MARC Alumni Advice about their First Year in a PhD Program, *MARC Focus*, Issue #3, Fall 2017

Alumni #1

What difficulties (lab placements, lab mentor, classes, etc.) did you face during your first year in your Ph.D. program?

Regarding classes, it was difficult to transition straight from undergrad to grad classes. I probably read more papers during my first month of grad classes than in my entire undergrad. Being able to read papers fast and efficiently took some time and I had a lot more writing to do. Everything needs to be concise yet informative, so I had to practice being able to pinpoint key experiments while reading papers. Thinking of different approaches to experiments in papers and future experiments was very difficult for me since I felt I did not know enough techniques. Rotating and attending classes takes a lot of time and you need extremely good time management to stay on top of everything. I had to plan experiments in between classes and learn to read for assignments during waiting periods. Sometimes I had to leave classes/seminars early to collect time points or stop an experiment at the right time, so I missed some parts in lectures.

During one of my rotations, I had a mentor that was very hands-on and intense that would send me emails at all times of the day asking me to do something. At one point I was so stressed out, I began to avoid my mentor so I could do work in peace. While I was interested in the research, the PI made it very difficult and stressful during my rotation.

I struggled very much with imposter syndrome since all my classmates were top of the top and extremely intelligent. It did take a toll on me emotionally, and I felt I wasn't "good enough" to be in a PhD program despite being accepted and not failing my classes. Experiments failed a lot and rotations were too short to get any meaningful positive results, so I did feel bad that I wasn't a good enough scientist.

How did you deal with these challenges, what resources (university resources, family resources, etc.) if any, did you use?

I had a planner/calendar where I could schedule blocks of time for classes, experiments, homework, and fun. It's easier to see your day and not forget things when you can visualize it on a calendar. I had to learn to read papers more efficiently and understand experiments in great detail. The more you read papers, the easier it will be to read and understand. I was very fortunate to have a supportive cohort and we helped each other out through many difficulties. We had study groups for exams and talked about papers in between classes to see if we missed any key points from the paper and helped each other understand new experiments introduced that week.

Before choosing a mentor and lab for rotation, I should have talked to the students in the current lab or others who have rotated in that lab to see how the lab/mentor was. Although the lab was very intense and stressful, I tried to make the best of it and stuck it out for the duration of rotation. I talked to my program chair many times throughout that rotation to vent my frustrations and to discuss my next rotation so I did not make the same mistake again.

I realized I was not the only one thinking they weren't good enough, and talking to my fellow classmates made me realize that I am not the only one struggling and that I am good enough to

be a part of the program. My lab mates and rotation advisors encouraged me, even when my experiments failed, or when I got an unexpected result. I had to learn to accept failure and to not beat myself up over small things. Also, the department provides free/reduced tickets for students to various events (Chicago Bulls games, Hamilton tickets, Willis/Sears Tower party, etc.), which helped with meeting new people and de-stressing!

What did you do/what did you tell yourself that kept you on track to complete your PhD program?

I told myself that I was accepted into a PhD program because I am good enough, and that through hard work and determination I can and will complete my PhD program. My boyfriend and friends were integral in helping me stay positive and bringing my spirits up when I've had a bad day with research or classes. I also took time on weekends to de-stress by doing non-research related activities. I took things one day or one week at a time to not overwhelm myself and stayed organized by planning my activities for that week.

Alumni #2

What difficulties (lab placements, lab mentor, classes, etc.) did you face your first year? The classism associated with graduate school. The majority of my peers are White and come from high SES.

How did you deal with these challenges, what resources (university resources, family resources, etc.) if any, did you use?

I was pretty selective with people I formed personal relationships with within the program and built a social network with people outside of the program. My brother also moved here, which helps.

What did you do/what did you tell yourself that kept you on track to complete your PhD program?

Stay organized. I'm also fortunate to have a great mentor and lab mates who push/motivate me.

Alumni #3

What difficulties (lab placements, lab mentor, classes, etc.) did you face your first year? The first year of a Ph.D. program brings its own unique difficulties. Programs vary so everyone's experience is different. My program used a creative method to provide me with full funding. It required that I be a graduate assistant for two professors that did not necessarily fit my research interest or skillsets. I spent a lot of time trying to manage the two 10/week GA positions, my classwork and working an additional full-time job. It made it extremely difficult to focus on my own research interest and start thinking about my own dissertation proposal.

How did you deal with these challenges, what resources (university resources, family resources, etc.) if any, did you use?

I am still struggling to manage all of these responsibilities. When I return in the fall I will only be working part-time at my additional place of employment. Additionally, I will speak with the program director and let her know that each GA takes well over 10 hours a week of my time and can no longer be split between two researchers. I will use the time that I have this summer to refocus my research interest and request that I work with a professor that shares my interest and can support my dissertation research.

What did you do/what did you tell yourself that kept you on track to complete your PhD program?

I sacrificed entirely too much to attend my PhD program. I don't have the luxury of getting distracted and pray often to maintain my strength and motivation.

I had difficulties managing my mentors' personalities early on. While some were well-intentioned their advice did not generalize to my unique experiences. Others were extremely busy and did not have the patience to help me learn the skills that I needed to learn. The best thing I did was to find a mentor outside of my department to talk through issues with. She advised me to identify what I needed to be successful then find the people that could meet that need for me. She also advised me to ask my mentor's directly how they wanted me to communicate questions and setbacks to them in order avoid uncomfortable, in-person interactions. Lastly, she reminded me that I am not my mentors' priority. The reality is that they are not thinking about me when I am not there. It is my job to make it clear to them what I need and to not waste their time. I come to meetings with clear agendas and promised action items. I am on time and ask smart questions (only after doing my own initial research). I don't ask them to tell me what to do. I present options and ask for suggestions. These practices allowed me to gain favor with my mentors and improved my productivity.

Alumni #4

What difficulties (lab placements, lab mentor, classes, etc.) did you face your first year? SDSU is one of the most ideal environments for a student to grow into a scientist. The department of the university I attended for my PhD was dramatically different from the culture of the department I was in at SDSU. The course work, as with any Ph.D. program, was much more difficult. It was difficult to find study partners that I got along with as the environment was very competitive. Being away from friends and family made it very stressful and difficult to cope. Given that I was under great stress, I decided to forego a social life so that I could concentrate on my studies which ended up not being sustainable for more than a year.

How did you deal with these challenges, what resources (university resources, family resources, etc.) if any, did you use?

Hard work was the main method I used. Over time, I adjusted to the rough change and became stronger for it. Having many phone conversations with friends and family to provide reassurance was crucial to my success in adjusting.

What did you do/what did you tell yourself that kept you on track to complete your PhD program?

I told myself that if a Ph.D. was easy to attain, then everyone would have one. I knew that graduate school was going to be a very challenging environment and that if I stayed focused and did not allow myself to get discouraged then I would accomplish something that very few people on earth have accomplished.

For as great as my Ph.D. advisor was in developing me into a scientist, he did not serve as an allaround mentor. Instead, I found several mentors that mentored me in different capacities, including my SDSU mentor from my time in MARC and McNair. Getting different perspectives from several people that I admire and respect allowed me to make thorough choices and truly helped my development as a scientist. I am a strong believer that very candid and upfront conversations with your advisor/mentor early-on are key to setting very well-defined expectations on both sides. Topics such as timeline for defense, number of publications expected, etc.

Alumni #5

What difficulties (lab placements, lab mentor, classes, etc.) did you face your first year? I had difficulties with time management, grades, my mentor, and health (psychological health). Overall I think that my physiological issues affected my grades and my ability to manage my time properly. However, I do want to say that my first mentor (PI) did not make things easier for me (in fact more difficult). I withdrew from the Ph.D. program because my mindset was not in the right place to continue attending the program. In addition, the PI who I wanted to work for had no funding to take me in, so it further reinforced my decision to leave the program.

What could the MARC program have done differently to better prepare you or support you? Perhaps it would have been good for the MARC program to have had a few meetings that specifically focused on issues regarding those MARC alumni who left their Ph.D. programs. Maybe by getting more insight about their issues and experiences, I would have been able to make better decisions about the way I managed my difficulties. Well, I am not entirely sure that these meetings/sessions would have really helped. I really do think that the MARC program in general does a good job at preparing their students for graduate school.

In retrospect, what do you think you could you have done differently that may have helped you to continue on your path to completing your PhD. (classes taken at SDSU to better prepare you, untapped resources such as mentor, colleagues, etc. or anything else that could have been helpful)?

I think that seeing a psychological counselor earlier on could have helped me. At SDSU I believe I was experiencing these issues (especially during the last two semesters), but I simply did not face them on - a mistake on my part.

Even now it is not easy for me to talk about this. I am not happy about how these events turned out. I am looking into a few programs in the US and outside as well. The first step will probably be to obtain a master's degree, but I need to be mentally ready for it.

Alumni #6

My name is Alterra and I attend the University Of Maryland College Park (UMD). I am studying the environmental chemistry of microplastics and organic pollutants under the MEES program; however, my laboratory resides in the Department of Civil and Environmental Engineering.

One of my greatest difficulties was being a teaching assistant. To put it simply, it was really not fun. So my advice is to not TA. Try to find other funding or wait and find another program. Though I believe UMD to be an extreme case (legislation was passed that took bargaining rights away from graduate students about 3 years ago); it is not a unique problem. I should also mention that I did not TA for my department, receiving an assistantship within your department, or even in your field, is not always guaranteed. Wait till you gain some seniority and lecture a non-major or freshman course if you really are interested in teaching. I believe there are other ways to get teaching experience besides TAing (tutoring, giving effective presentations at conferences, etc.).

And in my opinion, TAing wasn't representative of instructing a course, i.e., you are essentially a supervisor, not a teacher.

What did I do to deal with this? Well, I wrote a letter to the dean, with the help of the graduate student government (GSG). I learned a lot about how the bureaucracy works at big, R1, research universities, but it didn't change anything (and I recommend not to write letters to administrators during your first semester, wasn't a great time). However, what I did discover was the amazing network of people at GSG where I met, my now, very close friend. My friend and her coworkers are paid to help make my university better, and so they are super loving and courageous people who understand the struggle of grad school. Most have also had "personal stuff " happen in the midst of trying to get a graduate degree. This was especially important to me because my husband contracted an autoimmune disease shortly before my first semester and my friend supported me through that. I probably would not have gotten through it without her. Also, I cannot forget, my fellow TAs. Though we only occasionally text each other now, we formed an unforgettable fellowship. Your peer TAs (and lab members!) are the only ones who truly understand what it means to teach that class, take a full load of classes, and do research all at the same time. They are the people you can bitch and moan at and they'll gladly listen, and you'll listen too.

The next biggest challenge was my advisors class during my first semester. It. Was. HARD. Like really hard, man. Due to me teaching full time, I was hardly around the lab and didn't talk much to anyone from my lab or my department. It wasn't until things got really bad that I finally reached out. For 2 months I thought that I was stupid, wouldn't pass, and had to be the only one struggling this much... nope. Everyone was up to **here** with that class, and it turns out I was actually doing pretty well in comparison; so don't alienate yourself. Reach out to anyone and everyone. As scientists we tend to get caught up in our heads and for some reason we aren't taught to reach out, aka, 'Figure it out on your own, kid!" (a teacher even scoffed once at my learning something in Excel with a YouTube tutorial). Well, that gives you character for sure, but why suffer if you don't have to? Grad school is hard enough. So even if it's embarrassing, mass email the whole class and say "OMG THAT QUIZ, how was that y'all?!" I bet you'll get responses like "I'm crying," "I ate 10 cupcakes," "Who is still passing and could you tell me your secret ways?" It turns out you are actually just as smart as everyone else and professors just like to throw the hardest stuff at you they can and then they curve the class. We all got A's and B's at the end, but for 2 months I suffered; don't do that to yourself. Create a fellowship with the people in your classes regardless of their research; grad school is grad school.

On a similar note, please be open with your advisor. I especially picked one that is very open, honest, respects the work-life balance (yeah, she *is* European), and is genuinely a loving person. I encourage you to make that as much a priority when picking an advisor as their research interests. I would have quit if she wasn't all those things. When I thought I was failing her class she told me, in short, that I'm smart and capable, I question myself too much, and she knows I can do it. When my husband got sick and I was on the verge of cracking from teaching, she gave me extensions on projects, and told me to relax and feel better; don't keep things to yourself (P.S. you can do this with all of your teachers as well if something crazy is happening in your life, I did). Getting a PhD can be thought of as a short-term marriage: nothing but honest, frequent

communication is going to prevent that "hay cart" from actually flying off the hill (though it will feel like it sometimes). They are your MENTORS. Treat them like it.

PLEASE establish **boundaries**. Here are some examples of boundaries: don't answer emails past 7pm, don't answer emails until you leave the house (for heaven's **do** not wake up, turn off your alarm, and then check your email), and learn to say no if you really don't have time! Additionally, and this isn't a suggestion, turn off all of your notifications for your email and your calendar on your phone, *permanently*. Instead, make a habit to check them at certain times during the day when you are good and ready...like after you've had breakfast. Each little beep, each thing that you read, can cause little bits of anxiety that build up; they take up mental space and energy and it just isn't necessary. If you start to feel like you want to punch a wall, or you need to drink an entire bottle of vodka, or may be run outside naked and scream, you might be burnt out and need a weekend off, and you better take it! The world isn't going to explode if you don't work for two days. To keep your sanity, take at least 6 hours off each week where you hide your laptop and your phone and pretend not to be in school. I know that may seem silly, but it's really easy to always be working with your email always accessible. And yes, you have a lot of work, but I'm here to tell you that you'll be more productive and produce better work if you are well rested and give yourself mental breaks (and you'll spend more time actually working than browsing cat pictures). If you don't, at the end of the semester you'll not leave the house or shower for a week because getting off the couch is too much work and you'd rather be disgusting than use more brain cells than you have to (from personal experience, gross, I know, but boundaries are really that important).

You're finally a PhD student and it feels all professional, high, and exciting. It is also your first year in a new place, with new people, away from everyone you know and you are doing A LOT of new things. So, let's be a little selfish (human?) and focus on #1 during the first year. Don't volunteer and don't go to conferences; just focus on your course work and may be a little bit of research. Concentrate on just settling in and figuring out what it means for you to be here: find your cafes, gyms, yoga studios, running trails, bars, grocery stores, and etc. Find what makes this new place *your home.* Then, during your second year, you can go back to seriously kicking ass, but first let's take care of you, ok?

TLDR: make lots of friends, always ask for help, establish boundaries, and take time for yourself.

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