RANDOM SAMPLES

edited by CONSTANCE HOLDEN

Getting Science Dollars To Russia

About 150 Russian scientists—grantees of the International Science Foundation (ISF)—met in Moscow last month to talk about how to keep the money flowing to them and their beleaguered colleagues. If they can't persuade the U.S. government to chip in, they fear the foundation will dry up.

The ISF was set up 2 years ago with a commitment of $100 million from Hungarian-born financier George Soros. About two thirds of that has so far been disbursed. Soros has said that he will make further contributions only if they are matched by the Russian and U.S. governments. Russia has pledged $12.5 million for 1995. But, says émigré biologist Alex Goldfarb of the Public Health Research Institute in New York, efforts to get U.S. government agencies to kick in have proven futile.

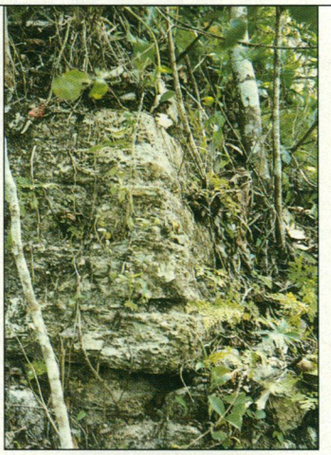
Goldfarb, who played a key role in starting the ISF, says he told the Moscow gathering that, without matching U.S. funds, "we will have to fold in '96." The grantees plan to form a political action committee to explore ways to get to U.S. lawmakers.

There is $10 million in U.S. Defense Department money that's supposed to go to former Soviet scientists via a soon-to-be established joint U.S.–Russia Research Foundation proposed by Representative George Brown (D–CA), chair of the House science committee. The logical course of action, many observers say, is for the two initiatives to merge. But there are numerous stumbling blocks. The major one, in the view of some U.S. bureaucrats, is Soros. If he wants U.S. government agencies to play ball with him, "Soros will have to relax some of his direct control" over ISF policies, says a House science committee aide. ISF, for its part, thinks bureaucrats are the problem. Goldfarb says ISF would be happy to merge with the Brown initiative, but that any joint effort would have to retain the ISF policy of only spending 10% of its money on overhead. Otherwise, he predicts, the effort is likely to "turn into a federal program where most of the money is spent on fact-finding missions in posh Moscow hotels."

Mayan Eco-Park

Sixteen years ago archaeologist Anabel Ford led a handful of machete-wielding Guatemalans in carving out a 20-mile trail to link two ancient Mayan sites separated by dense jungle.

Now Ford, a researcher at the University of California, Santa Barbara, is blazing another kind of path: She is spearheading the creation of an archaeological reserve around a Mayan site, called El Pilar, that straddles the border between Guatemala and Belize. It's basically a one-woman effort to mobilize two governments that share a contested border as well as international funding agencies and a multidisciplinary cast to create a 2000-acre binational reserve. The aim of the park is to foster eco-tourism, education, and research, as well as serve as a model of harmonious international cooperation. Plans include experimental "forest-gardens" between reconstructed ancient Maya houses and "sustainable charcoal production from Orbignya palm nuts." Ford hopes to help farmers develop alternatives to unsustainable slash-and-burn agriculture. She is now trying to raise $2.8 million for a 5-year development plan. So far the project, which has captured the interest of Guatemala's Ministry of Culture and Belize's Department of Archaeology, has $100,000 from the U.S. Agency for International Development.



Stones of antiquity. Side of 1300-year-old temple at El Pilar.

Ford's colleagues, though impressed with her idea, are not uniformly optimistic. Archaeologist David Freidel of Southern Methodist University in Texas, who calls Ford a "first-rate archaeologist," says "it's both remarkable and intriguing that she's trying to bring authorities together" in this "audacious" scheme. But Steven Houston of Brigham Young University in Utah is skeptical that she can pull it off, saying "these kinds of binational initiatives are problematic."

NASA PROJECT RANKINGS

	Mission	95–96	97–98
1	Hubble Space Telescope	1.3	1.3
2	Compton Gamma Ray Obs.	2.6	2.8
3	ROSAT (X-ray Obs.)	4.0	5.6
4	Eur. Infrared Space Obs.	4.5	3.6
5	High-Energy Transient Exp.	5.3	3.5
6	Cosmic Bkgrd. Explorer	5.5	8.0
7	Hopkins UV Telescope	6.7	8.2
8	2-Micron All-Sky Survey	6.8	4.8
9	Extreme UV Explorer	7.4	9.0
10	X-ray Timing Explorer	8.3	6.1
11	UV Imaging Telescope	10.3	10.8
12	International UV Explorer	10.6	10.5
13	Wisconsin UV Photo-Polarimeter Exper.	12.5	12.7

Hubble riding high. Every 2 years, NASA asks a panel of scientists to evaluate the future scientific productivity of its astrophysics missions to guide budget decisions. Last month, the latest review ranked the Hubble telescope at the top in terms of scientific bang for the buck expected over the next 4 years. Other rankings, such as those for two ultraviolet explorers, reflect the fact that they have completed their primary missions.

Safety at Sellafield?

A long-term study of workers at the U.K's nuclear fuel reprocessing plant at Sellafield has shown that—contrary to claims by anti-nuclear campaigners—working at Sellafield does not raise one's overall risk of getting cancer.

Epidemiologist Peter Smith and colleagues at the London School of Hygiene and Tropical Medicine, who report their findings in the 28 November issue of the *British Journal of Cancer*, pored over the records of 14,000 people employed between 1947, when the plant opened, and 1975. They looked at all deaths prior to 1989 and at the incidence of cancer between 1971 and 1986. The overall cancer death rate was actually 4% lower than the national rate. The leukemia rate was no higher than the national rate, although people exposed to higher doses of radiation were more likely to get leukemia, a finding in accord with a 1992 study of 95,000 U.K. workers.

One rare cancer for which there were significant excess deaths was that of the pleura (mesothelioma). But the researchers suspect this is associated with exposure to asbestos used in the plant's construction, not radiation. "That will be the thing that one will want to investigate most in the follow-up," says Smith.

Radiation biologist Barry Lambert of London's St. Bartholomew's Hospital Medical College is unhappy that only external radiation exposure—from gamma rays as registered on personal dosimeters—was documented in the study. He says alpha particles inhaled in plutonium dust could affect the blood and internal organs. Martin Day, a lawyer representing "radiation victims" around Sellafield, adds that data may be unreliable because external doses have been shown to be wrong in the past.

Officials of British Nuclear Fuels Ltd., however, professed themselves "very pleased" with the report and say that data on internal radiation are likely to have little effect on the results.