managed to hold increases in fluid milk prices to a minimum until recently, but a substantial increase in the supermarket price for milk has occurred in most areas since September 1989. There is also a strong international demand for dairy products, especially for non-fat dry milk, as a result of the depletion of the supply of subsidized dairy products from the European Community.

While most dairy industry economists think that the current milk deficit is a short-term phenomenon resulting from drought and low profit margins and that supply will catch up with demand within 6 to 12 months, it also may be argued that the success of Jeremy Rifkin and other genetic engineering critics in delaying the approval of bovine somatotropin, thus denying the dairy industry a tool with which to respond quickly to an unusual situation, is at least partly responsible for this shortfall and for the resulting increased price of fluid milk and cheese to the consumer.

S. L. SPAHR
Department of Animal Sciences,
University of Illinois,
Urbana, IL 61801

Erratum: In the report "Vaccination against experimental allergic encephalomyelitis with T cell receptor peptides" by Mark D. Howell *et al.* (3 Nov., p. 668), the sequences of the peptides r-VDJ2_8 and r-VDJ2_9 shown in table 1 on page 669 were incorrect. These peptides are truncations of the r-VDJ1 sequence, not the r-VDJ2 sequence, as stated throughout the text. The actual sequences of the peptides designated r-VDJ2_8 and r-VDJ2_9 are SSDSSNTE and ASSDSSNTE, respectively.

Erratum: In the News & Comment article "Making transgenic mice: Is it really that easy?" by Marcia Barinaga (11 Aug., p. 590), the reference on page 591 to a paper published in the April 1989 issue of *Cell Biology International Reports* should have noted that the author was Franco Arezzo, not "a group at the University of Palermo."

Erratum: The caption for the figure entitled "More mad cows" accompanying Jeremy Cherfas' News & Comment article "Virus-like agent blamed for mad cow disease" (2 Feb., p. 523) was incorrect. The bar graph shown represented the cumulative number of cases of bovine spongiform encephalopathy reported in the United Kingdom from December 1988 through January 1990.

Erratum: The cover caption for the issue of 9 February 1990 should have described the molecule on the cover as VPI-5 (Dow and Virginia Polytechnic Institute), not as ALPO-5 (Union Carbide). The first sentence of the caption should have read, "Superlattices of *p*-nitroaniline molecules self-assemble and orient within the polar, greater than 10 angstrom wide channels of VIP-5, a molecular sieve." The preferred orientation of the polar molecules occurs in both materials.