Sixteen (out of 100) Tips for a Career in Community Science

By Raj Pandya

So, you want to be a community scientist or incorporate community science into your work in a big way. Congratulations! I say that because I have found in community science — the chance to roll up my sleeves, work with people with radically different skills and outlooks, and do science while accomplishing something real — among the most meaningful and enjoyable parts of my career.

That said, it can be a bit of an adventure, and there haven't always been well-defined pathways or a big group of peers. So, with that in mind, what could I offer to make the trip a little easier? Here are some things I've found helpful in my community science career. Hopefully you'll find them useful too. Like community science, they blend the practical and theoretical, they are flexible in pathway but firm in destination, and they focus on the spaces between.

#1 Embrace the Middle

Many people who do community science talk about feeling like they work in two worlds and aren't completely at home in either. I think it might not be a coincidence that so many people who do boundary spanning have backgrounds that bridge more than one culture. My advice: Lean into it. You have skills and a mindset that comes from living liminally, including an ability to observe, a capacity for reflection, a plurality about identity, an ability to see things from inside and outside the group, and an ability to sit with being uncomfortable (and help others do the same). These skills, while sometimes hard won, will serve you well as a bridge-builder and facilitator of co-creation.

#2 Remember, Process and Outcome

How we do the work is part of the work we are doing. It's not okay to get to a good outcome at the expense of an inclusive process, nor can we excuse getting nothing done with an inclusive process. As community scientists, we have to do both.

Sometimes, this even means taking a step back to start in the right way. An example: I recently helped organize a workshop on community science for community resilience. I thought I would start with a standard definition of resilience, but workshop participants rightly pointed out that real community science meant codefining resilience.

#3 Be Flexible on Path, Firm on Goal

This might be a management strategy, but I think it's the right one for community science. Once you decide on the goal (together, of course), be creative, open, and experimental about how you'll achieve it. Applying this to your own career, this might mean that there are many, many ways to build community science into your work. Try to avoid getting fixated on one kind of job, organization, employer, or partner.

#4 Practice Patience

Remember process is part of the outcome? It can be really frustrating when you're in the middle of the 13th community discussion and you realize the co-creation actually needs to be two steps earlier. Find a way to be okay with that, whether that means focusing on the first step, centering into the discussion you are having now, going for a long walk, yelling at your computer, or celebrating the fact that it took you only 13, not 15 discussions to realize it.

#5 Balance Theory and Practice

I think one of the biggest strengths about community science is that everything we do connects theory and practice. We are all about how knowledge can influence practice and how practice can help us create knowledge. Please, please, please let's hold onto that connection. (Huge shout out to Association of Advancing Participatory Sciences [formerly the Citizen Science Association] for naming their Journal "Citizen Science: Theory and Practice"). You can connect theory and practice by insisting on application, anchoring the big idea in the particular example, constantly testing ideas with real-world experiments, and avoiding jargon and insisting on straightforward language. I also think, in a small way, it helps to avoid passive voice: Community science is about action, accountability, and responsibility, and passive voice makes it easier to forget all of that. Case in point: "Resilience is defined as..." is a lot different than "We define resilience as..."

#6 Believe in Science

It is hard to invest in science if you don't believe in it, especially if you want to invest enough to change science. It's also hard to engage scientists, who are your allies

after all, if they think you don't believe in science. I listened to Fredrick Douglas's speech about the fourth of July and was struck by how deeply he believed in America. He deeply felt the flaws and broken promises, but he came back to the ideals in those promises and the possibility of reaching them. "Notwithstanding the dark picture I have this day presented of the state of the nation, I do not despair of this country." Community scientists should to the same for science.

#7 Believe in People

Speaking of not despairing, it can be easy to be pessimistic about the state of the world, the harm we are doing our planet and other species, the neglect and oppression of entire communities, the rise of authoritarianism and erosion of democracy, the spread of misinformation, the deepening wealth gap, and political polarization. And that's just reading the headlines over coffee. I keep coming back, though, to a work by the artist Chris Jordan, "E Pluribus Unum." It is a mural-size mandala, and as you walk closer to the mandala, you see that it's made from the names of 1 million organizations dedicated to environmental justice, Indigenous rights, and ecosystem health. It reminds me that the same species that does so much harm also does so much good. Hold on to that.

#8 Speak Up

I spent a lot of time being afraid to talk about community science. In the end, I think that made me lonelier. When I did speak up, in small groups at first and later in larger rooms, I was surprised by how many people said, "You know, I feel the same way, and I've wondered if I was alone."

#9 Embrace the Strengths of Being a Scientist

I can barely even understand the math I did in my thesis anymore, but the fact that I did once gives me a kind of credibility and even, sometimes, a little confidence. Even after 30 years, I get the occasional, "Oh, wow, so you actually are a scientist, too?" It's helpful to recognize how my scientific background plays into my own identity and my interactions with others, even if part of me wants to problematize the assumption that getting a PhD makes someone a scientist. It's also worth modeling that, all problems aside, there are important knowledges, approaches, and insights that I got from science (see 6). At a recent community science planning meeting, when it came time to decide, one of the scientists suggested that maybe only community leaders should get to weigh in. One of the community leaders said something along the lines of: No, you are here because you have something to contribute. Community science recognizes multiple ways of knowing, and science is one of those ways.

#10 Teach

Five reasons for teaching: 1) You don't truly know it till you can explain it; 2) It's a completely portable skill (you can almost always find an adjunct spot if you need something to tie you over between careers); 3) It's a skill you'll draw from every day in your work in community science; 4) Teaching builds the future; and 5) You can always do community science under the banner of project-based learning. (And PS: when you think of teaching, don't forget about K-12. My first out-of-college job was substitute teaching for middle and high-school.)

#11 Expand Your Search Area

Pragmatically, there just aren't always good community science career options available in every place. While you might be able to shape a job a little (see below), you'll have more options for finding a job that you like if you can expand the circle of places you'll look. Honestly, living in different places is good for gaining perspective, too. I know that moving doesn't work for everyone, and it definitely isn't critical, but if you can consider jobs outside the place you live currently, it increases the available options. It is also worth looking for remote opportunities – including ones abroad!

#12 Apply Anyway

Even if the job isn't perfect, apply anyway. You might have a chance to shape it a little, for example, by thinking about how community engagement helps achieve the goals outlined for the position. Even if you don't think you are a perfect fit for the job, apply anyway. Evidence suggests there are plenty of other people who will apply anyway, so why not you? Plus, as a community scientist, you are good at learning and listening, so you'll be able to learn as you go.

#13 Manage Up

Know what makes your boss and your organization proud, and make sure you attend to those things. Do the things that matter to you and talk about them in the words that matter to your organization. Do what is good and right, and help your organization get some credit for it. Here is a really concrete example: One time I spent a lot of time nominating Thriving Earth Exchange for an award, even though I worried it was self-aggrandizing and that it took time away from working with the communities. What I didn't get, and my boss did, was how much it would matter to potential funders, partners, and our board.

#14 Invite Your Friends

It is a weird thing, but sometimes bringing someone else in to talk about things is more effective than talking about it yourself. Use that. Trade speaking gigs with colleagues you trust — invite them to give a seminar at your organization, and give one at theirs. You'll both have something for your resume, and I suspect you'll notice a little more regard for your own community science after someone else talks about community science.

#15 Ignore the Ladder and Chart Your Own Path

Try not to think about a career as an unending climb up some ladder of success. Instead, try to think about a series of experiments that connect to things you care about. I've taken jobs with a smaller team, started over in a new role, and gave up a tenure-track position. I know there is some privilege embedded in that, but there is also the willingness to question the standard definition of success. That said, there are ways to minimize the risk. I asked for leaves of absence, taught on the side, tried some quiet under-the-radar efforts (ask for forgiveness, not permission), and even worked as a volunteer to be able to try something out.

#16 Define Success for Yourself

Community science careers generally don't have black-and-white measures of success. You usually can't count widgets — students taught, clients served, or papers published. The good part, though, is that often gives you latitude to guide other people in how to judge your success. You can use community science-like processes to set goals and measure your progress against those goals — in other words, to co-create with your boss (see 13). When you fall short (everyone does) explain what you learned and how the experience sets you up for the next success.

So, those are some of my tips. While I hope they are kind of useful by themselves, I suspect they would be even more useful if they served as a prompt for more tips. What would you add? What would you change? What would you improve? To invite that, please let us know in the comment section and/or share on social media by tagging us <u>@ThrivingEarth</u> or leave a comment on <u>this blog post</u>. Even if you have just three minutes, drop a tip, please. I think together we could create an amazing list of tips, and a rich back-and-forth around them.