U.S.-Cuban Scientific Relations

IN A FEW YEARS, THE TWO OLDEST NATIONAL ACADEMIES OF SCIENCE IN THE WORLD OUTSIDE of Europe—those of the United States and Cuba—will celebrate their 150th anniversaries. Yet despite the proximity of both nations and many common scientific interests, the U.S. embargo on exchanges with Cuba, which began in 1961 and is now based on the 1996 U.S. Helms-Burton Act and subsequent regulations, has largely blocked scientific exchange. It’s time to establish a new scientific relationship, not only to address shared challenges in health, climate, agriculture, and energy, but also to start building a framework for expanded cooperation.

Restrictions on U.S.-Cuba scientific cooperation deprive both research communities of opportunities that could benefit our societies, as well as others in the hemisphere, particularly in the Caribbean. Cuba is scientifically proficient in disaster management and mitigation, vaccine production, and epidemiology. Cuban scientists could benefit from access to research facilities that are beyond the capabilities of any developing country, and the U.S. scientific community could benefit from high-quality science being done in Cuba. For example, Cuba typically sits in the path of hurricanes bound for the U.S. mainland that create great destruction, as was the case with Hurricane Katrina and again last month with Hurricane Ike. Cuban scientists and engineers have learned how to protect threatened populations and minimize damage. Despite the category 3 rating of Hurricane Ike when it struck Cuba, there was less loss of life after a 3-day pounding than that which occurred when it later struck Texas as a category 2 hurricane. Sharing knowledge in this area would benefit everybody.

Another major example where scientific cooperation could save lives is Cuba’s extensive research on tropical diseases, such as dengue fever. This viral disease is epidemic throughout the tropics, notably in the Americas, and one of the first recorded outbreaks occurred in Philadelphia in the 18th century. Today, one of the world’s most outstanding research centers dedicated to dengue fever is in Cuba, and although it actively cooperates with Latin America and Africa, there is almost no interaction with U.S. scientists. Dengue fever presents a threat to the U.S. mainland, and sharing knowledge resources to counter outbreaks of the disease would be an investment in the health security of both peoples.

Cuba has also made important strides in biotechnology, including the production of several important vaccines and monoclonal antibodies, and its research interests continue to expand in diverse fields, ranging from drug addiction treatment to the preservation of biodiversity. Cuban scientists are engaged in research cooperation with many countries, including the United Kingdom, Brazil, Mexico, China, and India. Yet there is no program of cooperation with any U.S. research institution.

The value system of science—openness, shared communication, integrity, and a respect for evidence—provides a framework for open engagement and could encourage evidence-based approaches that cross from science into the social, economic, and political arenas. Beyond allowing for the mutual leveraging of knowledge and resources, scientific contacts could build important cultural and social links among peoples. A recent Council on Foreign Relations report argues that the United States needs to revamp its engagement with Latin America because it is no longer the only significant force in this hemisphere. U.S. policies that are seen as unfairly penalizing Cuba, including the imposition of trade limitations that extend into scientific relations, continue to undermine U.S. standing in the entire region, especially because neither Cuba nor any other Latin American country imposes such restrictions.

As a start, we urge that the present license that permits restricted travel to Cuba by scientists, as dictated by the U.S. Treasury Department’s Office of Foreign Assets Control, be expanded so as to allow direct cooperation in research. At the same time, Cuba should favor increased scientific exchanges. Allowing scientists to fully engage will not only support progress in science, it may well foster positive interactions elsewhere to promote human well-being. The U.S. embargo on Cuba has hindered exchanges for the past 50 years. Let us celebrate our mutual anniversaries by starting a new era of scientific cooperation.

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