



Partners in science. At the Cuban Academy of Sciences headquarters, Alan I. Leshner, Gerald Fink, Ismael Clark Arxer, president of the CAS, and Sergio Jorge Pastrana stand before a sculpture of the famous Cuban scientist Carlos Finlay. (Above) A street scene outside Havana.

SCIENCE DIPLOMACY

AAAS Signs Historic Agreement with Cuban Academy of Sciences

HAVANA, CUBA—In an elegant meeting room of the 84-year-old Hotel Nacional, where mobsters and movie stars once rubbed shoulders with intellectuals and heads of state, the leaders of AAAS and the Cuban Academy of Sciences this month signed a landmark agreement to advance scientific cooperation by Cuban and U.S. scientists in key areas of mutual interest to both countries.

The signing of the memorandum of understanding followed 2 days of meetings between a AAAS-organized group and a broad assortment of scientists and physicians across Havana. The group also met with the Chief of Mission of the U.S. Interests Section there, who expressed his support for the visit.

“This trip was a wonderful opportunity to reinvigorate the long-standing friendship between U.S. and Cuban scientists and to form a specific plan of action,” said AAAS President Gerald Fink, who is also a professor of biology at the Whitehead Institute at MIT.

The memorandum identifies four areas in the life sciences where AAAS and the Cuban Academy of Sciences will seek opportunities

for sustained cooperation: emerging infectious diseases, brain disorders, cancer, and antimicrobial drug resistance.

Merely 45 minutes from Miami by plane, Cuba is a natural choice for scientific partnerships with the United States. The country has committed a large amount of its resources to its scientific, medical, and public health systems, including a hardy biotechnology industry that exports a number of vaccines, antibody-based drugs, and other biomedical technologies.

While greater longevity is typically associated with wealthier populations, life expectancy in Cuba rivals that in the United States. “Cuban people live as poor people but die as rich people,” said Luis Herrera Martínez, director general of the Center for Genetic Engineering and Biotechnology in Havana. Cuba could thus be fertile ground for research on aging populations and the diseases that affect them, such as cancer or age-related neurodegenerative diseases.

The Cubans are also well positioned to detect emerging infectious diseases of concern to the United States, such as dengue and chikungunya, serious mosquito-borne viral diseases for

which no vaccines exist. Officials at the Hermanos Ameijeiras hospital in Havana told the U.S. group that Cuba has already implemented surveillance measures for chikungunya, which has just turned up in the Caribbean in recent months. The virus is spreading rapidly in the region, raising fears among U.S. public health experts that it may soon make an appearance in the U.S.

The obstacles to scientific collaboration are formidable, however. The Cuban economy, which crashed after the dissolution of the Soviet Union, is still faltering despite modest economic reforms in recent years. And, in addition to blocking U.S. federal research funding from reaching Cuban scientists, the U.S. embargo has imposed other constraints on the scientific enterprise. Throughout the visit, several researchers voiced frustration that U.S. researchers could not attend most of the scientific meetings that take place in Cuba.

While the effects of the diplomatic impasse between Cuba and the United States largely will require political solutions, the agreement between AAAS and the Cuban Academy of Sciences signals a joint desire for scientific cooperation to move forward.

“In spite of existing political differences, scientists can always get together and talk. With this signing, we are providing support for communities dealing with very similar problems,” said Sergio Jorge Pastrana, foreign secretary and executive director of the Cuban Academy of Sciences.

The AAAS group included Alan I. Leshner, chief executive officer of AAAS and executive publisher of *Science*; Peter Agre, Nobel laureate and past president of AAAS; Vaughan Turekian, AAAS’ chief international officer; and several other scientists and policy experts.

—KATHY WREN