I grew up in the agricultural heartland of California. My grandfather brought the family there from Mexico during World War II, responding to the need for farm labor. My parents were first-generation college students who valued education and encouraged me to work hard in school.

As a young boy, I was keenly aware that if I wanted to succeed in school, I had to be sensitive to rules and authority. An infraction such as correcting an adult, exploiting a loophole, or pulling a prank might have been seen as cute if a white kid did it, but the same activity would get me labeled a troublemaker or lead to punishment. As I saw it, getting ahead meant I not only had to color within the lines, but had to make sure I was nowhere close to the lines.

By never pushing the limits, I became a model student and received admission to prestigious universities for my undergraduate and graduate studies. I ended up having access to career opportunities my family never even imagined. But my risk-averse approach had unintended consequences.

For starters, it factored heavily in my decision about what field to study at college. I opted for engineering, which felt safer than physics because there was a clear career path in industry if my dream of becoming an academic didn’t work out. It also influenced my research, as I shied away from asking bold, risky questions. I viewed each opportunity in my career as too precious to potentially squander doing work that wouldn’t lead to guaranteed results. Even when I became a faculty member, my lab's approach was “safe”—we addressed hypotheses that were likely true, but had yet to be proved.

My cautious approach kept my lab productive. But a downside became apparent when I met with the program officer overseeing a young investigator award I desperately wanted. He listened politely to my pitch, then told me the truth: “The topic area is just not right for this program; your research is too incremental.” I realized that by choosing to do less-risky research, I had lost out on a chance at the flashy publications and prestigious awards that catapulted the careers of some of my peers.

At first, I thought I had focused on incremental work because that’s a common approach in my subdiscipline. A few years later, though, my view changed after I sat on grant review panels and read several proposals by researchers in other fields whose approach was as cautious and defensive as mine. I noticed we had one thing in common: We are all people of color.

I realized then that marginalized groups face a dilemma in science: The cautious strategy they adopt to succeed can ultimately be a hindrance, keeping them from reaching the upper echelons of science. In my case it helped me become a solid, productive scientist doing useful work. But it also kept me from pushing the boundaries of scientific knowledge.

It has taken me time to unlearn my cautious approach. Getting tenure helped me feel freer. But I also made a conscious decision to take more risks even when that meant leaving my comfort zone. Over the past few years, my lab started several new lines of investigation, each entirely novel. And my grant proposals now focus on the implications of my work, rather than on defending my capabilities. If I could go back in time and send a message to my young investigator self, it would be: You’ve already proved you’re capable; now’s the time to take risks and change the world.

Christopher J. Hernandez is a professor at Cornell University.
Send your career story to SciCareerEditor@aaas.org.
Sciencing while brown
Christopher J. Hernandez

Science, 374 (6573), • DOI: 10.1126/science.acx9755

View the article online
https://www.science.org/doi/10.1126/science.acx9755
Permissions
https://www.science.org/help/reprints-and-permissions