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Jennifer Mankoff, who experiences extreme fatigue, studies technologies for people with disabilities.

including awards for excellence in research and, at one point, a position on a US federal panel advising about research on ME/CFS. He recommends that scientists pursue the work that matters most to them. "The reality is that you can't do it all," says Jason, of DePaul University in Chicago, Illinois. "Prioritization is absolutely critical when one is in a diminished state. If it's trivial and you don't care about it, let it go."

Overdoing it on good days can end up backfiring. Zihms was recently laid low with exhaustion for two days after spending six hours outside on a cold, windy day doing fieldwork in Brazil. She now prepares carefully before doing fieldwork in the depths of winter and sets aside time to recover afterwards. At conferences, she saves energy by resting between sessions and staying in a hotel nearby. And because her diet affects her fatigue levels, she makes her own breakfasts and lunches.

Mankoff finds it useful to break down large tasks into smaller ones of varying lengths so that if she has, say, two good hours or ten good minutes in a day, she can accomplish at least something that day. She honed that skill in her first year as a computer-science PhD student in 1996, when she developed a repetitive strain injury after using a poorly designed keyboard. She switched to voice-recognition software, but that led to a vocal-cord injury.

Although frustrated, she realized that she had learned how to prioritize tasks and to focus on her work when she was feeling well. Today, she limits Facebook and other social-media time to avoid distraction. She also recommends a blog community called Chronically Academic.

Therapy can be useful, Zihms adds. And self-care is important, too, says Snider. Adopting a kitten has helped to fend off the anxiety and depression that are common companions to arthritis. "No matter how down I get or how much my knees hurt," Snider says, the kitten relies on her, and caring for it is not too strenuous a task.

Coping with a chronic illness requires planning for the unexpected, and could require a job change. Julia Hubbard, a biophysicist who has type 1 diabetes and the autoimmune disease lupus, packs suitcases two weeks before trips in case she lacks the energy to pack nearer the time.

Shifting the focus of her work has also helped her to accommodate her condition. When she first became ill in the early 1990s, frequent hospital appointments and sick days made it hard for her to conduct protein-chemistry experiments as part of her job at a pharmaceutical company. She switched to a data-focused position that allowed her to work remotely when she needed to. In 2001, she retrained as a protein crystallographer and is now a research scientist at the Francis Crick Institute in London, where her manager is sympathetic to her needs, and where working remotely is an option if she needs it.

Looking back, she says, she wishes that she had been gentler with herself when she first got sick. "You've got to adapt to it. It's a loss and there's a grief cycle."

Learning to adapt can build confidence in a researcher's ability to handle setbacks, Mankoff adds. In the past couple of years, she has been feeling well enough to increase her publication rate and to feel excited about the work ahead. But she also knows that she could relapse at any time. Still, with a battery of well-honed coping skills, she feels optimistic about the future.

"Even though I'm a full professor, I feel like I'm just getting started in an exciting way," she says. "I'll accept it if I relapse or go back to doing less. I'm just having fun digging in and solving problems." ■

Emily Sohn *is a freelance journalist in Minneapolis, Minnesota.*

GENDER

Pay differential

Pay disparities between female and male PhD holders in the United States exist across almost all fields of science and engineering, according to a report from the US National Science Foundation (NSF). The report examines annual salaries for those who earned their doctorate in 2016 and had confirmed permanent employment in the life sciences, physical sciences, mathematics and computer sciences, psychology and social sciences, or engineering. Across all fields, the median salary of US$92,000 for men was 24% higher than the $74,000 median salary for women. In biomedical and biological sciences, women earned $67,500 to men's $77,000; in geosciences, atmospheric and ocean sciences, the figures were $65,500 for women and $71,000 for men; in physics and astronomy, women earned $89,000 to men's $100,000; and in engineering, women earned $92,000 to their male counterparts' $100,000. Women had lower salaries in all fields of social sciences, including psychology and economics. In health sciences, women and men disclosed equal salaries of $80,000. The NSF report did not indicate whether the salaries reported were within or outside academia.

COLLOQUIA

Men get more invites

Female scientists give fewer colloquium talks than do their male counterparts, reports a study published in December (C. L. Nittrouer *et al. Proc. Natl Acad. Sci. USA* http://doi.org/chm6; 2017). The study authors analysed the gender differences among 3,652 colloquium speakers at 50 prestigious US research institutions in the 2013–14 academic year. They found that male speakers gave more than twice as many colloquium talks during the year as did women (2,519 compared with 1,133). The study dismantles several commonly accepted explanations for the disparity: that there are more men than women in science; that men hold higher ranks in science than do women; and that women decline talk invitations at greater rates. In talks presided over by women, women represented 49% of speakers. When men oversaw talks, only 30% of speakers were women. Colloquium talks allow researchers to publicize their research and increase their national and international reputation. Without those opportunities, women can miss out on job offers and research collaborations.