SCIENTIFIC AMERICAN™

Permanent Address: http://blogs.scientificamerican.com/guest-blog/2013/07/21/the-awesomest-7-year-postdoc-or-how-i-learned-to-stop-worrying-and-love-the-tenure-track-faculty-life/

The Awesomest 7-Year Postdoc or: How I Learned to Stop Worrying and Love the Tenure-Track Faculty Life

By Radhika Nagpal | July 21, 2013

Scary myths and scary data abound about life as a tenure-track faculty at an "R1" university. Scary enough to make you wonder: why would any smart person want to live this life?

As a young faculty member at Harvard, I got asked such questions a lot. Why did you choose this career? How do you do it? And I can't blame them for asking, because I am scared by those myths too. I have chosen very deliberately to do specific things to preserve my happiness, lots of small practical



ADVERTISEMENT

SCIENTIFIC AMERICAN comp

Interested in complete online access?

TH Scientific American, Inc.

things that I discovered by trial and error.

So when asked by graduate students and other junior faculty, I happily told them the things that worked for me, mostly in one-on-one meetings over coffee, and a few times publicly on panels. Of course, I said all these things without any proof that they lead to success, but with every proof that they led me to enjoy the life I was living.

Most people I talked to seemed surprised. Several of my close friends challenged me to write this down, saying that that I owed it to them. They told me that such things were not done and were not standard. That may be true. But what is definitely true, is that we rarely talk about what we actually do behind the scenes to cope with life. Revealing that is the scariest thing of all.

I've enjoyed my seven years as junior faculty tremendously, quietly playing the game the only way I knew how to. But recently I've seen several of my very talented friends become miserable in this job, and many more talented friends opt out. I feel that one of the culprits is our reluctance to openly acknowledge how we find balance. Or openly confront how we create a system that admires and rewards extreme imbalance. I've decided that I do not want to participate in encouraging such a world. In fact, I have to openly oppose it.

So with some humor to balance my fear, here's goes my confession:

Seven things I did during my first seven years at Harvard. Or, how I loved being a tenure-track faculty member, by deliberately trying not to be one.

- \circ I decided that this is a 7-year postdoc.
- O I stopped taking advice.
- O I created a "feelgood" email folder.
- O I work fixed hours and in fixed amounts.
- O I try to be the best "whole" person I can.
- O I found real friends.

I decided that this is a 7-year postdoc.

In 2003, at a party, I met this very cool guy. He was on the job market for faculty positions and had just gotten an offer from MIT Sloan. I was on the job market too, and so we instantly hit it off. I had recently completed my PhD in computer science from MIT; it had already felt so hard, just proving myself as worthy enough. I also had a 4 year old kid and a little toddler. I really wondered how I'd emotionally survive tenure-track, assuming anyone would even offer me the job. So I asked him. How did he feel about doing the whole tenure track thing? Having to prove oneself again after the whole PhD experience? The answer changed my life, and gave me a life long friend.

He looked at my quizzically, and said "Tenure-track? what's that? Hey, I'm signing up for a 7-year postdoc to hang out with some of the smartest, coolest folks on the planet! Its going to be a blast. And which other company gives you 7 year job security? This is the awesomest job ever!"

In 2004 when I came to Harvard as a junior faculty, I wrote it on my desk.

This-is-a-7-year-postdoc.

I type it in every day. For all seven+ years I have been at Harvard. No joke.

It is an incredibly liberating point of view. If I'm not here for tenure, then there are a bunch of things I do not need to do. For example, I don't need to spend my seventh year travelling doing the tenure talk circuit (I did not do this), or make sure I invite and get to know personally exactly 18 folks who might be my letter writers, or be on organizing committees so everyone important knows me well, or try to get nominated for awards as fast and as young as possible (I just turned 42). Frankly most of this is not possible to actually do!

But the sad part is seeing how completely miserable people will allow themselves to get trying to do it. I don't like being miserable. And why should I be? When I'm surrounded by some of the smartest and coolest folks in the world! Just brainstorming with the faculty and students at Harvard is an incredible experience, and being friends with them is icing on the cake. And to be paid to do that for 7 years? Heck, no industry job was offering me that kind of job security! I figured 7 years is a long time. Enough time to make a detailed plan for my next career.

I decided that this was a great job, that I was going to take it with both hands, and that I was going to enjoy my 7 years to the fullest. And I took explicit steps to remind myself of this decision every day.

I stopped taking advice.

I hate to say this, but people lie. Even with the best intentions. If you ask them what is important to succeed as a junior faculty member, people will tell you everything they did that they think helped them succeed. Plus everything they wish they had done. And all the things their friend did too. They deliver you this list without annotation, a list which no single person could ever accomplish. And while this list sends you into shock, followed by depression, followed by a strong desire to quit (because heck I'm never gonna be able to do all that) — the truth is that that is the last thing this person wants. They want you to succeed! And so with the best of intentions, they advise you on how to fail.

An extreme case of this happened to me in my early years, when I went to a Harvard event for junior women faculty. To make a long story short, several senior women got up and explained how we needed to do all the things the male junior faculty were doing, but then also do a whole second list of extra things to compensate for the fact that there is huge implicit bias against women in letters and assessments. And there I was, with two young kids, already worried how I was going to have to be twice as productive as the men in order to compete with half as many working hours. And these women were telling me I'd have to be four times as good as the men per hour to survive! These women had the best of intentions. But I came back to my office, lay on the couch, and decided to quit. Then I remembered rule 1: I am not here for tenure, so none of the advice actually applies to me. Since then I just refuse to go to these sorts of events, and there are plenty of gender-neutral versions of that experience. Instead I run a therapy couch for those male and female junior faculty who attend.

The second problem is that people gave me advice in the form of lists. Example lists I got: give invited talks in many big places, publish lots of journal articles, join prominent conference committees so you get to know senior people personally, volunteer in University committees to get to know Harvard faculty who might be on your tenure case, etc.

It is easy to give (and receive) advice that is a list, even when the things on the list are not the most important to do. No one said to me, "Hey, my advice is to win the McArthur grant. Then you'll get tenure for sure." Frankly, that's much surer advice than the list. Just harder to swallow. Given that any time spent on a list item is time not spent on research (and many of these list items are super time consuming), I don't feel like a lot of advice I got was sound.

Finally, it doesn't help that computer science (and university faculty in general) suffers from an extreme lack of diversity. People claim to care about about work-life balance, while only really understanding and practicing workaholism. Most people I know are incapable of giving advice I can follow, without getting a divorce or giving up my kids for adoption. Unfortunately that's still true.

I created a "feelgood" email folder

I have an email folder named "feelgood". It's a little silly, but effective. Every time I tell my colleagues about this one, they first laugh, and then seriously consider making one for themselves. Here's what's in it:

The eloquent and touching email my MIT advisor wrote to our group about how proud he was to see one of his students choose to go into academia. The email from the Harvard faculty member who offered me the job, and then went on and on saying how excited she was that I was joining. The first paper acceptance I got. The first award I got. The random email I got from a famous professor who I totally idolize (oh my god, they know my name!). The junior faculty member who said they'd save my emails and reread them every time they felt down. The student who told me I should be awarded a degree in psychology, because I let them vent and cry on my couch and that apparently made all the difference. The email from the Turing award winner who thought my promotion was good but not surprising (could've fooled me!). The photo my husband sent me while I was traveling at a conference, of how my 6-year old daughter tried to help her dad by packing lunch for her 3-year old brother (unsuccessfully of course). Some seriously funny emails my faculty buddy sent me to cheer me up. Basically pointers to moments when I felt happy.

One of the hardest things for me about this job is that there are so many ways to get rejected, and those linger a lot longer than the feeling of success when something good happens. Grant rejections, harsh paper reviews, bad teaching reviews — all ways of having someone reject your results without acknowledging the huge amount of hard work that went into this not-quite-perfect outcome. Even in a 7 year postdoc, it is still hard.

People advised me, "Don't take it personally". Yeah. In the bin of not-useful-advice for me. I put in the work and I care about it. It is emotionally taxing and that is personal. The very idea that we can't admit that openly is ridiculous. Anyways, that's when I take 15 minutes and browse though my "feelgood" folder. And a little bit of that feeling of happiness comes back. Just reading the emails transports me back to those different moments. Its fleeting, but effective. And its real. Good things happened to me, and I have no reason to think that good things won't happen to me again in the future. Helps me counter the feeling of rejection, and move constructively towards a fix.

The feelgood folder is just one of my many "patches" (and thank you Netflix for streaming BBC Masterpiece and Bollywood). As far as I can tell, other seemingly-perpetually-positive faculty have coping mechanisms too; some write blogs, some go grab a beer, others hit the gym. And not all coping mechanisms are graceful. I've cried alone in my office and I've sobbed a couple times in senior faculty's offices. Its life. Not being emotional, not being frail, not being human — these are parts of the scary image of the faculty member. Luckily, I'm in a 7 year postdoc! Far lower standards.

I work fixed number of hours and in fixed amounts

Not long after I joined Harvard in 2004, the then President Larry Summers publicly told the world his opinion of why women do not seem to succeed to the top. One of the several hypotheses he put forth was that they weren't willing to put in the 80 hours/week that was expected of faculty.

That week I went home and tried to calculate it out. After all how many hours did I "work at work"? Mind you, I had a toddler and a 4 year old, so I felt I was working *all* the time. Here's my calculation:

Ideal scenario: On days where I picked up my kids from daycare, I was fully at work 9-5 and then if all went well I could maybe squeeze in another two hours 10-12pm (while effectively being "on" non-stop from 7am-midnight, and having kids in 9-6pm daycare). On days where I could stay late at work, I would work 9am-9pm straight but then spend no time with family. On weekends (when there is no daycare, only two overworked parents) I couldn't manage anything work related but we'd shop, cook, clean, in preparation for the next week. And this ideal case still means being awake and "on" from 7am to midnight, all 7 days.

So the generous calculation is: (2pickupdays * 10 hours) + (3latedays * 12 hours) = 56!!

When I did this calculation, I realized that I was basically getting in about 50 hours/week on a good week! And if I wanted to get to 60 hours/week I'd need to have 12 job-only productive hours per weekday, and if I wanted to get to the 80 hour/week that would mean ~11 hour work days all 7 days of the week. That's crazy, and *completely* unreasonable. With that expectation, the only way to survive would mean one of us quitting having a career, and the other quitting being a parent.

And at that point I decided that 50 would just have to be enough.

But of course *less hours mean you get to do less work*. And that's hard to accept for the uber-ambitious person that I am, surrounded by lots of uber-ambitious colleagues and hence lots of peer pressure to take on ever more work. So eventually I came up with an easier solution. I decided on *a priori* "fixed amounts" in which I was allowed to agree to do things. Once the quota is up, I have to mandatorily say no.

- O I travel at most 5 times a year. This includes: all invited lectures, all NSF/Darpa investigator or panel meetings, conferences, special workshops, etc. Typically it looks something like this: I do one or two invited lectures at places where I really like the people, I go one full week to a main conference, I do maybe one NSF/Darpa event, and I reserve one wildcard to attend something I really care about (e.g. the Grace Hopper Conference, or a workshop on a special topic). It is *not easy* to say no that often, especially when the invitations are so attractive, or when the people asking are so ungraceful in accepting no for an answer. But when I didn't have this limit I noticed other things. Like how exhausted and unhappy I was, how I got sick a lot, how it affected my kids and my husband, and how when I stopped traveling I had so much more time to pay real attention to my research and my amazing students.
- O I have a quota for non-teaching/research items. Just like the travel, I have a fixed number of paper reviews (usually 10), fixed number of graduate and undergraduate recruiting or mingling events, and fixed number of departmental committees I am allowed to do each year. I also do one "special" thing per year that might be time consuming, e.g. being on a conference senior program committee, or being on an NSF/DARPA panel, or being on a junior faculty search committee. But only 1 per year. As soon as I sign up for that one, all present and future opportunities are an automatic no (Makes you think a lot before you say "yes", no?). Plus, there are things that are really important to me that don't get enforced externally. Like making time to meet other women in computer science, and doing a certain amount of outreach to non-Harvard audiences. If I'm not careful, I end up with no time for these less promoted events. And if I end up with no time for these, I end up a very bitter person. I have a quota to prevent me from accidently getting bitter.
- O I also have a weekly hard/fun quota There are things that for some reason are super hard, or bring out your worst procrastination habits. For me, that's grant reports and writing recommendations. There are also things that are really fun. For me, that's making logos and t-shirts and hacking on my website. If I can do 1 hard thing per week, and 1 fun thing per week, then I declare victory. That was a good week, by a reasonable measure of goodness.
- O I aim to raise kids as an equal 50-50 partnership. This is a big one and I don't want to make this seem obvious the idea below was born after a long time of growing arguments and anger and resentment, which neither of us are eager to remember. Moving on though, we now happily tell our method to all parents.

The basic idea is simple. We play zone-defense during the week: only one parent has childcare at a time. I do five days morning drop off (7-9am) and two days evening pickup (6-10pm), my husband does three days evening pickup and no drop offs. When you are on kid duty, all responsibilities are yours (feeding, bathing, where did the gloves go, yes I understand you want to cry inconsolably right now for no reason). But all rules are yours too; the other parent has to stay clear out of it and no comments allowed. When you are off kid duty, you can schedule the time as you please, stay late at work or take a tennis class or go drinking with buddies. No questions asked.

I mostly work those days or schedule work-related social events on those evenings. This tag-team parenting also means we don't all get together as a family during the week usually. *So we decided: no job related work on the weekends*. No reading or writing email, no reading grants and papers, no preparing lectures, no conference calls. The weekend is either for getting organized at home or just spending time together. We also carved out a chunk of our budget to get household help 3 times a week, to create more time for us on the weekends to be together as a family. Finally, if you want to break the rules, then you have to trade: for every evening I cover for him, he has to cover an evening that week for me. For every weekend I travel, I have to give him a weekend day off. No free lunch.

The nice thing about the fixed amounts approach is that it made equality easier to approach in a house with two alphas. My husband worked for industry, but his job had the same expectations of working all the time, traveling all the time, and pretending that nothing else exists. This helped us limit how much our careers (or kids) were allowed to encroach on our lives as a whole. But I also adher to this

pretty strictly for other reasons. I need rest!

I stop working late Friday night and I don't open my email client until Monday morning. My students have adapted. They know not to put me in unreasonable situations like trying to submit a paper last minute. My kids have adapted too. They like the idea that Tuesday is mommy rules and Wednesday is daddy rules. They know the weekend is theirs. My colleagues I'm not exactly sure about. I'm afraid they don't quite realize how few hours I am willing to give to the job. Oh well, I guess they know now.

People want you to do everything all the time, and they impress you that the world will collapse if you don't. But there are times I wish the world would just bloody collapse! Because the amount of stuff people keeping adding to the "must be done" list is outrageous. It is also stunning how little thought society has given to raising kids with two working parents. People in my work community constantly schedule important work events on evenings and weekends, with no apology or offer of childcare. People in my city government think that affordable public education ages 5-12 until 3pm is sufficient, and the rest doesn't need organized effort or collective funding. Yet somehow we declare victory with Title IX? Ridiculous.

So in spite of all the practical ways I counter these issues, it still makes me very angry and frustrated. Which brings me to the next point.

I try to be the best "whole" person I can.

It was the end of a month where a lot of things had gone haywire: rejected grants, a poorly prepared problem set that should have never seen the light of day, a sick kid whose fever I tried to mask with Tylenol and send to school, and so on. It was all bad, and I was embarressed and depressed. I was doing poorly on every account, in front of people who quite reasonably expected so much more from me. As I was having this nervous breakdown moment and feeling very isolated, I called one of my old friends just to chat. Unaware of my condition, she told me a story about her uncle who had a smart young daughter, and how he takes off work at 3pm to take her to be part of a special math Olympiad, and how he goes with her on weekends for classes at a community college, and how he is doing everything within his power to provide his daughter access to the best opportunities.

And in that moment it suddenly dawned on me what was taking me down. We (myself included) admire the obsessively dedicated. At work we hail the person for whom science and teaching is above all else, who forgets to eat and drink while working feverously on getting the right answer, who is always there to have dinner and discussion with eager undergrads. At home we admire the parent who sacrificed everything for the sake of a better life for their children, even at great personal expense. The best scientists. The best parents. Anything less is not giving it your best.

And then I had an even more depressing epiphany. That in such a world I was destined to suck at both.

Needless to say it took a lot of time, and a lot of tears, for me to dig myself out of that hole. And when I finally did, it came in the form of another epiphany. *That what I can do, is try to be the best whole person that I can be*. And that is *not* a compromise. That *is* me giving it my very best. I'm pretty sure that the best scientists by the above definition are not in the running for most dedicated parent or most supportive spouse, and vice versa. And I'm not interested in either of those one-sided lives. I am obsessively dedicated to being the best whole person I can be. It is possible that my best whole is not good enough for Harvard, or for my marriage; I have to accept that both may choose to find someone else who is a better fit. But even if I don't rank amongst the best junior faculty list, or the best spouses list, I am sure there is a place in the world where I can bring value.

Because frankly, my best whole person is pretty damn good.

I found real friends

I found friends at work who think I'm special just the way I am (and I avoid the others). My work friends are awesome, but not "perfect". They are *not* senior people in my field. These are folks I "gel" with. These are folks who think I have good ideas, regardless of this year's crop of paper acceptances and rejections. These are folks whose ideas I like, making every coffee conversation worth it. In my awesomest-7-year-postdoc, I am here to have an awesome time. So what better way than to spend it with people I truly have fun with!

In our community there is a lot of pressure to network and impress the perfect friends, e.g. senior faculty in your field who will sit on your grant panels, review your papers, and eventually write your tenure letters. These people are supposed to tell you your worth. Yikes! Good thing I wasn't on tenure-track! When I started out, it was hard to simply walk up to such people and say, hey, instantly like me without any proof beyond my graduate thesis. Exposing myself to groups of people I didn't know and had no reason to trust, just so they

could shoot me down, didn't seem like an effective way to learn. Plus, I get enough anonymous feedback as it is. Often it isn't clear to me that the expert reviewers in my field have made a sincere effort to understand what it is I am trying to do, if I am saying it poorly. Four years later with some work under my belt, and a clearer idea of who I was, I did make many good friends in my field. But they will never replace my first friends who thought I was special from the start and who believed (on some inexplicable faith) that I would do good things.

My most valuable and constructive professional criticism has come from these friends — friends who were not in my field, but were in my "court". These friends are the ones who read my proposals and papers for my first four years at Harvard. Even though they weren't from my field, they caught 90% of the bugs in any argument or writing I did. They cared about me personally, so they put in a lot of time and effort to deliver honest critical evaluations of my work and my decisions, in a language I could understand. They helped me deal with the inevitable rejections and insults. These people were instrumental to my success, when I had few accomplishments and little experience to recommend me. These are the people who will still instantly care about whatever I care about at that moment, and give me their valuable time. These are the people who will proofread this article.

I get by with a little help from my friends...

I have fun "now"

In 2012 when I got tenure, people came up to me and said "Congratulations. Now you can do all the things you've always wanted to, take risk, take an easier pace, and have fun". My answer was: "I've always done what I wanted to". And its true. But its not because I have extra courage. Rather, by demoting the prize, the risk becomes less. People will say: you can do xyz after you get tenure. But if I am not here for tenure, then that doesn't apply! I don't have to worry about being so brave. *I'm allowed to have fun now*.

I have fun doing research I like at my natural balance for risk tolerance (even if it's a 7-year-postdoc, I can't take or handle unbounded risk in research). I take 1-month long vacations in the summer without touching my email (and I've ignored the advice that my away message would make people stop taking me seriously). My lab goes on an annual ski trip (the first trip was four years ago, and my lab's productivity doubled that year). I enjoy working hard, but not at the expense of my principles or my personal judgment of what is actually important. Fun is essential to my research. It is essential to me wanting to have this career.

A faculty member once told me that when people are miserable and pushed to their limits, they do their best work. I told them that they were welcome to poke out their own eyes or shoot a bullet through their own leg. That would definitely cause huge misery and might even improve their research. Ok, yeah, I only thought about saying that.

Conclusion

Many who consider, or even try, the tenure-track faculty life feel like they don't fit the stereotype. For some, the stereotype is so far, that one feels like an alien. The two options I hear most are getting burned out (by trying to live up to the rules) or opting-out (because one can't play the game by the rules). I guess my hope is to add one more option to the list, which is covering your ears and making up your own rules.

I am not saying this approach or this list is a recipe for success. As one of my wise colleagues said, we know very little about what makes people actually succeed. Rather this is the recipe by which I have, and I am, having fun being in academia. And if I'm not having fun, I will quit and do something else. There are lots of ways to live a meaningful life.

I realize that my own case is special in many ways. It is a rare privelege to get a tenure-track faculty position at a place like Harvard. And engineering is a discipline with many reasonable career alternatives. And very, very few mothers get to raise kids with a feminist husband. Nevertheless, it seems to me that at all levels of academia, almost regardless of field and university, we are suffering from a similar myth: that this profession demands – even deserves – unmitigated dedication at the expense of self and family. This myth is more than about tenure-track, it is the very myth of being a "real" scholar.

By my confession, I hope to at least make some chinks in the armor of that myth. Maybe even inspire others to find their own unorthodox ways to cope with the academic career track, and to share them. And maybe, just maybe, I can inspire my senior colleagues to have an honest discussion about what expectations and value systems we are setting up for young faculty. I know that I do not want to participate in encouraging a world anchored by that myth. In fact, I have no choice but to openly oppose it. Because I can't live – I can't breathe – in that world.

Other Things to Read

Many of the ideas in this article were inspired by discussions I had with friends and things I've read. There have been some really terrific articles on this subject. Here's a few that I find really useful. I often revisit them.

Uri Alon: Work-life Balance in Science: A Theory Lunch Video

(~30 minutes, parts 1-4, especially part 4 "Sunday at the Lab" spoof song)

The Alon lab has put together an excellent set of Materials for Nuturing Scientists.

Anne-Marie Slaughter: Why We Still Can't Have It All, The Atlantic, July 2012

Ivan Sutherland: Technology and Courage, Perspectives, Sun Microsystems Inc, April 1996.

Kate Clancy: On being a Radical Scholar, Scientific American Blog, October, 2011



About the Author: Radhika Nagpal is a Professor of Computer Science, in the Harvard School of Engineering and Applied Sciences, and a core faculty member of the Harvard Wyss Institute for Biologically Inspired Engineering. She received her PhD degree from MIT in Computer Science. Her research interests lie at the intersection of computer science, robotics, and biology.

More »

The views expressed are those of the author and are not necessarily those of Scientific American.



Scientific American is a trademark of Scientific American, Inc., used with permission

© 2013 Scientific American, a Division of Nature America, Inc.

All Rights Reserved.

Advertise About Scientific American Subscribe

Special Ad Sections Press Room Renew Your Subscription

Science Jobs Site Map Buy Back Issues

Partner Network Terms of Use Products & Services

International Editions Privacy Policy Subscriber Customer Service

Travel Use of Cookies Contact Us