

Science Is Not a Spectator Sport

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Photo credit: Jeanne Neville

Be the change that you wish to see in the world. -Attributed to Mahatma Gandhi

It was a late August morning, but I could feel the crisp air of autumn already setting in as I stood in the starting corral of a race in Central Park. Having traveled much of the summer (and armed with a few other excuses), I had little to no preparation for even a short run that day. Yet, as I began to put one foot in front of the other I could feel my belief return, slowly but surely, in being able to cross the finish line.

The journey of becoming a scientist and of practicing science can often bring such tough patches. In this column, I focus on a particular aspect of this journey that goes hand in hand with our central goal of producing rigorous science — that of cultivating an appreciation for science in others. As I noted in my September column, the need to communicate the value of our science is more important and more urgent than ever. How can we all do our part to serve this goal?

We are fortunate to have high-profile figures communicating science to millions. But each of us has a responsibility, too. You might say: “But I don’t have Alan Alda’s celebrity and platform or Neil deGrasse Tyson’s wit and reach.” “What can I do if I am a new faculty member, a transitioning postdoc, an eager graduate student, or an undergraduate student who just declared psychology as a major?” “How can I become the change that I wish to see in our world?”

I’ll offer a simple start — one that is in our daily practice but one that we can lose sight of every now and then. And one that calls for simply putting one foot in front of the other. We are lucky because we are in the business of teaching and learning. This instantly gives us reach. For those of us who get to teach, we know that we have opportunities all around us to focus everyone’s attention on the science that lies

behind the findings. We have the opportunity not just to create sound bites but also to go behind the nifty findings and talk about the process of science. We can do this as faculty and teaching assistants in the classroom; as faculty, postdocs, and graduate students in the lab; and as psychological scientists working in applied settings.

My main message in this column is to our psychology majors. You might ask, “What can I do if I am still a student?” You can start to spread the message about the importance of science. For example, join a lab as an undergraduate student and get hands-on research experience. If you are not in a position to participate in a lab, then aim to learn how those fascinating psychology experiments work. You can seek out APS communications on the latest scientific developments coming out in our discipline, and talk to graduate students and faculty to find out how it all works (remember those office hours!). Then share all of this with your friends. Share not just the findings but how psychological scientists arrive at these findings. Those of us who teach regularly know this secret — you learn best when you teach. As a student, you can start to teach your friends what you learned, and you’ll be amazed how wonderful that experience is. In brief, cultivate curiosity.

Why do this? Communicating the excitement and the ideals of science is ever more important today when scientific inquiry seems to be among our key solutions to the very many problems that we face as a species. Once you become curious and make your friends curious about psychological science, you are effecting a change — you have joined forces with your professors and lab mentors to cultivate educated consumers of science.

Science, like running, cannot be simply a spectator sport, an exercise in knowing about a bunch of facts. That’s important, of course. But, like running, science — to paraphrase Natalie Angier — is a state of mind. It is to “know how to think about information that is presented in front of you,” as Neil deGrasse Tyson would say. So, no matter how distant the finish line may seem from where we are standing or how small our own part in the journey may seem, if we put one foot in front of the other, we move forward — one step at a time.

I did cross the finish line that morning. I also felt exhilarated, and I felt eager to enter the next race. I ask all the students of psychological science to join me in our journey to create rigorous science and to communicate it as ably as we can in our spheres.