

EXECUTIVE SUMMARY (followed by detailed comments by respondents)***What steps did you take as a grad student/postdoc when you realized you didn't want to be a PI?***

- Don't listen to the people who will tell you what you can't do: "you can't do your undergrad and grad work at the same institution and be successful," "you can't leave academia and then ever return," "you can't work for government agencies and then go into industry or academics." I was told all of these things but did not listen and have seen them proven wrong. I did undergrad and grad at the same university, went into a government postdoc, then to biotech, then into patent law, then back into a university academic lab, then to small startup, then to big pharma!
- I asked for some riskier postdoc projects. I did not have to think necessarily about what I could take away to start my own lab, but rather what projects could expand my working knowledge and be FUN! and worthwhile.
- I went and asked my boss (postdoc advisor) if I could help him with his journal, so we created an "editorial fellowship" position for me to learn the ropes.
- I talked to as many professionals within my selected industry as possible to get a flavor of what it would really be, to see if my style and personality would be a good fit.
- I secured the best possible postdoc I could, ensured my publication record was solid, and interacted with people who were involved in industry; i.e., faculty members who were serving on boards of directors, as scientific advisors, etc.

What were the most important things you have learned in your career path?

- The perfect job can be hard to come by. So find one and realize that there are parts you won't like. *Then find a way to change the job.*
- Education should expand someone's options, not restrict them. I tell people to use their PhD as a ticket to the life and career path they want, not the one someone else expects them to follow.
- Do NOT let anyone else judge success for you. You will suffer from impostor syndrome; we all do. You and your record will be judged at many points in whatever scientific field you pursue: tenure, paper submission, grant submission, editing papers and rejecting them, filing for patents or seeking VC funding. But you must keep your own definition of "success" front and center or you will be beaten down by the system.
- Bring a solution to the table when you complain about something. Ask yourself "Have I tried my best within my abilities?"
- I think the **most** important thing is to do an HONEST assessment of your strengths and talents and set aside the ego or the idea that "I have to say I want to be a PI even if I don't because then he or she won't give me the time of day."
- Define my own principles and stick to them – understand what I consider the priorities in my life, and then live my life according to those. I never felt like I had to "choose" between things I wanted in my life – I set my priorities and everything else just fell into place naturally around that.

What key advice do you have for someone contemplating a non-PI career?

- Think about what you would most like to do, and find people who are doing it (Patent attorney, science journalist, teacher, whatever). Take them to lunch and ask them all about what they do, how they got to their career, and what advice they have.
- Be flexible...stay focused on what you want your career to look like--you're in the driver's seat. Talk with people who are in industry and those who have transitioned from academia --> industry.
- My key advice would be to write down why you made the decision you made. When you hear about new research coming out and you yearn for something other than what you have, it is important to remember why you are where you are.
- Do the best science you can but cultivate additional skills, look for opportunities to try out different things, be creative, be bold. I got my job with the first organization because I read about them on their website (looking for opportunities where my husband had a job offer) and I figured out how I could add value to the organization.
- Try to get administrative experience—often asked for in non-PI type jobs.

DETAILED ANSWERS BY RESPONDENTS IN NON-PI CAREERS

Liberal arts college teacher #1 (Ph.D., postdoc, job)

What steps did you take as a grad student/postdoc when you realized you didn't want to be a PI? Though I did not want to be a PI, I thought I would be a bench scientist. I asked for some riskier postdoc projects. I did not have to think necessarily about what I could take away to start my own lab, but rather what projects could expand my working knowledge and be FUN! and worthwhile. That worked out well for me, because I was not stuck with performing the same techniques I already knew. The family move changed my choice for me, and I became a liberal arts teacher. My new field of research is the scholarship of teaching and learning.

What were the most important things you have learned in your career path? I think you have to be flexible in a career path and see where it takes you. But, find a way to keep doing some of what drives you. The perfect job can be hard to come by. So find one and realize that there are parts you won't like. *Then find a way to change the job.* For example I started the undergraduate research program at my college so that I could keep doing research with students. It is slower, and different from I would sometimes like, but is a way to do some research. And, my students have gotten great positions upon graduation.

What are the plusses of this career path? The minuses? I enjoy teaching. The interactions with students are great. I hate paperwork and endless meetings. One thing I wish I had done was to not do my best at everything [administratively]. Seriously. When you show competence they give you more to do. I wish I had not excelled at determining departmental goals and methods for assessment. I wish I had never been secretary of a committee. (Hint: where I am, chairs do less and it looks better on your faculty evaluations). So I would recommend thinking about what you want your job to look like and choose a few areas to really excel in.

What didn't you anticipate about this career? I did not think that teaching would continue to be fulfilling. I mean, how many times can you teach the same stuff? However, since I've been studying the learning process and continually thinking about improving my courses, I have plenty to do to keep my mind busy!

What key advice do you have for someone contemplating a non-PI career? My key advice would be to write down why you made the decision you made. When you hear about new research coming out and you yearn for something other than what you have, it is important to remember why you are where you are. For me, it was

have a family, or not. Teaching was the only thing I could do where I moved with my husband. Seeing my daughter makes that choice worth it. (Ok, I still really really miss the lab!

Liberal arts college teacher #2 (Ph.D., postdoc, job)

What steps did you take as a grad student/postdoc when you realized you didn't want to be a PI? I didn't do enough to prepare for a teaching career, so here is what I advise. Get TA training and teach. As a postdoc try to get some teaching experience where you work, or as an adjunct. Consider a postdoc that is for science PhDs who want to teach [e.g., [SPIRE](#) at UNC Chapel Hill; [IRACDA](#) NIH/NIGMS and see [IRACDA Participating Institutions](#)]. Do a postdoc (research or teaching)-it opened a lot more job opportunities for me. While a grad student/postdoc, cultivate a research project that is long-term that can be done with limited time, money, equipment, and using mostly undergraduate labor. Get this going while you are a new faculty member and still have good contacts in the research world. Time will be an issue in doing this; it is really hard to find extra time when you are writing lectures, labs, coming up with classroom activities, grading, taking care of a family, etc.

What were the most important things you have learned in your career path? Teaching is hard work; some education background would have been good; growth comes from experience. It is a very rewarding job when students do well, they get it, they get where they want to go, and you see your work as helping students do those things.

What are the plusses of this career path? The minuses? The schedule is good for having a family. Once my kids started school, summer childcare was a problem, so being off in the summer is really great for our schedules and for family time. It is great that when the semester ends, you get to really start over. I really love working with students, creating new learning opportunities for them, trying out new techniques, and introducing them to lab work/research.

What key advice do you have for someone contemplating a non-PI career? Find a way to figure out what the job is really like and whether you think you will enjoy it.

Science journalist #1 (Alan Dove; while writing Ph.D. thesis, did 6 month editorial internship with Nature America offices; then declared himself a freelance science journalist)

Key advice: There's an enormous bias against non-PI careers in the academic community, such that any other career track is regarded as a form of failure. That view is simply absurd, especially since upwards of 75% of PhD graduates will never be on the tenure track. The key piece of advice I try to get across is that education should expand someone's options, not restrict them. I tell people to use their PhD as a ticket to the life and career path they want, not the one someone else expects them to follow.

See blog posts on alandove.com (and the comments). These have some good links to outside articles about the market for Ph.D.s (see third post, + link to Jordan Weissmann summary).

5/9/13 <http://alandove.com/content/2013/05/15-years-of-income-as-a-freelance-science-journalist/>

5/10/13 <http://alandove.com/content/2013/05/how-to-make-75000year-writing-and-hate-it/>

5/16/2013 <http://alandove.com/content/2013/05/on-leaving-science/>

Science journalist #2 (Ph.D., postdoc, 1 year graduate program in Science Communication at UCSC; writer for *Nature* and *Science*)

What steps did you take as a grad student/postdoc when you realized you didn't want to be a PI? I decided I wanted to be a journalist at the same time I realized I didn't want to be a PI. I began to research science-journalism programs, but I did it in secret, afraid to tell my PI, because at the time (27 years ago), students/postdocs were looked upon as "failures" if they did not want to pursue an academic career. I do hope

things have changed since then!

What were the most important things you have learned in your career path? A PhD provides a very deep knowledge about a rather narrow area, and working as a science journalist requires more shallow knowledge of a broader area. But having done PhD research gave me a deep grounding in how one does science, so that I could ask the right questions, and understand any new area I was researching for an article. And most importantly, having done research gave me the understanding of what a control is, and gave me a healthy skepticism of any flashy new result I was told about. My biggest criticism of much science journalism today is that the writers are too credulous, too quick to believe what they are told, without asking the tough questions to really understand whether the result or discovery they are writing about is as good as it seems. Having a strong research background gave me the confidence to ask the tough questions and not be overly credulous.

What are the plusses of this career path? The minuses? Journalism has changed so much since I entered the field, that it is hard to say what are the plusses and minuses today. When I joined the field, all the major newspapers had science sections, and there were good newspaper jobs for science journalists. There was a growing number of glossy monthly science magazines that paid well for freelance stories. Internet journalism had not yet arrived. Today newspapers are in a decline and most science sections have disappeared, as have many of the magazines. Today the opportunities have shifted to the internet and since I left journalism to be a rancher/cheesemaker 10 years ago, I have not kept up with the changes.

What would you do the same? What would you do differently? I am very glad I completed my PhD. I feel the degree helped me get the job I wanted with *Science*, and the experience of my doctoral research gave me the ability to think critically about any research area I found myself writing about as a journalist.

What key advice do you have for someone contemplating a non-PI career? Think about what you would most like to do, and find people who are doing it (Patent attorney, science journalist, teacher, whatever). Take them to lunch and ask them all about what they do, how they got to their career, and what advice they have.

Nature editor/science communicator (Ph.D., postdoc; editorial fellow at a journal, job)

What steps did you take as a grad student/postdoc/beyond when you realized you didn't want to be a PI? I looked around for postdocs that would allow me to pursue other options I was considering as well, like clinical certification in human genetics. When I realized I wanted to do editing, I applied for a job at a major journal and interviewed. And then I went and asked my boss if I could help him with his journal, so we created an "editorial fellowship" position for me to learn the ropes. (In retrospect, shoulda done that last one before just applying for a job....)

What were the most important things you have learned in your career path? Do NOT let anyone else judge success for you. You will suffer from impostor syndrome; we all do. You and your record will be judged at many points in whatever scientific field you pursue: tenure, paper submission, grant submission, editing papers and rejecting them, filing for patents or seeking VC funding. But you must keep your own definition of "success" front and center or you will be beaten down by the system.

What are the plusses of this career path? The minuses? See above with lots of judgment. In this era of the sequester, increasing scarcity of funds is a serious minus. The plusses for me include relationships -- pursuing a scientific career surrounds you with the most fascinating (and sometimes strange) people on earth; and a never-ending stream of "oh, wow!" moments and learning new things.

What would you do the same? What would you do differently?

Gosh. I would still go into editing because I love it. I would definitely still work at Nature because it was like riding the Knight Bus from Harry Potter. And I would still go into science communication because that's the part I have always been most passionate about.

Differently: I think I would have sought more mentoring in my PhD and postdoc years, particularly from women. I mostly got advice from men who encouraged me to stay with tenure-track academia, and I wish I had sought more and different viewpoints, earlier.

What didn't you anticipate about this career?

The fun parts, like standing up at a press conference in Washington DC and speaking to reporters about the chimpanzee genome.

Or the bad parts, including watching so many women leave behind scientific careers for many reasons along the way. It is to the point where I wonder sometimes if we can responsibly encourage all young people to pursue academic science.

Director of Research Programs at a state research alliance (Ph.D., postdoc, job)

What steps did you take as a grad student/postdoc when you realized you didn't want to be a PI?

I didn't make a conscious decision to not be a PI. I tried to keep all options open but realized that it would be a challenge with our "two body problem" and the reality that funding was already in decline by the time we hit the interview circuit. I pursued my science with the same intensity of someone intending to become a PI but tried to cultivate additional skills that might help me should I go a different direction (e.g., I became President of the postdoc association at my postdoc institution...)

What were the most important things you have learned in your career path?

I think the **most** important thing is to do an HONEST assessment of your strengths and talents and set aside the ego or the idea that "I have to say I want to be a PI even if I don't because then he or she won't give me the time of day." That does everyone a disservice. In the end, I realized that I would likely not be the one to discover a "cure" but through my current role, I could influence policy decisions that could influence cancer outcomes for an entire state. To me, that was a much bigger impact and made better use of my skills and talents while allowing my husband to pursue his strengths. Clearly, it was the right decision and has given us greater balance personally and professionally. Now that the organization I first worked for has merged with the state research alliance, I get to utilize my micro/immunology/virology and cancer background, since the state has invested a lot of effort in virology/immunology/vaccines.

What are the plusses of this career path? The minuses?

The pluses: more regular hours, ability to work on lots of different projects, program building, and strategic planning. The minuses: my job (or our organization's funding) is heavily influenced by politics at state level.

What would you do the same? What would you do differently?

I really wouldn't change anything. I'm a purist: I believe everyone should do a postdoc. It has given me a broader scientific base that I utilize in my job and gave me opportunity to mature. I wouldn't have been ready for this job straight out of grad school.

What didn't you anticipate about this career?

Coming from academia, I was least prepared for the politics that come along with being a primarily state-funded organization. Lots of competing demands for limited resources during economically challenging times. You have to learn to communicate science in a way that resonates with legislators who may not have a science background but who do control the money.

What key advice do you have for someone contemplating a non-PI career?

Do the best science you can but cultivate additional skills, look for opportunities to try out different things, be creative, be bold. I got my job with the first organization because I read about them on their website (looking for opportunities where my husband had a job offer) and I figured out how I could add value to the organization. I then guessed the CEO's email address, contacted him, and ended up getting a job. As luck would have it, my predecessor had just left to take a consulting position and they had a vacancy that hadn't even been advertised yet.

Biotech company, then startup biotech company scientist (Ph.D., postdoc, job)

What were the most important things you have learned in your career path? Bring a solution to the table when you complain about something. Ask yourself "Have I tried my best within my abilities?"

What are the plusses of this career path? The minuses? Pluses: No struggles for grant writing. A real field test and application of what you have learned in school.

Minus: less collaboration opportunities (due to trade secrets, IP issues)

What would you do the same? What would you do differently? I would still seek industrial opportunities. Considering my own international background limitations, I would not do anything differently.

What didn't you anticipate about this career? There are quite different cultures in big, midsize and small start-up biotech companies.

What key advice do you have for someone contemplating a non-PI career? Lengthy postdoc experience may not necessarily help you in your industrial career.

Big Pharma scientist #1 (Ph.D., postdoc, job)

What steps did you take as a grad student/postdoc when you realized you didn't want to be a PI? As a student and postdoc I saw how much time was spent writing grants and decided that I would rather focus on hands-on science.

What were the most important things you have learned in your career path? Don't listen to the people who will tell you what you can't do: "you can't do your undergrad and grad work at the same institution and be successful," "you can't leave academia and then ever return," "you can't work for government agencies and then go into industry or academics." I was told all of these things but did not listen and have seen them proven wrong- I did undergrad and grad at the same university, went into a government postdoc, then to biotech, then into patent law, then back into a university academic lab, then to small startup, then to big pharma! I like to think that I have been successful because I have always been able to move into whatever area (academia, commercial, etc.) of science that I wanted to move to.

What are the plusses of this career path? The minuses? The plusses are that I have built a broad experience base and have enjoyed all of the different areas I have worked in- the only minus is that you have to be patient when switching around and allow yourself time to develop- sometimes finding that patience can be hard and you can feel like you are not moving up fast enough.

What would you do the same? What would you do differently? I have never followed a predetermined path- I have followed my footsteps, and my career path has been guided by reacting to what struck me as the next step at the moment. I would do the same thing upon a repeat because that is my personality- but the second time around I am sure different opportunities would arise and I would end up in a different place.

What didn't you anticipate about this career? That I would one day find myself being away from the bench and that I would be OK with that- I am surprised how much I still love science even when it does not come from my own hands- I really love seeing and helping people grow into their careers

What key advice do you have for someone contemplating a non-PI career? Do what feels right but try pushing yourself out of your comfort zone- stepping out into a new area and learning how to deal with that is where you really grow. And don't listen to people who want to tell you what you cannot do- listen to those who encourage you to try.

Big Pharma Scientist #2 (Ph.D., postdoc, job)

What steps did you take as a grad student/postdoc when you realized you didn't want to be a PI?

While I was in grad school and in my post-doc, I thought I DID want to be a PI – unfortunately, it was the steps I DIDN'T take in my post-doc that kept me from accomplishing that and ultimately left that path more blocked for me. I did not have a mentor that could help set me up as a PI. That said, I just started looking for a job when I realized that it would require a second postdoc for me to actually get to professor status. Nowadays, I would have leaned on contacts, but back then, I just started looking.

What were the most important things you have learned in your career path?

Define my own principles and stick to them – understand what I consider the priorities in my life, and then live my life according to those. I never felt like I had to “choose” between things I wanted in my life – I set my priorities and everything else just fell into place naturally around that.

What are the plusses of this career path? The minuses?

Plusses and minuses are the same as any career path as near as I can tell – it's a matter of what you are suited to doing, and what you enjoy doing, and what you want to do. I work hard, I play hard. I have a family and I have a high-powered career. My family has had to support me, and I have had to support my family – I think that is what we are meant to do here in this world. I guess the advantage of industry is that my skills are transferrable to A LOT of different roles, so I've had the freedom to explore that. It has also given me an outlet for my personal ambition to be successful, as well as my values for global health.

What would you do the same? What would you do differently?

Hard to have regrets about anything as a scientist, so it's hard to wish to do something differently – you look at the data as they are presented at the time and you draw the best conclusion based on the data, and you move ahead with that conclusion. When the data change, then you reassess.

What didn't you anticipate about this career?

Didn't anticipate being so comfortable financially – being able to comfortably support my husband and children so that he doesn't have to work and they have a stay-at-home parent. Also didn't anticipate having so much freedom to choose how I spend my time.

What key advice do you have for someone contemplating a non-PI career?

Do what you love, set your priorities, understand your principles and live by them.

Project/Program Manager in Pharmaceutical/Medical Device Industry (Ph.D., job)

What steps did you take as a grad student/postdoc when you realized you didn't want to be a PI? I talked to as many professionals within my selected industry as possible to get a flavor of what it would really be, to see if my style and personality would be a good fit. Take home message: Never rush into anything blind.

What were the most important things you have learned in your career path? Always trust my instinct (definition of instinct: my knowledge of myself, my strengths, my weaknesses combined with my past and present experiences and lessons learned).

What are the plusses of this career path? No day is ever the same, and challenges are always present to be solved (financial, resource, business growth). The minuses? It is not a "clock-in and clock-out" job. It requires dedication to get the job done, constant communication with teams, and has pressure to perform. For the right people, this is a dream job, but you have to fit the bill.

What would you do the same? I am blessed to be doing something I love. I wouldn't change my path, because it has gotten me to where I am.

What didn't you anticipate about this career? That it would highly value an analytical scientist that is a "people person."

What key advice do you have for someone contemplating a non-PI career? 1. Know what your strengths are 2. Trust your instinct (see definition of instinct, this is not synonymous with "blindly jump in").

VP Research & Development, division of major biotech company (Ph.D., postdoc, job)

What steps did you take as a grad student/postdoc when you realized you didn't want to be a PI?

Secured the best possible postdoc I could.

Ensured my publication record was solid.

Interacted with people who were involved in industry; i.e., faculty members who were serving on boards of directors, as scientific advisors, etc.

What were the most important things you have learned in your career path?

Be flexible...willingly take on new challenges and assignments that show you can work outside your comfort zone.

Stay relevant...you have to stay in the learning curve - not just from a scientific standpoint, but also in terms of business and market developments.

Make connections: be sure people know who you are and what you have accomplished.

What are the plusses of this career path? The minuses?

+ Ability to work on a lot of different things--not just molecular biology but instrument development, software development. A breadth of experience.

+ Interaction with a global organization on a daily basis.

+ Providing enabling tools for researchers to address complex questions

- Having to respond to funding decisions with little input. A project that is going really well can get shut down due to a change in focus and/or budget constraints (not dissimilar to trying to get a grant)

What would you do the same? What would you do differently?

Definitely would pursue industry again.

Would have chosen to postdoc in a lab focused more on applied science and/or with industry connections

Would have waited to take a position with a diagnostics company initially...this would have opened more doors for me.

What didn't you anticipate about this career?

Leading an international team of applications development and support at a filtration company where we focused on filtering/purifying just about ANY liquid or gas. For example, amine sweetening for petrochemicals...uh huh!

Learning how to produce membranes, make instruments, and the processes to develop instrument control and data analysis software.

What key advice do you have for someone contemplating a non-PI career?

Be flexible...stay focused on what you want your career to look like--you're in the driver's seat. Talk with people who are in industry and those who have transitioned from academia --> industry.

Biological Safety Professional (see [ABSA](#)) (Ph.D., postdoc, public policy internship, [NBBTP fellow](#), BSP)

What steps did you take as a grad student/postdoc when you realized you didn't want to be a PI? The simple answer is to explore other careers. A Ph.D. is incredibly valuable in many non-PI/non-academic careers, so there is no need to automatically think your degree won't be useful. Some ways to explore other careers include: informational interviews, teaching classes, writing for public relations offices, interning at tech transfer offices, internships in policy, and lots of reading. Getting some experience in an alternate career path is the best way to know if it is appealing to you. If your advisor is open to the idea of alternative careers, use him/her as a resource and a source of support. Look into the career office at your institution for resources and assistance.

What were the most important things you have learned in your career path? A career path is rarely linear. Everyone gets to their current position in a variety of different ways. The most important thing is to be open, look for opportunities, and don't be afraid to make a leap if it feels right.

What are the plusses of this career path? The minuses? No two days are alike. I get to interact with scientists and learn about the science without actually being a slave to experiments or grant applications. As a researcher, I knew a whole lot about a very small piece of the pie. In my current position, I have to know a great deal about a whole host of topics. I am currently challenged, always learning something new, and constantly interacting with new and interesting people. I have a little bit of a lot of alternative careers that I use in my job: policy, science, safety, teaching, and communications.

What would you do the same? I would keep an open mind and continue to pursue fields that interest me as best I can. What would you do differently? I would be more open and willing to ask others for help in the job search.

What key advice do you have for someone contemplating a non-PI career? Keep an open mind and follow your passion. As cheesy as it sounds, I was once told to think about what made me excited as a kid. I lost a lot of that passion in the lab. By looking at what made me excited about science in the first place, I began to pursue a path that led me to where I am today. I now am excited about getting out of bed and coming to work every day.

Technology Transfer Office at a major research university (Ph.D., postdoc, biotech positions, tech transfer)

What steps did you take as a grad student/postdoc when you realized you didn't want to be a PI? I needed some career movement beyond a postdoc position, so I became a co-PI and project manager on a multi-site NIEHS funded collaborative contract. This allowed me to learn about project management (key in industry), the coordination of research activities of different groups, and the concept of deliverables. This was many years ago and at a time when LOTS of industry positions were advertised in Science and Nature. I scanned those applied for a few positions in research areas that interested me. Also, make sure your friends and contacts know that you are looking.

What were the most important things you have learned in your career path? Flexibility increases the number of opportunities. Science is sooo broad. For example, I was trained primarily in virology, molecular and cellular

biology. In industry, our virology group was eliminated and I moved to a group focused on anti-microbial discovery. I also was willing to broaden my general experience by getting involved in activities around my projects, such as working with the chemists (to learn combinatorial and antisense chemistry and QC), pharmacologists, and PKADME groups (Pharmacokinetics: Absorption, Distribution, Metabolism and Excretion) as well as non-research groups such as business development representatives, patent attorneys, and marketing staff. I was based in San Diego, a very close-knit biotech community. It is important to keep good relationships with people and not burn any bridges...I knew I would see these people again and again throughout my career. Keep in contact. It is via contacts that I obtained my first job opportunity in biotech, my second job (the contacts were several people that I had worked with at my first biotech job), and my current position.

What are the plusses of this career path? The minuses? The combination of experience in both industry and academics has benefits. I've met some amazing people and traveled quite a bit. There is benefit to having a good understanding of the challenges faced by basic researchers, what research really is, and also knowledge of the potential applications of research results/product development. I am also glad that I was exposed to product development processes since I can better evaluate negative and positive aspects of early stage discoveries. The negatives might be that I am more of a generalist rather than, for example, being a world-renowned academic expert in herpes virology. Also, there are some aspects of the lab camaraderie and international interactions of academics (focused meetings, visiting scientists, students, postdocs) that are not the same in industry.

What would you do the same? What would you do differently? No changes...but I would have liked to live in closer proximity to my jobs! What a time sink. I've been commuting between 25 and 60 miles each way to work for more than 20 years. This personal sacrifice was necessary for career advancement.

What didn't you anticipate about this career? My current career is in a dynamic area and there is constant criticism from every side (academic and industry). I did not anticipate as much controversy around university policies regarding interactions with industry, startup companies on campus, patenting and licensing. While I had done similar work in industry (intellectual property, industry legal agreements), I did not anticipate the complexity of doing such work within the university. There are layers of government and state regulations, policies, and conflict of interest guidelines that make the same job responsibilities, particularly decision making, much more involved.

What key advice do you have for someone contemplating a non-PI career? Network at academic and business events. Contact law firms. Be prepared to do unpaid internships to find out what it is that really interests you (we have several interns working in our office), volunteer at or attend community or charitable events...you often meet business and non-profit reps at those events. Also, check out the FDA and foundations. I ride horses at a stable nearby and two people I ride with work at companies. If I were looking for a position, I would ask if they could connect me with someone from their companies (one of them just put me in touch with one of their friends at a university that is interested in getting involved with stimulating university startups...so I will meet with that person to see what she is seeking). I work with many academics that consult for local companies...if I wanted to work at a local pharmaceutical/biologics company, I might first talk to professors to get names of people that have left academics to work there. We all have LONG careers now and might change jobs a fair bit. Do whatever you can to try different things, find out what excites you since you are going to spend so much of your life in your career.