

By Jeffrey J. McDonnell

The sustainable scientist

After I started out in a university faculty position nearly 30 years ago, the early years were rough. Not because of problems, exactly, but because of opportunities—too many of them. I did not know how much was enough, so I just did more and more. As a result, I lived a life distracted, both at home and at work, with too much to do and too many people to possibly satisfy. Guilt was a constant companion—for not spending enough time with my family, for not devoting enough time to my students, for not accepting a review request or committee assignment. It simply was not sustainable. It took me several years after getting tenure to come back to some semblance of a balanced life.

Now, when I mentor early-career scientists I warn them about the unsustainability trap that I fell into. And I try to instill the idea that the goal is to stride across the finish line—whether you are completing a postdoc, getting tenure, or reaching some other career goal—with a smile on your face, not in a state of collapse.

But how? A sustainable scientist is still a hard-working scientist. Combining hard work with laserlike focus and ruthless time management is an important step toward making your life sustainable. Even more important is opportunity management.

Early on, I worried that each new opportunity—an invitation to give a talk, participate in a proposal evaluation panel, or join a committee of a scientific society—might never come along again. I felt like I couldn't say no. I now understand that early-career opportunities, like gray hairs, don't stop appearing, and that sometimes it's important to turn them down so that you can complete the things you've already said yes to. As you work on learning to say no, the "want-to-need to" matrix can be a useful tool: Say yes only to the things you both need and want to do, and say no if you either do not need or do not want to do something.

Similarly, developing a personal work philosophy can help you allocate your most precious resource: time. "Work on important problems" is a good adage for starters. Beyond that, your research agenda may help you set limits. Maybe you are interested only in interdisciplinary research, or in projects that strike some balance between basic and applied research, or in pure research in a very narrow area. You can also use fun as a meter for accepting new projects or engaging in new collabora-



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tions, as I try to do. Regardless of your specific priorities, thinking through these types of questions early on can help you know when to say yes and when to politely decline.

Ultimately, self-reflection is key to sustainability. Learn to recognize the warning signs of overload. If you are in a bad place, taking stock is an essential step toward getting back on course. I wish I had realized earlier the value of a midday gym visit to mentally reset and bust stress before it accumulates. For my first several years, I could not imagine indulging in what felt like such a luxury, but taking time out pays worthwhile dividends.

Even the sustainable scientist will still have days—or weeks—when their nose might slip below the water line. But more often, you will feel generally on top of things and satisfied with the direction in which your work and life are going. You'll notice that you're in the moment and not distracted in meetings or at home at the dinner table. You'll sleep well. You'll make your weekends mini-vacations and take your full allotment of vacation days. An improved home life will enhance your work, boosting job satisfaction and productivity. And when opportunities come knocking, you'll know whether to open the door. ■

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