

CROSS TALK

Scientists blend work and life into palatable cocktails

BY INGRID WICKELGREN

14 NOVEMBER 2016

Many scientists are workaholics. The pressure to publish combined with teaching and administrative duties leaves little time for leisure. And for many scientists, just when free time has reached a vanishing point, children arrive. We asked several autism researchers how they managed to mix family and fun with science into their days — and received some clever recipes.

Some say work-life boundaries in their overfull lives are impediments. They stifle the passion that should flow throughout the daylight hours, and that ideally drives scientific discovery. Sports of various sorts make it onto some calendars, with the idea that making time for what you love will bring the greatest joy. Optimism and the long view get others through the day. If you can't get to it today, perhaps the next decade will do.

Jessica Cardin

Assistant professor, Yale University

Success often requires integration, rather than segregation, of work and life — more a juggling act than a high-wire balance routine.

Success means blurring the lines

For a scientist, it is almost impossible to draw strict boundaries between work and life. To meet professional expectations, we make enormous commitments to conduct research, publish, write grants, teach and carry out administrative duties. Being a scientist is not a 9-to-5 gig but an all-the-time job. Success often requires integration, rather than segregation, of work and life — more a juggling act than a high-wire balance routine.

Scientific research attracts people who are passionate about their work. I am fortunate to love what

I do, and rarely think of it as an unwelcome imposition on my 'real life.' Making the boundary between work and life fluid can enhance both.

It is often not possible to anticipate moments when 'life' will overtake 'work,' and many research science jobs allow for flexibility in day-to-day scheduling. When sick children or family events demand extra time, the work-life equation can adapt. However, flexibility can be more limited for scientists at teaching-oriented institutions with rigid course schedules.

Despite the advantages of being a scientist, women may find competing demands particularly burdensome. For financial and career reasons, they often defer having children until they secure a faculty position. However, expectations for productivity remain high, even during pregnancy and maternity leave, and pre-tenure scientists have a fixed period in which to demonstrate success.

Multiple demands:

Statistically, women in the United States contribute more than 50 percent of the **time spent on childcare and housekeeping**, even when their earnings equal or exceed those of their male partners. Female scientists are thus likely to face multiple demands, whereas their male colleagues may remain relatively free to dedicate extra time to work. This disparity can ultimately lead to differences in grant funding and publications.

Promotion and retention policies at academic institutions often make little allowance for the demands of childrearing, disproportionately affecting women's success. Indeed, women leave academic science at higher rates than men, and the number of female faculty, even at junior levels, falls far short of the number of male faculty. At my institution, about 20 percent of all science faculty are women.

In addition to balancing heavy loads at home and in the lab, women scientists often find themselves in high demand for administrative work. Most institutions laudably strive to include women on committees and advisory boards, but there are too few women to share this labor. Such efforts are a valuable community service, but they generally do not count toward promotion, and they take up time that could be spent on science.

Easing the burden:

How do we ease the disproportionate burden on women? At the personal level, equally sharing parenting and household duties between partners can free women to focus on professional goals. With two children under 5 years old, a key to my success as a scientist has been to split childcare 50-50 with my spouse and hire outside help for housework.

However, this strategy relies on financial resources and a partner with equal flexibility, and is not possible for everyone.

At the institutional level, academic institutions should develop policies that acknowledge family demands and promote the success and retention of female scientists. Many institutions already offer a tenure clock extension, but this option is insufficient to offset the time cost of childrearing, and could be made more flexible. Providing high-quality, affordable childcare on campus could also ease the constraints and sometimes staggering financial costs of juggling family and career.

Brian O'Roak

Assistant professor, Oregon Health & Science University

Finding balance may mean scheduling priorities rather than prioritizing a schedule.

Schedule priorities first

When I think about work-life balance, my initial impulse is to say that I don't feel very balanced. You see, my wife and I had our second child in January and he came a few weeks early. As is true for many major life events, this one has completely tipped our scales. Several grants and papers from my lab were in the works; some remain so. New trainees had just joined my lab, and we were planning for our part in the **largest autism study in history**.

I've often heard it said that one plus one does not equal two when it comes to children. I'm not sure I completely agree — luckily, we have a good sleeper — but adjusting to a home life with four people has been an adventure.

The biggest challenge is juggling competing interests in a limited time. Usually our to-do list is long at home and at work. My wife works as a development officer in higher education. For me, there is always the next experiment, the next question or, these days, the next grant. The only partial solution I have found is to schedule priorities, rather than prioritize my schedule. That is, I slot in what is most important to me first, and then work to fit in the rest.

Interstate bingo:

For example, we get perhaps two short stretches of time with our children each weekday: one-and-a-half to two hours in morning and a similar period in the evening. For a big chunk of that time, we may be stuck in the car. I could spend this time thinking about the next experiment, but instead my wife and I try to make the best of this time as a family.

With our 4-year-old, we talk about our day or play interstate bingo — in which we look for yellow taxis, trains, mile markers or even a pig — or the 'story game.' The latter involves each of us taking turns telling parts of a story, most of which involve baseball. The baby usually sleeps.

At home at the end of the day, we have dinner, play with games or toys, maybe watch an inning or two of baseball, and put the children to bed. Then I usually try to get a few hours of work done on the computer: data analysis, manuscript review or writing something such as this essay. By 10 p.m., I admit, I am often exhausted and no longer productive.

Game on:

As our children grow, our commitments are also expanding. When our local Little League was desperate for T-ball coaches, my wife innocently asked about the time commitment. (T-ball is a beginner baseball program played with a softer ball that is hit off a stationary tee.) Before I knew it, I had been assigned head coach of the Gutterman's Supply, a team of 4- to 7-year-olds that included my son (who was only 3.75).

With my wife's solemn pledge to handle all parent communications for the team, I was able to meet this commitment. I coached 15 games and had a great time working with the boys. The baby was the team's biggest fan and cheerleader. On game days, I had to schedule around this priority. I had to get to the lab earlier so I could leave earlier — or otherwise alter my day to make up the time. I'm proud to say that every Gutterman's kid could hit a live pitch (without the tee) by the end of the season.

I also believe it is important to find time for a non-science activity that provides interaction with people in other careers. Twice a week for the past six years, I have spent a few hours playing the Irish national **sport Gaelic football**. It is an ancient sport that combines skills people now use in soccer, basketball and rugby. Playing Gaelic football has been great *craic* (the Irish term for 'fun'). And if I rush home after the game, I can usually make it back before it is time to put the children to bed.

Camilla Bellone

Assistant professor, University of Geneva

It's not easy to balance lab life with family life. But with the right support, it's possible — even enjoyable.

It takes a village

I found out I was pregnant one week after landing my first faculty position at the University of Lausanne in Switzerland. After the initial excitement, reality set in: I would be launching my own lab right when my baby was due.

At first this seemed impossible. But I managed to set up my lab by day and my nursery by night. Within seven months, I had hired Ph.D. students, postdoctoral fellows — and a nanny.

Many people see having children as a major obstacle to a woman's career. I can attest that it's not easy to balance lab life with family life. But with the right support, it's possible, even enjoyable. I spent four months at home after having my son, Giovanni. But I continued to run weekly lab meetings by Skype and kept in touch with my team and my collaborators daily. Sometimes I felt as if I were failing as both a mother and a mentor. But the people in my lab and in my department always supported me.

Now that Giovanni is 2 years old, my biggest challenge is travel. I am lucky to have a supportive

husband who is fantastic as a father. He is totally self-sufficient when I am away — which comes to about seven times a year. But he works for the World Health Organization and travels just as much as I do. We try to stagger our trips, but we often lean on our nanny and family for help.

Lean on me:

Another challenge is the unpredictable nature of both parenting and running a lab. When I took a tenure-track position at the University of Geneva earlier this year, I was lucky enough to get a spot for my son in the university's nursery. He spends his days about two minutes away from me, in the same building as my lab. This means I can drop him off in the morning and pick him up in the evening. Even more importantly, if he is sick and needs to go to the doctor, I can make a round trip in a couple of hours. I even have time to take him to a weekly music class.

I know I'm lucky to have the supports I do. But still, I can't do everything. Sometimes I have to miss a conference because school is closed or my husband is traveling at the same time. Or I have to miss a family event because of a work commitment. Last summer, I arrived late to a wedding because I was speaking about women in science at a conference.

I've also learned to lean on other women and learn from their experiences. I still turn to **Monica Di Luca**, my mentor in graduate school, for advice. She is a great scientist and a great mother.

I try to do the same thing now with my lab. I encourage my students and postdocs to come to me with questions about lab or family life. I can only speak from my own experience, but I am happy to help them in whatever way I can.

I'm still learning how to navigate an academic world dominated by men. I realize that although I can learn something from my male colleagues, I am in a better position than many of them to promote the importance of quality time at work and at home.

Helen Tager-Flusberg

Director, Developmental Science Program, Boston University

*Work-life balance can change over the course of a career,
reflecting events in a person's life.*

Striking balance over a lifetime

For more than 40 years, I have had the good fortune to follow my passion. My career in science, particularly given the challenges of studying autism, hasn't always been easy. At several points in my career, I wasn't sure that I would continue on this path, which began when I was a doctoral student. But in the end, I was in the right place at the right time, and opportunities to continue my work kept me on track.

Looking back, I can't imagine a more fulfilling life. The many thousands of hours of work, the highs when a grant is funded, the lows when papers are rejected and the pride in applauding the achievements of students, have all given me more pleasure than almost anything else in my life — almost.

I knew all along that I would not be able to sustain this drive to succeed in my career if I did not also have 'a life,' though that doesn't mean that I deliberately planned a balance between the two. For the most part, my private life consists of books (fiction) and, most importantly, family. Unlike other, more sensible people, I don't create a schedule that blocks off time for work and life. Instead, external demands allow me to have a life that balances my work.

As I look back, I see that the balance has changed over the course of my career, reflecting events in my life.

Center of my world:

In the early years, when my children were young, I fit my work around their lives and rhythms. The balance weighed heavily in favor of my personal life, and during those hectic years, I worked fewer hours. I squeezed work into the days my children were at daycare or school and into the nights, when they slept. Deadlines kept me on track for getting work done.

As my children grew older, I had more and more time for work, until I reached a tipping point when I hardly had a life at all. I would start work soon after waking up, work most evenings, and I often sacrificed even weekends to the demands of email, grant proposals and reviews. It was only when I awoke in the middle of the night that I took time to read my novels for an hour or two. Those were the only waking hours that I was able to put work out of my mind completely.

But the cycle of life continues, and I now have my grandchildren to bring back balance and to give me joy outside of my work. I have learned the importance of dropping my work for weekend visits, Facetime calls or babysitting to make my grandchildren, and the rest of my family, the center of my world.

I still have a workaholic lifestyle, but only when my children and their families are not around. I now work hard at limiting the hours I work, finding new ways to enjoy a richer life by expanding my interests, seeing friends or having dinner with my husband, and always making time for my family — whenever they have the time for me.