

## Advice from a wife, mother, and assistant chemistry professor

By Mindy Levine

The following is based on a talk I gave at the 246<sup>th</sup> National ACS Meeting in Indianapolis, as part of a symposium in honor of Women Chemists Committee Travel Award Alumnae:

It always makes me self-conscious to give advice to a diverse audience, as it is quite presumptuous to think that at 30 years old and 3.5 years on this job, I have enough experience that I can tell other professionals, especially those who have more years of experience, how I think they can improve their work-life balance. However, I have found other people's advice to be tremendously helpful, so I will attempt to pass along some of that wisdom and some tips that have worked for me.

I think that talking about work-life balance issues is crucially important for everyone, but especially for female professors in STEM disciplines, because there continues to be a significant gender gap in STEM. While that gap is narrowing at the undergraduate, graduate, postdoctoral, and even assistant professor levels, it remains high at the associate and full professor levels. This means that even when academic departments hire female professors, and invest tremendous time and resources in the success of those junior faculty members, some factors are disproportionately affecting women and causing them to leave academia at higher rates than their male colleagues.

Anecdotal evidence suggests that many of the factors that cause women to leave academia relate to their struggles in managing their work, personal, and family responsibilities successfully. Helping people navigate their work and personal obligations is not just a women's issue – it is an issue that strongly affects any employee who has a family, or outside interests, or hobbies. It is also an issue that, if not addressed, will continue to negatively impact scientific progress, by preventing talented scientists from all backgrounds from using their talents to contribute to scientific progress. Dr. Rosalyn Yalow, in her Nobel Prize speech from 1977, said, "The world cannot afford the loss of the talents of half its people if we are to solve many problems which beset us." This statement was true in 1977 and continues to be true more than 30 years later. I will therefore share some of my own experiences in an attempt to help other professors, both male and female, to navigate extensive and time-consuming professional and personal demands.

Some brief biographical information: I received a Ph.D. from Columbia University in 2008, under the guidance of Professor Ronald Breslow, and then spent 2 years doing an NIH-funded postdoctoral fellowship at MIT, working for Professor Timothy Swager. During that time, I gave birth to a son. In 2010, I started my independent career as a tenure-track assistant professor at the University of Rhode Island. During the past 3 1/2 years, I have published 11 papers (with 2 newly accepted publications), presented research at a number of conferences, and received external funding for our research. I also gave birth to a second son in January 2012. Throughout this time, I have struggled to successfully manage my personal and professional life. I expect that this struggle will continue to be a lifelong learning experience.

## **Work advice:**

**1. To-do lists:** I think this cannot be emphasized enough. Make a lot of to-do lists. Make as many to-do lists as you can – and in all cases, the more specific the to-do list is, the better the likelihood that you will actually do the things on the list. In my case, I maintain 3 lists: (1) A long-range to-do list that I compile at the beginning of the semester/summer/winter break, which includes goals for each project (paper, grant application, etc); (2) A weekly to-do list that I compile on Sunday night, where I look at the long-range list and divide up the necessary tasks by day; and (3) the daily to-do list that includes so much of the minutiae inherent to this job (type up problem set solutions; order chemicals for a new project; proofread a budget justification for a grant, etc). I try to avoid scheduling any commitments in the morning (more feasible during the break time), so that I ensure that I've finished all the "major tasks" for the day and leave the minutiae for later in the day when I'm more distracted. Following to-do lists also takes away the emotional energy associated with constantly questioning whether you are working on the most important thing – you have already decided (with the long-range, weekly, and daily to-do lists) what the 'most important' thing is, and you no longer need to be constantly second-guessing yourself.

**2. Be possessive of your time.** Everyone has only a limited amount of time (24 hours in everyone's day). People who are rushing to make a 6 pm day care pickup or who can't come in until 9:15 am after school drop off have even more limits on their time. Designate times that you will meet with your students and times that you will keep your door closed. Think carefully before agreeing to go to meetings or serving on committees. Prioritize your time carefully.

**3. Limit the guilt.** Every time you are working, you have made a decision that you are doing what is most important at that time. Every time you are with your children, you have also made a decision (consciously or sub-consciously) that this is where you should be spending your time. Once that decision is made, try to be done questioning it and feeling guilty that you are not doing something else.

## **Personal advice:**

**1. Learn to live with a mess.** Prioritize what is important in your home life, and chances are good that cleaning up the toys/clothes/dishes/papers is not going to be a top priority. Either find someone that you can pay to clean up for you, or learn to live with a lot of mess.

**2. Delegate.** Cost permitting, do not do something yourself that you can pay someone else to do for you. This includes: cleaning bathrooms, washing dishes, shoveling snow, and raking leaves. But it can also include grocery shopping, picking up and dropping off dry cleaning, and other assorted errands. You might be surprised by the number of things that you can pay another person to do.

**3. Find more time in your day.** Try to find time to get work done on the weekends and holidays that doesn't interfere with your family life. For me that is usually early morning. I will get up as early as I need to (routinely as early as 5:30; sometimes as early as 4 am) to get whatever work I need done before 8:30 am, when the rest of the family activities start.

**4. Talk to people.** Talk to as many people as you can to know that everyone who is a parent and a professor has to juggle a lot of responsibilities. We can commiserate and swap strategies of what works.

**5. Be explicit with your needs.** This is mostly related to your spouse/partner. I've gone to quite a number of talks about work-life balance where the speaker says, "Find a supportive spouse." Unfortunately, I only started going to these talks after I got married. The problem with that kind of advice is that it is not actionable. How do you know whether someone will be supportive before you marry him/her? How do you deal with a spouse you already have who may not know what you need to be supportive? My advice on this is: Be explicit with your spouse about what you need him/her to do or say to support your work.

There are quite a number of challenges associated with being a wife, mother, and assistant professor simultaneously. The biggest one, in my opinion, is the general expectation that academia is a 24/7 job, and the reality that you are competing against people who aren't parents or spouses and have more time to devote to the grant applications and scientific research. While you cannot change that reality, the best you can do is to work as hard as you can in the time you have, and hope that will be enough.

In conclusion, we are certainly not the first generation of women who are trying to balance demanding professional and personal lives, although there may be particular challenges for our generation. However, every day that we do good science, teach the next generation of chemists, apply for grants and publish articles, AND go home to a spouse, children, and partner and relate to them, we are showing that it can be done. We are not worse scientists for also being parents, spouses, and caregivers. In some ways, considering the life experience and perspective that our personal responsibilities confer, we may even be better scientists for it.