aspects of thermonuclear weapons. Although the name was an apt one, its origin is now lost. Likewise, the reason for "Sherwood" now seems to be lost, although it is most likely attributed to James Tuck, a member of the U.K. team at Los Alamos (1943–1945), who stayed on to help start the fusion studies there.

Rolf M. Sinclair
Program Director for Special Programs,
Division of Physics,
National Science Foundation,
4201 Wilson Boulevard,
Arlington, VA 22230, USA

References

1. A. S. Bishop, *Project Sherwood: The U.S. Program in Controlled Fusion* (Addison-Wesley, Reading, MA, 1958).

■

Beef Quality

The Random Samples item "Designer cattle with ultrasound" (21 Jan., p. 327) describes attempts being made by researchers at Iowa State University and elsewhere to use ultrasound for grading cattle. However, contrary to what the article says, the major determinant of higher cattle price is increased intramuscular (not intermuscular) fat, which is known as "marbling" in the industry. Marbling can be poorly related to the palatability of beef (*1*), and the additional, trimmable intermuscular (seam) and subcutaneous fat that come with marbling reduce the efficiency of growth and the carcass value. Variation in tenderness is a concern of beef producers, but indicators other than marbling are needed to predict the palatability of meat (*2*).

Michael L. Thonney
Department of Animal Science,
Cornell University,
Ithaca, NY 14853–4801, USA

References

1. G. Armbruster, A. Y. M. Nour, M. L. Thonney, J. R. Stouffer, *J. Food Sci.* **48**, 835 (1983); J. L. Garcia-de-Siles, J. H. Ziegler, L. L. Wilson, *J. Anim. Sci.* **44**, 36 (1977); D. R. Campion, J. D. Crouse, M. E. Dikeman, *J. Food Sci.* **40**, 1225 (1975).
2. J. B. Morgan *et al.*, *J. Anim. Sci.* **69**, 3274 (1991).

■

Future Energy Supplies

In his editorial "U.S. petroleum: Past and future" (21 Jan., p. 303), Philip H. Abelson argues for the development of new and admittedly costly recovery strategies to extract the last 100 billion barrels of oil from U.S. soil—the oil presently lying in small, isolated pockets of discontinuous fields.

By his own numbers, the current U.S. total oil requirement of 13.5 million barrels per day would be met for a mere 20 years more if that oil were extracted, at which point the United States would become totally dependent on imported oil, with the uncertainties that that entails for energy security. Of course, we could continue to put up with that insecurity and import oil to make that "last drop" stretch out a few years longer. But what is the point? Within a generation, the United States will have either to depend totally on imported oil (and natural gas) or it will have to change to the use of renewable forms of energy.

Wouldn't it be much smarter to take our limited research and development resources and put them toward developing the latter rather than throwing them away trying to get the very last drop of oil out of U.S. soil?

Mary E. Clark
Station 6001,
University of Montevallo,
Montevallo, AL 35115–6001, USA

As a participant in the upstream sector of the domestic oil and gas industry, I was pleased to read Abelson's customarily cogent comments regarding the present situation in petroleum. It would seem that if our government could

spend billions of dollars and not a few American lives defending Kuwaiti and Saudi oil sheiks, then certainly it could afford a few million for long-term petroleum research, as advocated by Abelson. One problem is that such a policy would not be politically correct. It appears that a large and vocal segment of the American populace regards all of us as clones of J. R. Ewing.

Philip S. Brumbaugh
1359 South Mason Road,
St. Louis, MO 63131, USA

■

Consciousness: In Whose Hands?

I feel compelled to offer one comment regarding J. J. Hopfield's review of Francis Crick's *The Astonishing Hypothesis* (Scribner, New York, 1994) (4 Feb., p. 696). A "heroic attempt to wrest consciousness from the minds of the philosophers and place it in the hands of scientists" may well be as appropriate as wresting Chopin's C♯ Minor Waltz from the minds of the concert pianists and placing it in the hands of skilled riveters.

John W. Fowler
Infrared Processing and Analysis Center,
California Institute of Technology,
Pasadena, CA 91125, USA

Corrections and Clarifications

In the article "p53 sweeps through cancer research" by E. Culotta and D. E. Koshland Jr. (Molecule of the Year, 24 Dec., p. 1958), under the heading "Molecular medicine" on page 1959, the third sentence should have stated that "aflatoxin B_1 causes a guanine to be replaced by thymine at a particular nucleotide position in the gene for p53. . . ."

Figure 2C on page 1057 of the report "Dynamics of the hippocampal ensemble code for space" by M. A. Wilson and B. L. McNaughton (20 Aug., p. 1055) was printed incorrectly. The words "actual" and "reconstr." should have appeared in black and red, respectively, at the left of the figure to indicate the actual and reconstructed spatial trajectories shown. In reference 1 of the same report, T. Hökfelt's name was spelled incorrectly in two places.

Figure 4 of the report "Selective and ATP-dependent translocation of peptides by the MHC-encoded peptide transporter" by J. J. Neefjes, F. Momburg, and G. J. Hammerling (6 Aug., p. 769) stated incorrectly that a peptide with T as the COOH-terminal residue was not efficiently translocated. Resynthesis revealed that the peptide RYWANATRST is transported by rat TAP. This does not change the general conclusion that the transporters are selective, because several other peptides are not well translocated [F. Momburg *et al.*, *Nature* **367**, 648 (1994)].