

NSF Announces Plans For Elementary Science

The National Science Foundation has launched what it calls "the first major step toward making science a basic part" of public schooling from kindergarten onward.

The first phase of the project, covering kindergarten through 6th grade, entails matching 4-year grants totalling \$6.6 million to three groups, each a "troika" comprising scientific advisers, schools, and textbook publishers. The grants, to be matched by contributions from publishers, are being awarded to the Technical Education Research Centers of Cambridge, Massachusetts, which is collaborating with the National Geographic Society in developing an electronic information-sharing network; the Biological Science Curriculum Study of Colorado Springs, Colorado, and the Education Development Center of Newton, Massachusetts.

Each group will be developing and testing "exciting" new science courses and materials which, it is hoped, will eventually be widely adopted. Publishers are also expected to contribute about 5% of their income from sales to teacher training activities. Speakers at a news conference announcing the event observed that publishers have not been keen on developing elementary science texts because of the "splintered" market and constricting criteria imposed by buyers.

NSF science and engineering education director Bassam Shakhshiri said students are generally not prepared to study science when they get to high school since elementary schools devote less than 1¼ hours a week to it "by the most optimistic standards." By the time they reach 8th grade, "most students have already decided that science courses are difficult and dull." The foundation will soon be accepting proposals for projects on science curricula for middle schoolers, followed by the same for high schools. ■ C.H.

Fasting Astronomer Goes to Geneva

Astronomer Charles Hyder, who has declared his intent to fast till death if the Administration does not change its nuclear arms policies (*Science*, 5 December 1986, p. 1191), has taken his cause to Geneva.

The 56-year-old Hyder departed on the 127th day of his water-only diet to meet with various peace organizations. He feels

this is a time to "establish his presence" at the site of the ongoing arms negotiations, according to a colleague, Robert Noyes of the Harvard Center for Astrophysics. He was expected to return on 3 February.

The reason Hyder, who expected to die around the New Year, is still alive is that he started out at 310 pounds. George Washington University nutritionist C. Wayne Callaway estimates that he is now down to about 170 pounds. Callaway says Hyder's endurance also stems from his ability to adapt his metabolic rate—he is probably burning fewer than 1000 calories a day. People of normal weight begin dying after around 70 days of starvation, says Callaway, but experiments in "therapeutic starvation" conducted with grossly obese people during the 1960s at the University of Pennsylvania showed that people could fast for about 200 days.

Hyder is now in a "very risky" phase as his body fat and protein from muscle tissue are being consumed, says Callaway. The next phase is likely to be death either from cardiac arrhythmia as heart muscle fibers are disrupted, or from bronchial pneumonia as a result of weakening of muscle tissue in the lungs. ■ C.H.

Comings and Goings

The Carnegie Institution of Washington has announced that **Maxine Singer** has been chosen to succeed **James D. Ebert** as the institution's president. Singer, a biochemist who is currently chief of the Laboratory of Biochemistry in the National Cancer Institute's division of cancer biology and diagno-



Maxine Singer

sis, will be the institution's eighth president. Her appointment will begin on 1 March 1988. Ebert will become director of the Chesapeake Bay Institute of Johns Hopkins University.

The Carnegie Institution has five research centers: The Department of Embryology in Baltimore; the Department of Plant Biology in Stanford, California; the Department of Terrestrial Magnetism and the Geophysical Laboratory, both in Washington, DC; and the Mount Wilson and Las Campanas Observatories. ■ C.N.

MacArthur to Support Family Planning

The MacArthur Foundation has made its first foray into the field of family planning with \$5.7 million worth of grants to eight organizations involved with population and reproduction issues in Asia, Africa, and Latin America. The largest is a 3-year, \$1.05-million grant to the International Women's Health Coalition in New York.

In making the awards, the foundation's president John E. Corbally noted that United States government support for international family planning is on the wane at a time when the movement "seems to have reached a plateau" in Asia and Latin America, and "has had little or no effect" in Africa. "This is a time of great need," Corbally said.

The programs to be funded will focus on the cultural, public policy and social aspects of family planning rather than technology or delivery systems. One grant, for \$200,000, will help the Center for Population Communications, International, of New York, develop soap operas based on family planning issues in heavily peopled Third World countries. ■ C.H.

Japan to Build French Reprocessing Plant

Europe's nuclear industry received a boost last week when Japan announced that it had selected French technology for the construction of a \$4.6 billion reprocessing plant, to be situated in the far north of Japan's main island, Honshu. The plant will be based on the same designs as those used for the construction of new reprocessing facilities by the nuclear fuels group Cogema at France's principal reprocessing facility at La Hague, on the country's northern coast. The French technology was chosen after a close competition with British Nuclear Fuels and the West German company DKW. ■

D.D.