AAAS president sees desire for global collaboration

AAAS can help its members build scientific partnerships in developing countries, says Geraldine Richmond.

By **Becky Ham**

Geraldine Richmond (left center, white shirt) visits with scientists as part of the COACh Cameroon Program.

PHOTO: COURTESY GERALDINE RICHMOND

Geraldine Richmond started this year with visits to Thailand and Vietnam in her role as U.S. science envoy for the Lower Mekong Delta. She saw scientists there grappling with issues of coastal flooding, the impacts of dam building, and field tests of vaccines for HIV. She also saw opportunities for scientists in the U.S. and those countries to work together.

"We have a lot to learn from people and scientists in these developing countries, because many of these problems, such as those associated with climate change and water issues, are merely foreshadowing what we in the United States will have in years to come," Richmond said.

"It just reinforced my strong belief that scientific partnerships at the scientist level—boots on the ground, lab to lab—are so critically needed on both sides," she continued. "I believe scientists in the U.S. want to play a role in this, and that AAAS can be valuable in helping make those connections."

Richmond wants to encourage these collaborations in her year as AAAS president, which began on 16 February. "The most challenging global problems we face require a broader integration of expertise than we've ever needed before," she said. "AAAS uniquely embraces and provides an integrative platform for bringing together the physical, the biological, and the social sciences that are so essential for addressing these issues."

AAAS has done much to facilitate broader science policy engagement by seeking partnerships with other national and international scientific associations, Richmond noted, through the work of its Center for Science Diplomacy and other international programs. This outreach will continue under Richmond's direction of the 2016 AAAS Annual Meeting, where the theme will be global engagement as it relates to developing countries.

In March, she will visit Laos and Cambodia and hopes to solicit applications to the meeting from scientists there. "When I go to these other countries and see how many exciting things are going on between the U.S. and these countries, I want everyone to know about it," she said.

Richmond's own international experience extends to Africa, Latin America, India, and the Middle East through COACh, a career training and networking program for women scientists and engineers that she founded in 1998. The program's workshops in communication, negotiation, and leadership skills have reached more than 12,000 participants, and follow-up studies show that 90% of those participants go on to mentor others in these skills. COACh's international program serves both men and women researchers in developing countries and brings women from the U.S. and other countries together for scientific conferences.

She has been delighted to see the program's "multiplier effect" continuing, with coaches from Cameroon traveling to coach other women in Nigeria, for example. "That's been our plan in the U.S. and globally, to train women, to understand their issues, and give them the career skills that they might not always learn in their traditional science education," said Richmond.

Richmond is the Presidential Chair in Science and professor of chemistry at the University of Oregon. Her research looks at the molecular processes in liquid surfaces, with applications in environmental remediation, energy production, and climate change. She has served on several national scientific advisory boards, including a current appointment to the National Science Board.

Born to a Kansas farmer and a beautician, Richmond said her mother encouraged her to learn math as a critical career skill. "She knew the precariousness of employment, after living through the Depression and World War II, and she had four daughters who had to make a living for themselves," she recalled. "In her mind, as long as you knew math, or were good at math, you could do anything."

After that, she "fell in love slowly" with science, Richmond said, and research remains at the heart of her career. "I have a fabulous lab here, and I can't give that up, as a practicing scientist and educator. My office is in the back of my lab, so I'm sitting here right now with my lasers operating 20 feet away."

Richmond said AAAS offers many ways for scientists and engineers to become involved beyond the lab. "In my year as president I want to expand our outreach to get engagement of more of our scientists who would never have thought about AAAS beyond *Science* magazine," she said, "and to realize that getting engaged with this global network can be extraordinarily important in career advancement, as well as satisfying passions in making a real difference by being involved in global activities." ■