A recent traveler to Moldova and Armenia describes the state of health care in these former Soviet republics. Recent statements by South Africa's President Thabo Mbeki concerning HIV and AIDS have drawn much criticism, "[h]owever, some of Mbeki's views highlight still unanswered and pertinent questions." From a survey of the various movements plants exhibit to a suggestion of what to call "zoologically inspired robots," readers respond to *Science*'s recent special issue "Movement: Molecular to Robotic." And the impact that the introduction of sulfonamide drugs in 1948 had on the poultry industry and the role of these drugs today are discussed.

Health Care in Former Soviet Republics

Richard Stone in his News Focus article "Stress: The invisible hand in Eastern Europe's death rates" (9 June, p. 1732) highlights a serious problem in the countries of Central and Eastern Europe and especially those of the former Soviet Union. I recently visited Moldova and Armenia. If you ask medical doctors there about the current health service, they say it is chaotic and many times worse than in Soviet times. Diseases such as tuberculosis and hepatitis are on the increase. A large part of the problem is that many patients don't have the money to buy drugs or even anesthetics. The result is that the hospitals are short of patients and doctors are unemployed. Stone's article ends with a statement that "improving life expectancy in Eastern Europe lies with the region's economy." In Moldova and Armenia, I saw no signs of such improvement and hence am rather fearful for the future, as most likely the populations of these countries are as well.

Peter N. Campbell
Department of Biochemistry and Molecular Biology, University College London, London WC1E 6BT, UK. E-mail: p.campbell@biochemistry.ucl.ac.uk

Contributions to the U.S. Space Program

The News of the Week article "Goldin shakes up NASA's life sciences program" (Andrew Lawler, 12 May, p. 938) does not include mention of the many contributions that Arnauld Nicogossian, former chief of NASA's Office of Life and Microgravity Sciences and Applications (OLMSA), has made to our nation's space program. Despite flat budgets for OLMSA over the past 6 years, Nicogossian's leadership has increased the office's extramural research community from about 650 to more than 900 researchers from nationally recognized institutions. Working with the National Institutes of Health and the National Science Foundation, Nicogossian has been instrumental in establishing the Life Sciences competitive peer review process, which requires all NASA scientific research to undergo vigorous peer review by independent external panels. Nicogossian should also be credited with spearheading an interdisciplinary research program in biology, physics, and chemistry, which uses biologically inspired technology as the basis for integration. This effort is attracting a new generation of scientists to NASA, as well as several Nobel laureates.

Whether serving as the associate administrator for OLMSA or as chief health and medical officer, Arnauld Nicogossian will continue to do an outstanding job providing NASA with world-class leadership and expertise.

Daniel S. Goldin*
National Aeronautics and Space Administration, Washington, DC 20546, USA
*Administrator

Mbeki and AIDS in Africa

Jon Cohen, in the News of the Week article "AIDS researchers decry Mbeki's views on HIV" (28 Apr., p. 590), accurately conveys the response that most scientists have to South Africa's President Thabo Mbeki's revisiting of the extensive evidence that HIV causes AIDS. However, some of Mbeki's views highlight still unanswered and pertinent questions. Despite the fact that various hypotheses have been put forward and numerous studies carried out, it is not yet clear why HIV and AIDS is spreading so rapidly in sub-Saharan Africa. In the absence of any satisfactory explanation for the overall phenomenon, there is logic in President Mbeki expressing a desire to consider whether there might be an "African" approach to the problem that differs from the response to AIDS in the West. Further research will reveal if there are significant factors that are specific to the African AIDS situation.

Something that needs to be investigated is whether the helminthic parasitic infections that are prevalent in Africa (but not in most developed countries) predispose individuals to AIDS and, for that matter, to tuberculosis, a disease that often occurs in AIDS patients. The body's predominant reaction to most worm infestations is a T helper cell type 2 (T_H2) immunological response. There is evidence that this immune profile allows the causative microorganisms of AIDS and tuberculosis to flourish (*1*–*4*). Future research should show whether mass deworming of human populations would represent a "local" approach, as envisaged by President Mbeki, to help control the spread of HIV and AIDS. Treatment of certain non-HIV sexually transmitted diseases has already been carried out in Africa in an attempt to reduce the incidence of HIV infection (see "Study of HIV transmission sparks ethics debate" by Gretchen Vogel, News of the Week, 7 Apr., p. 22). Indeed, on 9 July 2000, a workshop on "Helminth Infection and AIDS" is to be held in Durban, South Africa, as a satellite meeting of the 13th International AIDS Conference.

Miles B. Markus
Parasitology Research Program, University of the Witwatersrand, Private Bag 3, Wits 2050, South Africa. E-mail: milesm@iafrica.com

John E. Fincham
Medical Research Council, Post Office Box 19070, Tygerberg 7505, South Africa. E-mail: jfincham@mrc.ac.za

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Many Modes of Movement

The interesting array of articles for the special issue "Movement: Molecular to Robotic" (7 Apr., pp. 79–106) examines the biology of movement for animals with endoskeletons, animals with exoskeletons, robots, and molecules, but movement in an entire kingdom—the plant kingdom—is overlooked. Movement in plants is based on physical mechanisms that are very different from most animal movements, and movements have been a central factor in the evolution of many plant adaptations. Mechanisms include hydraulic shifts operating by means of osmotic engines (*1*), differential growth, fracturing of structures due to localized desiccation, and cell separations or dissolution leading to projectile actions.

Examples of movements based on hydraulic shifts include the cyclic flapping of leaves and the opening and closing of some petals and flowers. Cells on one side of a petiole, pulvinus, stem, or pedicel will lose water, whereas cells on the opposite side will maintain or even in-