The AAAS Center for Science Diplomacy helped advance international collaboration in 2013 by reaching out to scientists and policymakers worldwide. Projects ranged from coordinating new monitoring of a volcano in North Korea, to helping to convene experts from the developing world to work together on resource issues requiring science-based solutions. Science diplomacy initiated by AAAS fostered global progress in many areas and improved quality of life, while encouraging good relations between countries.

**SCIENCE & DIPLOMACY IMPACTS**

Recent history abounds with little-known examples of international science collaborations that have achieved great goals, not the least of which is improved relations, mutual trust, and peaceful, productive cooperation between countries.

One such example is the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), which was described in a 2013 issue of *Science & Diplomacy*, the quarterly publication of the AAAS Center for Science Diplomacy. Author Harold Varmus, director of the National Cancer Institute and winner of the Nobel Prize, pointed out that by 2012, PEPFAR had through bilateral agreements between the U.S. and African countries supplied about 5 million patients in the developing world with antiretroviral drugs—up from 1.7 million in 2008—while protecting nearly a million infants from maternally transmitted HIV, as well as testing nearly 50 million people for infection and distributing prevention information and condoms.

PEPFAR halted a precipitous plunge in life expectancy in Africa that came with the HIV/AIDS epidemic. It also established solid partnerships with African countries, building and strengthening U.S. ties in that region.

*Science & Diplomacy*, which was launched with support from the Golden Family Foundation, brings expert perspectives on issues involving science and international relations to policy analysts, government officials, scientists, and educators. According to a recent survey, 18% of readers work for a government, 45% are in academia, and 17% work for a think tank or nonprofit organization. In 2013, articles ranged from a discussion about engaging with North Korea through protection of its biodiversity, to an examination of the value of collaboration with Iran in the medical and health sciences.

**SCIENCE ENGAGEMENT WITH NORTH KOREA**

The AAAS Center for Science Diplomacy helped launch an unprecedented scientific...
collaboration in 2013, bringing American and British scientific resources to North Korea for cooperative seismological research and rock sampling on North Korea’s sacred volcano Mount Paektu. Until the collaboration began, data from the North Korean side of the mountain, which has two-thirds of its mass in China, was unavailable.

“This effort represents an exciting demonstration of active cooperation between Western and North Korean scientists in the fields of volcanology and seismology, and so far it appears to be working very well,” said Norman Neureiter, senior advisor to the AAAS Center for Science Diplomacy. “It has the potential of leading to a program of extended scientific cooperation with North Korea.”

Two years in the making, the research collaboration will not only provide new monitoring data and scientific insight to volcanologists around the world, it will also help to predict and quantify the volcano’s future eruptions. Mount Paektu last erupted about a thousand years ago, spewing ash over more than 33,000 square kilometers of northeast China and Korea. A decade ago, small tremors at the volcano motivated Chinese and Korean authorities to increase their monitoring.

One of the first scientific collaborations between the Democratic People’s Republic of Korea (DPRK) and the West, the monitoring arrangement began in 2011 with the support of AAAS, at the request of the Pyongyang International Information Center on New Technology and Economy, a nongovernmental organization. The project was arranged by the Environmental Education Media Project, a non-profit focused on ecosystem management. The funding for the construction and maintenance of field stations to house six seismometers, as well as other logistics, came from the Richard Lounsbery Foundation in Washington, D.C. British organizations, including the Royal Society, were also instrumental in bringing the project to fruition.

SUPPORTING SCIENCE THROUGH DIPLOMACY

Vaughan Turekian, director of the AAAS Center for Science Diplomacy, addressed scientists and policy experts from the developing world at a 2013 workshop held at The World Academy of Sciences (TWAS). Advocating smaller and developing nations’ increased involvement in science diplomacy, Turekian pointed out that even nations just beginning to build their scientific strength could use science diplomacy as a means of increased and improved interaction with other countries.

At the event, which was part of a science diplomacy program organized by AAAS and TWAS, Turekian spoke of the event’s value as a means of advancing science globally by bringing together experts from the developing and the developed worlds.
The AAAS/TWAS science diplomacy program “is connecting science and diplomacy to two organizations that have access to a very broad scientific community,” Turekian said.

Addiction researchers in the United States and China have explored more effective local approaches to addiction treatment using traditional Chinese medicine and “Western” medicine. U.S. scientists have traveled to Iran for the country’s first HIV/AIDS conference, where they mapped out promising areas for collaboration. At a workshop in Uganda, researchers from the United States, the United Kingdom, and several African countries brainstormed strategies to improve the treatment of mental, neurological, and substance-use disorders in Sub-Saharan Africa.

These examples illustrate health science diplomacy bringing nations together to address local and regional health challenges while also encouraging positive international relations, said Alan I. Leshner, CEO of AAAS, at the 2013 World Science Forum in Rio de Janeiro. “Science diplomacy is now a force in global health, science policy, and foreign policy,” he said.

The examples also revealed some principles key to successful science diplomacy, Leshner said in a roundtable discussion at the forum, which attracted more than 100 countries. Those principles include making sure that all the participants in a collaboration are full partners, that they focus on issues of local importance, that they find ways to deal with resource disparities among the countries represented, and that they agree upon standards and values regarding scientific ethics, intellectual property, and publication or access issues.

Science Editor-in-Chief Marcia McNutt also presented at the international event.

The AAAS and the Foundation for Polish Science launched a new award in 2013 honoring scientists “who have made exceptional research achievements as a result of Polish-American scientific cooperation.” The award recognizes a long history of U.S.-Polish science collaboration across many disciplines, said AAAS Chief International Officer Turekian, who added: “As we move forward, the initiative will help us to identify areas where international research cooperation can both advance science and build closer societal relationships.”

Poland’s primary scientific strengths, according to a 2013 report by the European Commission, encompass food, agriculture and fisheries; energy; the environment; information and communication technologies; and certain areas of materials science.