and Opportunistic Infections, www.retroconference.org, abstract 169 (2000).
4. P. N. Fultz *et al.*, *AIDS* **4**, 619 (1990); J. E. Phillips-Conroy *et al.*, *J. Med. Primatol.* **23**, 1 (1994).
5. A. Morris *et al.*, *Virol.* **73**, 8720 (1999); R. S. Diaz *et al.*, *J. Virol.* **69**, 3273 (1995)
6. A. Chitnis, D. Rawls, J. Moore, *AIDS Res. Hum. Retroviruses* **16**, 5 (2000).
7. A. Meyer *et al.*, *Med. Trop.* **51**, 53 (1991); D. Heymann, M. Szczeniowski, K. Esteves, *Br. Med. Bull.* **54**, 693 (1998); J. Cohen, *Science* **277**, 532 (1997); J. C. De Jong *et al.*, *J. Infect.* **40**, 218 (2000); I. Greiser-Wilke and L. Haas, *Dtsch. Tierarztl. Wochenschr.* **106**, 332 (1999); B. Hjelle and G. E. Glass, *J. Infect. Dis.* **181**, 1569 (2000); W. Heneine *et al.*, *Nat. Med.* **4**, 403 (1998); M. Callahan *et al.*, *J. Virol.* **73**, 9619 (1999).

Hooper asserts, with no confirmatory evidence, that we used chimpanzee cell cultures to make oral polio vaccine tested in the then–Belgian Congo between 1957 and 1960.

The suggestion that 80 pairs of chimpanzee kidneys would have been needed to make the few lots used in the Congo is untrue. In fact, no chimpanzee cultures were ever used for polio vaccine preparation. Moreover, as attested by witnesses, nearly all the animals captured for the camp were young: the only extant records show that 80% were 4 years of age or less, and 100% were less than 10 years old. The male "adult" mentioned by Hooper, presumably so labeled because it was significantly older than the other chimps, weighed 26 kg. This weight corresponds to an age of approximately 7 years, 10 years at the outside, but certainly not 15 years (*1*).

The paper by Korber *et al.* (*2*) is further evidence that the events postulated by Mr. Hooper never took place.

Stanley A. Plotkin
4650 Wismer Road, Doylestown, PA 18901, USA
Hilary Koprowski
Thomas Jefferson University, 1020 Locust Street, Room M85, Philadelphia, PA 19107, USA

References
1. T. M. Butler, *Aeromedical Review* **XVI**, 1 (1973).
2. B. Korber *et al.*, *Science* **288**, 1789 (2000).

Nuclear Power and Climate without Proliferation

The analysis in the Policy Forum "A nuclear solution to climate change?" by W. C. Sailor, D. Bodansky, C. Braun, S. Fetter, and B. van der Zwaan (*Science*'s Compass, 19 May, p. 1177) is diminished by inclusion of the myth—popular in the United States—that efficient use of nuclear resources is a proliferation threat. Quite the contrary, destruction of weapons materials in spent nuclear fuel by their use for production of electricity in fast, so-called breeder reactors is an essential component of good nonproliferation practice. Depleted uranium at U.S. enrichment plants, which was used by the United States Department of Energy (DOE) to produce plutonium for weapons, would also be destroyed in fast reactors. The electricity produced from existing nuclear by-products would be equivalent to that needed by the United States, at present use rates, for hundreds of years.

The nuclear solution presented by Sailor *et al.* would recover less than 1% of the energy from uranium. Spent fuel would be disposed of in a geologic repository. Depleted uranium—millions of tons of weapons source material—would accumulate indefinitely.

International Atomic Energy Agency (IAEA) safeguards are required for plutonium-239 in spent fuel deposited in a geologic repository. However, virtually no one accepts the IAEA contention that planned satellite surveillance can be reasonably assured for 10,000 years. Moreover, the time required for significant decay of plutonium-239 is not 10,000 but 240,000 years.

Since safeguards for these periods of time are not credible, spent fuel must be reprocessed to permit permanent disposal of unwanted fission products, i.e., high-level radioactive waste. Disposal of this waste is essential for viability of nuclear power and is a requirement of virtually all nations. Reprocessing only in well-designed, well-managed, and safeguarded facilities operated by nations with large nuclear power programs, and immediate fabrication of weapons materials into fuel assemblies for their destruction through production of electricity, provide the greatest assurance against a proliferation threat from nuclear power.

The du Pont company completed designs for such facilities in 1978, based on its experience in reprocessing at the DOE Savannah River Plant and on the experience of others. Among many important features of these designs was the elimination of accumulations of separated plutonium. Unfortunately, these designs were rejected by leaders of the DOE in order to support national laboratory reprocessing concepts that had led to earlier problems (failures and proliferation) and poorly focused research on "proliferation-resistant" fuel cycles. During this same time period, political decisions were made that led ultimately to cancellation of U.S. fast reactor development.

U.S. nuclear policies based on best science and best applications of science will result in nuclear power being used as the solution for climate change and other energy and environmental problems.

Clinton Bastin
987 Viscount Court, Avondale Estates, GA 30002, USA. E-mail: clintonbastin@msn.com

Retraction

In the course of carrying out experiments that were a direct extension of our recent *Science* paper "Stable RNA/DNA hybrids in the mammalian genome: inducible intermediates in immunoglobulin class switch recombination" (*1*), we discovered differences from those in the paper. The first author (R. B. Tracy) has admitted to data alteration such that the primary conclusions of the paper are in question. Because of this, the authors are retracting the entire paper on class switch recombination (*1*). We are deeply regretful for any scientific misconceptions that have resulted from these studies. [Note that the following related paper is also being retracted for the same reason: R. B. Tracy and M. R. Lieber, "Transcription-dependent R-loop formation at mammalian class switch sequences," *EMBO J.* **19**, 1055 (2000).]

Robert B. Tracy[1]
Chih-Lin Hsieh[2,3]
Michael R. Lieber[1,2,4,5]
[1]Department of Pathology, [2]Department of Biochemistry and Molecular Biology, [3]Department of Urology, [4]Department of Microbiology, [5]Department of Biology, University of Southern California Keck School of Medicine, Norris Comprehensive Cancer Center, Rooms 5420 and 5428, Los Angeles, CA 90089–9176, USA. E-mail: lieber@hsc.usc.edu

Reference
1. R. B. Tracy, C.-L. Hsieh, M. R. Lieber, *Science* **288**, 1058 (2000).

CORRECTIONS AND CLARIFICTIONS

NetWatch : "Bioweapon worries" (23 June, p. 2091). It was incorrectly stated that the 1972 Biological Weapons Convention has not been ratified. The last sentence should have read, "You can also read the 1972 Biological Weapons Convention, in force since 1975 but currently subject to debate as countries wrangle over ways to strengthen it."

News Focus: "Stress: The invisible hand in Eastern Europe's death rates" by Richard Stone (9 June, p. 1732). The two graphs on p.1733 should have been credited to V. Shkolnikov, F. Mesle, and D. Leon. In addition, in the graph labeled "Mortality of Russian men," the ratio was based on Russian mortality figures for 1998 and western mortality figures for the period 1992–1995.

Perspective: "An infrared look behind stars" by C. J. Hogan (14 Apr., p. 281). In five instances in the text, the unit micrometers "μm" should have been millimeters "mm": in column 2 on p. 281 (0.8 to 3 mm), in column 3 on p. 281 (0.8 to 3 mm, 0.8 mm, and 0.4 mm), and in column 1 on p. 283 (0.8 mm).