

Collaborative Efforts

Following are three examples of how several 2004–2005 AAAS Fellows leveraged their experiences, joining with other Fellows and experts in the science policy community for the benefit of people around the world.

THE AQUAYA INSTITUTE

<http://www.aquaya.org/>

Jeff Albert, a 2004–05 AAAS Fellow at the U.S. Environmental Protection Agency (EPA), helped save thousands of lives thanks to a product he learned about at a public-private partnership seminar during the September 2004 fellowship orientation. Two months later, the tsunami devastated Southeast Asia. Within two weeks, Jeff, a water resource specialist, raised funds and received permission from the EPA to take a leave of absence and head to Aceh, Indonesia. “I immediately thought, ‘What can I do?’,” he recalls. “From imagining this wave of destruction to imagining there was going to be a need for water and no infrastructure to deliver it wasn’t a difficult jump to make.”

For nearly a month, Jeff volunteered as a private citizen, lending his expertise to CARE International and the Centers for Disease Control and Prevention (CDC). He also distributed PuR® water purification packets, the product he first heard about during orientation. Procter & Gamble (P&G), the company that sponsored his trip, manufactures the PuR® packets, which are only the size of a ketchup packet and can disinfect and clarify nearly 10 liters of water. In addition, Jeff helped conduct the first quantitative study of the biological quality of post-tsunami drinking water. Results from that report were later included in “The Drinking Water Response to the Indian Ocean Tsunami, Including the Role of Household Water Treatment,” an article Jeff coauthored in the March 2006 issue of *Disaster Prevention and Management*.

Soon after Jeff returned from Southeast Asia, he and 2004–05 AAAS Fellow Ranjiv Khush, a microbiologist and immunologist who was working in the Office of the Science and Technology Adviser to the U.S. Secretary of State, decided to join forces to combat the human suffering that stems from a lack of clean drinking water. “We were excited about making a contribution to others using different scientific innovations,” says Jeff. Following the completion of their fellowships, Jeff and Ranjiv founded The Aquaya Institute, a nonprofit organization dedicated to advancing public health by improving drinking water



quality. With initial seed money from the P&G Fund, they set up shop in San Francisco. They also enlisted three other partners, including Ranjiv's former officemate at the U.S. Department of State, 2004–05 AAAS Fellow Peter Kozodoy, who is an engineer and product development specialist. The fellowships also brought Aquaya in touch with Bruce Alberts, who served two terms as president of the National Academy of Sciences, when he delivered a presentation to the fellowship class. Alberts, now a professor at the University of California, San Francisco, is a member of the Aquaya Advisory Board.

Today, Aquaya has many projects underway. The team is continuing its initial work with the PuR® technology by promoting its adoption and use by communities in Indonesia. They also received a grant from the Lemelson Foundation to explore the potential of antimicrobial coatings in drinking water treatment applications, and are part of a European Union-funded study to identify next-generation drinking water

quality diagnostics. In spring 2006, Ranjiv traveled to northern Pakistan as a consultant to the World Health Organization to evaluate the drinking water component of the humanitarian response to the October 2005 earthquake.

“The AAAS fellowship taught me that the importance of evidence in decision making,

which I took for granted in the laboratory, is often overshadowed by political and organizational priorities and realities in other settings,” says Ranjiv. “By working through Aquaya, I hope to continue on the path that I started as a AAAS Fellow, which is to bring the scientific method to bear on strategic decisions in international development.”



Jeff Albert and Ranjiv Khush