The long and winding road to success

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As our last post highlighted, scientific success is not always a straight line. In this post, we want to highlight the journey of Dr. Kateri “Teri” Moore who is an Associate Professor of Cell, Developmental, and Regenerative Biology at Mt. Sinai School of Medicine, wife of Ihor Lemischka, and mom to Chris and puppy Finley Louise. A clear theme from Teri’s path is that a sustained love of science, finding your own opportunities, and staying in it for the long haul can yield great rewards. We hope you enjoy Teri’s story and advice on how to thrive when there are bumps along the road. We thank her so much for taking the time to share her journey with us.

Career Overview:

I have been working in labs since I was 16. I first worked in a small clinical lab. I married very young and had a son soon after. Going to school became secondary, so I put my plans on hold. I worked as a phlebotomist and technologist at the local hospital. Later, I started working in the Veterinary Pathology Department as a technician. It seemed like I fell into my natural habitat. I was very successful there and published extensively. At some point I decided it was my turn and decided to apply to Veterinary School, as there were so many options after graduation. After my first year in Vet School my marriage fell apart, necessitating my return to my former job in my “spare time”. My son remained with me as my ex-husband soon left the state. Chris was a freshman in High School at the time of our divorce.

I continued to publish papers while I was working and still managed to graduate in the top 10% of our class. Our lab worked on animal models of hematological diseases, including glutathione deficiencies, red cell enzyme deficiencies, red cell membrane defects, and iron storage diseases. After graduation I decided to stay in science and found a post doc at Baylor College of Medicine. My son went to live with his father for his senior year in High School. My time as a post-doc was the first time I lived completely on my own and I loved it. I feel I was pretty successful; I had an NRSA Fellowship, published well and had the time of my life.

After 5 years I decided it was time to move on and interviewed with Ihor Lemischka at a Keystone Meeting where he ended up offering me a position. I had sought him out as he was doing everything I wanted to do: purifying stem cells, cloning molecules from HSC and investigating stromal microenvironments. I honestly thought I would be there for 2 years to gain some lacking skills but I ended up staying and entering a relationship with him. One cannot deny that this was a very successful partnership. My position at Princeton was a non-tenure track that allowed me to get grants and have my own people, but I had to pay my own salary, theirs and negotiate space from Ihor. Notwithstanding, I was successful and did some excellent and groundbreaking work there.

In 2007 we decided to “shake up our lives” and moved to New York to Mount Sinai. Initially this move was very hard on me as I had ongoing mouse experiments and a grant from the New Jersey Stem Cell effort and had to leave $100K behind. As a result I ended up getting scooped on the two major stories I had been working on. After my initially slow start I was able to publish my first New York-based study in 2011 and then followed up with the next in 2014. Even before that, things really started to take off with the publication of our direct reprogramming of fibroblasts into hematopoietic progenitors paper in Cell Stem Cell 2013. A Developmental Cell and Cell paper followed these papers in 2016. My absolutely fabulous graduate student has now followed with a Blood paper in 2017. I’ve been able to obtain an NIH R01 and a New York Stem Grant to support the reprogramming efforts. Now I am finally up for promotion to full tenured professor after being a non-tenured associate professor at Mt. Sinai for almost 10 years. Quite frankly I feel that I am in the most exciting phase of my career.

How well have you been supported throughout your career?
In general I feel that I have been very supported in my career. As stated above I started working in a lab when I was 16 and had two excellent supervisors both named Paul. In fact, I gave my son Paul as a middle name to honor these men. When I worked at the Vet school my supervisor was also very supportive. So supportive that he felt free to take off for a sabbatical shortly after I arrived. Luckily a brand new post doc slipped into that role and we did amazing things. The only one I lacked support from was my first husband. When our marriage broke down after one year in school my previous supervisor was more than happy to take me back and I continued to work while I went to Vet school. At this point I had very few supporters that were women, probably due to the fact that there were few to none following my path at the Vet school.

I had initially thought that I would go to graduate school after Vet school until I interviewed for grad school. This time it was a woman who looked at me and looked at my CV and saw that I had 15 publications; she asked me if “I just liked going to school”. She also said why don’t I just pursue a post doc. This I did and I was able to secure one after a phone interview arranged through the help of a male DVM/PhD that I worked with at the Vet school. At Baylor as a post doc I interacted with both men and women, again all very supportive. Those were heady times in molecular biology and gene therapy (1987-1992)- everything was new and

exciting. I had so many good experiences and opportunities to go to national and international conferences to present my work. In fact, the women scientists that I met at ISEH meetings over those years to now have really shaped my career. For this I will be forever thankful.

In some ways I cannot discount the fact that I got myself to somewhere I wanted to be. Deciding to work with Ihor Lemischka was one of them. I thought I would be there 2 years to acquire the necessary tools and then “get a real job”. Little did I know that I was starting on yet again another journey. At Princeton I was in a non-tenure track assistant professor position (although Princeton refuses to call the position that, I was a Research Molecular Biologist) to start with, and was promoted to the equivalent of a full Professor by the time I left. When I applied for a grant I had to get the department chairman to explain to the NIH what my position was. This is the first time I felt less supported. Nevertheless, I did obtain an R01, a competitive renewal of that R01 and a NJ Stem Cell Grant. Initially at Sinai I felt supported, although I did think that I should have been appointed at least an Associate Professor with tenure. It is just now after almost 10 years that I am finally going up for tenured Professor. I was approved for promotion the first of January but it took 3 months for the Chair to put together his letter. I had the rest of my package to him right away. It will probably be summer before the whole process is done and I get promoted. I seriously doubt that the Chair would have been so slow for an eligible male candidate. It has been worse for another female candidate, 6 months. I might also mention that we two will be the first females promoted to full Professor in the department.

How has the environment improved for women in science since you started your career? How have they gotten worse?
Basically things have gotten better but we cannot stop improving. We are not there yet. The fact that we cannot elect a women president in this country says a lot.

In an article about Joan Steitz she is quoted as stating that “If a woman is a star there aren't that many problems. If she is as good as the rest of the men, it's really pretty awful. A woman is expected to be twice as good for half as much.'' Do you agree with this sentiment? If so, can you give an example of how you saw it play out. If you disagree, can you comment on how different institutions or different scientific fields might have variable gender biases.
I do agree with her totally but let’s not forget that women can hold other women back. I’ve seen this play out over petty jealousies about appearance and success in our own field. I am not going to name any names but I feel that some women (not all) treat other women badly on study sections when we should all be supporting each other.

From your interactions with female colleagues in other scientific fields, do you feel the hematology field is better or worse than others when it comes to gender equality? Can you give examples.
I think that women are quite well represented in the Hematology field. I do not have numbers

on the Department Chairs or Division Heads in Hospitals but I have observed many strong women in leadership positions in Hematology, especially at ISEH. Overall the numbers are not there and I doubt that we will ever achieve gender equality across the board. To me the biggest areas of concern are in getting women to stand up for themselves and make demands in terms of leadership positions, salary, committee appointments, etc. We need to speak out more and not exist in the background. There is an inherent gender bias that is rather insidious, men and the powers that be tend to give lip service to this, but not act.

As a successful female researcher married to a successful male in a similar field, has this impacted your career negatively at any stage of your career, and if so, how did you deal with any of the negative experiences?

The ability to separate my science from Ihor was definitely difficult. I do feel that people have probably intimated that he was the brains behind the work we first did together. We did publish together extensively and he has been a co-Investigator or co-PI on my grants and vice versa. It's only been since we have been at Sinai that I have been able to separate my work from his and publish without him. I can explicitly remember getting grant reviews that questioned my independence from him. I happen to know of several couples who work quite closely together and run joint labs- it is not uncommon. There are also some dynamic couples in hematology that may not share labs but share similar careers eg. Connie and Allen Eaves and Thalia Papayannopoulou and George Stamatoyannopoulos. Overall, I feel that I have benefited greatly from my partnership with Ihor. I am the one who chose to stay in Princeton and work with him rather than leave and establish myself somewhere else. Frankly we've been awfully good for each other in terms of our science.

Do you have any advice for the younger female researchers whose partners are also male researchers on how to balance life/home and deal with any bias that might arise, especially if they work closely together?

We all have strengths and weaknesses. The challenge is recognizing them and then building on each other's strengths. Do not dwell on the small stuff; learn to let things go. The balance thing is something you have to work on constantly and I admit readily that I do not have it figured out. Most tasks seem to be leaning in my direction. I am very good about making things easier for him. Unfortunately, the vice versa is not there, especially in our home life.

Do you have any advice for those who cannot accept that a female researcher can be the brains (or driving force) behind the research?

Just call them on it. In this day and age such discrimination should not be allowed.

Stay tuned for our next installment when we will hear the advice of Dr. Connie Eaves, a woman who can surely share the above sentiment of being outspoken and calling things like she sees them.

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