

First Aid for Russian Science

Chicago—Congress and the Bush Administration are considering proposals to assist scientists in what was the Soviet Union, whose support has dried up in the economic crisis now gripping the former republics. And a separate initiative is being launched to help former Soviet researchers keep abreast of the world's scientific literature.

Representative George Brown (D-CA), chairman of the House Committee on Science, Space, and Technology, announced at the AAAS annual meeting held here last week* that he will soon introduce legislation to create a U.S.-Russian Science & Technology Foundation to fund joint projects in both countries. "Not less than \$200 million" would be required to get the operation started, says Brown, and he's eyeing money saved from defense cuts for the initial endowment. The foundation would be administered by a joint U.S.-Russian governing board and grants would be awarded on a peer-reviewed, competitive basis.

Brown admitted that the amount of money generated by the endowment—perhaps \$10 million a year at current interest rates—would be small compared to the needs of ex-Soviet researchers. But he emphasizes that a little hard currency goes a long way in Russia "where [top researchers] are still working for \$50 a month."

Brown's proposal was greeted enthusiastically at the meeting by Russian molecular geneticist Evgenii Sverdlov. "Such a foundation would be the most fruitful way to reorganize Soviet science," says Sverdlov. "It is not just that we need money. It is also that, when we get money, we need to start distributing it in the wisest way possible."

The Bush Administration, worried about the nightmare of a "nuclear brain drain" of ex-Soviet weapons experts to Third World countries, last week came up with an initiative of its own. According to a report in *The New York Times*, Secretary of State James Baker proposed to President Boris Yeltsin of Russia that a U.S.-financed clearinghouse be established to help these scientists find financial support to stay in Russia.

A third initiative, announced by Richard Getzinger, director of international programs for AAAS, will extend, free of charge, subscriptions to Western journals that would otherwise lapse because former Soviet researchers no longer have hard currency to

pay for them. The effort will begin with *Science*, which is published by AAAS and which, according to Getzinger, currently has less than twenty subscribers in the former Soviet Union. Getzinger says that AAAS will also ask other scientific societies, such as the American Physical Society and the American Chemical Society, to provide their journals at cost to subscribers in the region. Eventually, he says, AAAS hopes to arrange a grant from the Chicago-based MacArthur

Foundation to pay for the subscriptions.

Timing is a crucial element to the success of these initiatives. Brown admits that even if Congress and the Administration approve his foundation promptly, money wouldn't even begin flowing East until early 1993. And Getzinger says it could take as long as 2 months just to determine how many journal subscriptions would need to be subsidized. Those delays might prove too long for beleaguered Russian scientists. "Science is facing a total collapse because of the economic situation in the country," says Sverdlov. "We need first aid, the sooner the better."

■ STEVEN DICKMAN

Sphinx Riddle Put to Rest?

Chicago—When geologist Robert M. Schoch of Boston University's College of Basic Studies argued last October that geological evidence suggests that the Sphinx is at least twice as old as virtually every other scholar has assumed, reaction from archeologists ranged from disbelief to anger. Last week, at the AAAS meeting here, Schoch and his opponents met face-to-face in a fiery debate that led to charges of pseudoscience and New Age thinking. When it was over, it was clear that Schoch hasn't convinced many archeologists or geologists that they've been wrong all these years.

Because the Sphinx is carved from in situ limestone, and can't be dated with isotopic techniques that would provide an unambiguous age, archeologists are forced to rely on the context of other monuments and artifacts found nearby on the Giza plateau to determine its age. They agree that the Sphinx was built about 2500 BC during the reign of Pharaoh Khafre and that its head is carved to his likeness.

Schoch, a paleontologist and stratigrapher by training, challenged that view in a paper presented at the Geological Society of America's October meeting. He contended that irregular weathering and subsurface rock patterns indicate that the core of the monument was built much earlier—at least 5000 years BC—apparently by a heretofore unrecorded culture. But geologist K. Lal Gauri from the University of Louisville, who has worked near the Sphinx for more

than 10 years and is a specialist in the weathering of stone monuments, blasted Schoch's analysis at the AAAS meeting. "Neither the subsurface evidence nor the weathering evidence indicates anything as far as the age is concerned. It's just not relevant."

The debate turned personal when Gauri and his fellow critic, archeologist Mark Lehner of the University of Chicago, suggested Schoch's credibility was suspect because his work was funded with private money gathered by John Anthony West, a nonscientist who has written books on Egypt and believes in the possibility of undiscovered ancient civilization. Lehner also insisted the Sphinx debate isn't just interdisciplinary squabbling: "This is not geologists against archeologists. This is archeologists and geologists against one geologist—Robert Schoch. This is the way pseudoscience is done. Not science." Schoch fired back, accusing Lehner of being a devotee of author Edgar Cayce. Lehner acknowledged to reporters that he first went to Egypt in 1973 as "a quaker" associated with Cayce's foundation. Now a respected academic scientist, he calls it "ironic" that he is involved in this debate—and wonders why a lone contrarian like Schoch was given a forum at AAAS. Schoch and West will soon be appealing to an even broader audience, however: they have a popular book in the works.

■ ELIZABETH CULOTTA



Timeless face. The Great Sphinx.

GABRIEL COVIAN/IMAGE BANK

* The AAAS annual meeting was held in Chicago from 6 to 11 February. Extensive coverage will be included in next week's issue.