fails, and we need to minimize the risk of breakout from arms control agreements resulting from conversion of the weapons grade-material at least in part to reactor grade plutonium. We also need the dual approach to persuade the Russians to move rapidly to disposition.

We must unlink today's decisions about the management and disposition of excess plutonium from nuclear weapons from choices affecting the world's energy future. The DOE decision about the excess weapons plutonium deals with a "clear and present danger"; we have many decades to address future choices relating to civilian nuclear energy.

Wolfgang K. H. Panofsky
Director Emeritus,
Stanford Linear Accelerator Center,
Stanford University, Stanford, CA 94309, USA

Note

1. I am Chair of the Study on Management and Disposition of Excess Weapons Plutonium, Committee on International Security and Arms Control, National Academy of Sciences, Washington, DC.

■

Eco-Friendly Coffee Farming

Laura Tangley accurately details the need for U.S. consumers to think about how their coffee is produced and the importance of "certified eco-friendly" coffee to the conservation of migratory songbirds ("The case of the missing migrants," (Research News, 22 Nov., p. 1299). However, we would like to make clear that our ECO-O.K. Coffee Certification Program requires that coffee be grown beneath a diverse canopy of native tree species. ECO-O.K. certifies either organic farms or those that use integrated pest management. When a producer must use agrochemicals to save his or her crop, our standards strictly control the transport, storage, and use of the chemicals, thus reducing threats to the environment and human health.

While forested organic coffee farms offer perhaps the best example of bird-friendly production, they occupy only a tiny percentage of coffee-growing lands. The Rainforest Alliance wants to promote large numbers of forested coffee farms in order to have maximum conservation impact. By pursuing this strategy, we believe that we can stop and perhaps even reverse the trend toward damaging, "full-sun" coffee fields.

Daniel B. Katz
Executive Director,
Rainforest Alliance,
65 Bleecker Street,
New York, NY 10012, USA
E-mail: dkatz@ra.org

Tangley's commentary concerning the mounting deleterious impact of changing methods of shade usage, or lack thereof, in coffee plantations on migratory bird populations calls attention to my previously published data sets on cicada populations thriving in some Costa Rican coffee plantations (*1*, *2*). Costa Rican coffee plantations, in my experience, support several genera and species of cicadas of varying body size, behaviors, and seasonal emergence patterns. Furthermore, a large percentage of the total cicada fauna of Costa Rica (a total of about 30 species) thrives in those coffee habitats in which various legume trees—especially of the genera *Inga*, *Erythrina*, and *Pithecollobium*—are used as shade cover (*1*).

Repeated surveys of emerging cicadas in these coffee habitats reveal a discernibly patchy spatial distribution, as indicated by the locations of final molt–cast nymphal skins clustered near these shade trees rather than evenly distributed across the coffee bushes. Cicada nymphs drench sap subterraneously from tree roots for several years before maturing and emerging from the soil for the molt to the winged adult stage.

In some instances, the densities of cicada-cast skins in coffee habitats can be considerably higher than in comparable areas of adjacent wet or moist forest habitats. Such data suggest a larger biomass of adult cicadas being

present in coffee plantations with legume and other tree shade cover, very likely providing an ample food supply for insectivorous birds. What is especially notable about these patterns is the high numbers of cicadas emerging in Costa Rica's premier coffee-growing zone within the pronounced tropical dry season, a period corresponding to the winter season of the northern hemisphere. Therefore, dry-season cicadas undoubtedly comprise a portion of the diet for migratory bird species inhabiting these areas temporarily as well.

Allen M. Young
Curator of Zoology,
Vice President of Collections, Research, and Public Programs,
Milwaukee Public Museum,
800 West Wells Street,
Milwaukee, WI 53233–1478, USA

References

1. A. M. Young, *Am. Midl. Nat.* **103**, 155 (1980); *J. N.Y. Entomol. Soc.* **89**, 123 (1981).
2. ———, *Milw. Publ. Mus. Contrib. Biol. Geol.* **40**, 1 (1981).

■

Approaches to AIDS Research

The enormous attention paid to the problem of AIDS has included much discussion about funding: How much federal money should be spent on AIDS relative to other research endeavors? What are the gaps in our knowledge that need to be filled? How much spending should be for targeted research and how much should be investigator initiated? There has been little discussion, however, of the institutional formats under which AIDS research can be done.

I recently attended an opening celebration for a new research floor at the Aaron Diamond AIDS Research Center (ADARC) in New York and was reminded of the numerous significant advances made by their team of investigators. I doubt that the research progress of these same investigators would be anywhere near as spectacular if they were individually placed in major universities around the country. The key is the institutional setting. A highly competent group of faculty-level investigators with complementary disciplines and interests has been brought together by a strong leader, David Ho, to focus on several discrete aspects of the AIDS problem. As with any good sports team, the total is much greater than the sum of the individual parts.

The formation of ADARC was made possible by the hard work and financial backing of the Aaron Diamond Foundation. While the continued operation of ADARC is dependent on the cooperation of the Diamond Foundation, Rockefeller University, and the city of New York, most of the operating costs are borne by federal grants. We need more of these focused research centers if we are to optimize our spending in the fight against AIDS. I second the challenge of Secretary of Health and Human Services Donna Shalala to philanthropic organizations to use their financial power toward this end. Other societal problems—drug abuse and gun control, to name a few—could also benefit enormously from this approach.

Ronald C. Desrosiers
Division of Microbiology,
New England Regional Primate Research Center,
Harvard Medical School,
Southborough, MA 01772–9102, USA

■

Swedish Biomedical Research Funding

In Jon Cohen's News & Comment article of 25 October (p. 491), a table lists changes in the public funding for basic biomedical research in various countries between the years 1996 and 1997. The figures appearing