The U.S. Should Strengthen Its Science And Technology Links with Latin America

Reprinted from THE SCIENTIST ® 3(19):12, 2 October 1989.

Latin America is experiencing a prolonged economic crisis that is eroding its science and technology base. The burden of a \$400 billion foreign debt has forced deep cuts in government spending on research and development, and drastically devalued currencies have made it prohibitively expensive for scientists to travel abroad, buy foreignmade equipment, and subscribe to international journals.

We should recognize the United States' role in this and other Latin American problems. Our banks' desire for easy profits is partly to blame for the region's debt crisis. And our society's insatiable appetite for drugs has fostered the cocaine cartels that corrupt Colombia, Bolivia, and Peru. Will our government's concern over the federal budget deficit allow the continued deterioration of Latin American science?

An answer to this question will come from Congress' action on a bill (H.R. 2152) introduced by Rep. Robert A. Roe (D-N.J.), chairman of the House Science, Space, and Technology Committee. The bill is intended to strengthen scientific ties between the U.S. and Latin America by establishing the Inter-American

Scientific Cooperation Program within NSF. The program would stress key initiatives, such as joint U.S.-Latin American science projects; graduate and postdoctoral fellowship exchanges; transfer of scientific equipment to Latin America; and information exchanges to develop Latin American library resources.

The bill requests an appropriation of \$5 million for fiscal year 1990 and \$10 million for 1991. These amounts may seem small, perhaps even inadequate, in comparison with the scope of the proposed program and the magnitude of the problem it addresses. But this should not obscure the bill's significant symbolic value. It sends a signal that the U.S. wants to form a stronger partnership with Latin America in science and technology.

There are good reasons for the U.S. to express—and act on—this intention. Latin America offers many natural phenomena that are rare or nonexistent in the U.S. In the geosciences, Mexico provides unique opportunities to advance volcanic, geothermal, and earthquake research. Brazil's tropical rain forests are an unparalleled natural laboratory to study the consequen-

ces of deforestation on global warming. Chile and other Andean nations provide the most advantageous sites for astrophysical research on our own and neighboring galaxies. In energy research, Argentina yields special insights into the technological and economic aspects of alcohol fuels, and Venezuela is a leader in enhanced oil recovery techniques.

Greater support for Latin American science also advances U.S. foreign policy objectives. Such support ultimately improves economic conditions and the quality of life in Central and South America. This in turn helps to foster political and social stability in a region of strategic importance to U.S. interests.

In the 1980s, virtually all military dictatorships have been replaced by democratically elected governments. The U.S. should reinforce this trend with closer cooperation in science and technology.

The U.S. was once Latin America's closest science ally. During the 1960s and early 1970s,

we dedicated hundreds of millions of dollars to creating and strengthening research institutions and educating generations of scientists and engineers. It is ironic that we are today falling behind Europe and Asia in science support within our own hemisphere. France and Germany already rival or surpass the U.S. in many key areas-biotechnology, space sciences, renewable natural resources, and informatics, Japan, South Korea, the People's Republic of China, and the Soviet Union have formalized or initiated cooperative agreements with Argentina, Brazil, Mexico, Panama, and Peru.

Rep. Roe's bill deserves our full support for Congressional enactment. It is a small initial investment that should be continued and increased steadily in years to come. Over the long term, this investment will yield valuable scientific, economic, political, and social benefits for ourselves and our neighbors in the Western Hemisphere.