**A old professor learns new tricks in Cuba** or **What the Cuban people taught me**

P. Bierman, University of Vermont, pbierman@uvm.edu

I settled into my seat on a plane bound for Cuba feeling frustrated. When I planned the trip, I had assumed that my Cuban collaborators and I would hit the ground running, heading out into the field straight away to collect water and soil samples from rivers. That’s how I’d done fieldwork in Namibia, Bolivia, Israel, and Greenland. But not in Cuba, I was learning. Five days earlier, one of the Cuban scientists had emailed to inform me that we’d be meeting only to talk about our planned project. Sampling would happen during a later trip, she wrote. That left me feeling impatient and unhappy. Why did I need to get on a plane to have a meeting? But I’m thankful I made the trip because it taught me a key lesson: It was I—not the Cubans—who had a flawed approach to doing science.

When I arrived in at the Santa Clara airport that January night, it was warm, dark, and raining. My collaborator came late with a driver and we piled into a 30 year old Lada for the trip to town. The next day, another driver took us to Cienfuegos and then onto the lab where we talked and listened to our new colleagues in a mix of English, Spanish, and arm waving over strong coffee scented with evaporated milk. Scorpions scampered across the conference room floor. For much of the day, we toured labs, took pictures and met people, lots of people. Before lunch, we were on the lab steps posing as a group, everyone grinning proudly.

When we brought out American snacks as gifts for each of the scientists, our hosts insisted these goodies must be shared with the entire lab. And so, that afternoon, in tropical sunshine, dozens of people ate maple candies. We drove an hour to our homestay packed 3 abreast in a lime green ’57 Chevy stopping to see *Organoponicos* where immense cabbages spilled from shaded beds. These urban, organic gardens, fed by compost, feed the people.

After 26 years as a faculty member, it took 2 days in Cuba for me to realize that my American vision of teamwork wasn’t it. My new Cuban friends showed me that real teamwork involved listening better, slowing down, accepting the ways of others, and getting to know a place and its people – they modelled a distinct lack of hierarchy and power – everyone had a voice and was part of the decision making as we chose where to sample and what to sample. Our science was better for it and our first paper together, about river water quality, would never have happened if not for these two days of brainstorming.

Since then, we’ve worked across Cuba in bright yellow minivans packed with Cubans and Americans - students, faculty, scientists all sweating together. Spanish speakers next to English speakers waist deep in rivers. We work quickly but this is not grab-and-go geology. On the last night of one trip, we searched for a restaurant that could seat all 14 of us at one table because that’s what teams do. Between fieldtrips, we make analyses in labs 2500 kilometers apart and all the data go to everyone. Our papers and abstracts have a dozen plus authors.

Cuba and its people have changed me, a long-tenured professor. I spend more time listening in class now, more time building teams in our lab, and more time illustrating how different cultures interact with the Earth around them. My classes respond. Students are happier, we work together to understand the material, there’s far less complaining and far more student engagement.

We Americans, who spend so much time competing and taking sides, could do well to understand our Cuba neighbors, people shunned since before I was born. Every day, we hope to welcome our Cuban teammates to America and share our way of being, our labs, our farms, and our rivers with them – our course, that can’t happen until our government gives Cuban scientists visas. Let’s get on that. It’s about time.