**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 sediment samples from rivers. That’s how I’d done fieldwork in Namibia, Bolivia, and Greenland. But not in Cuba, I was slowly learning. Five days earlier, a Cuban scientist emailed to inform me that we’d only be meeting 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 got to Cuba, one of my collaborators greeted me at the airport with a broad smile. “Welcome to Cuba!” he exclaimed in perfect English, giving me a strong handshake and a hug. The next day, we drove to the research center where he worked. A dozen team members met in a modern, air conditioned conference room, as scorpions scurried across the floor. Each of us gave a presentation about our science and what we hoped to learn from the study of Cuban rivers.

Then, the group toured every lab in the building. I met scientists, technicians, secretaries, students, and the cook. Some spoke English; others communicated to me in Spanish while my collaborator translated. I was impressed that I was introduced to each and every person in their center. The lack of hierarchy—the team atmosphere—was unlike anything I’d experienced before in academia.

The next day we met again to brainstorm. Together, we poured over maps to plan how we were going to collect samples in the field. Had it not been for the Cubans, I would have been unaware that the maps I had were outdated and wrong; they left out reservoirs. Sampling downstream of these lakes, which we would have done if not for the team’s input, would have biased our results [[why would the results have been biased? Can you make that more clear?]]. Local involvement and knowledge was key – making me wonder what I’d missed working without such a team in Africa, South America, and Greenland.

Six months later, I flew back to Cuba and—this time—we headed into the field. I was impressed, yet again, by the lengths to which my Cuban collaborators went to ensure that all team members were treated equally. We drove around Cuba in two bright yellow vans, and we made sure that each van had a mix of Cubans and Americans as well as a mix of seniority levels. In the field, students, faculty, and technicians all sweated together. And on the last night of this trip, we searched for a restaurant that could seat all 14 of us at one table—because that’s what teams do, they sit together. When a restaurant couldn’t accommodate the team without splitting us up, my collaborators insisted that we move on and find a place with a large enough table.

In 26 years as a professor, I’ve always tried my best to treat my students as valued collaborators. I was never a fan of academia’s hierarchy. I want everyone working with me to feel as though they are part of a team. But my Cuban collaborators took teamwork to another level entirely. They made it clear—through actions, both big and small—that all team members are valued; that everyone was equal and that true teamwork made for better science. I returned to the United States a changed scientist. When I had the opportunity to lead an international workshop this fall, I made sure that every scientist presented their work, everyone had a voice in the discussions, and all 35 of us ate dinners together. People from five nations worked as a team.

[[I still feel like there’s an anecdote missing here describing some moment after you go back. I think we need the career message to come through more strongly for this essay to be interesting and useful to scientists beyond your field. Is there one moment you could write about? Maybe a time when you convened your lab for a group meeting to talk about changing a lab protocol?]]

In Cuba, I learned that real teams listen, slow down, and do better work because each person thinks differently and brings different ideas to the conversation. Now, I spend more time listening. Sometimes it’s as simple as talking through everyone’s ideas before we change a lab procedure or write a quiz. I’ve become a far more vocal advocate for equality. All voices have value; each and every person is deserving of respect. I know that we Americans have much to learn from our neighbors to the south. I hope this essay inspires others to recognize the power of real teamwork —even during routine moments such as dinner.