Stories of a Non-traditional Career Path

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Gabriel

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Growing up, science always had a place at the table; my dad made a habit of interjecting notes about science into our dinnertime conversations. My dad had a small scientific library, in my early teens I loved to explore them and see how far I could read before I was completely confused. Included in this collection was, “the Molecular Biology of the Gene”, by James D. Watson, 1965, first edition. Amazingly, I was able to understand it and, by the time it was required-reading for my undergraduate eukaryotic molecular biology class, I was also amazed at how much it had changed. In high school I continued studying biology, but I also discovered bread baking and began formulating a plan to go to culinary school. This did not sit well with my traditional immigrant parents, who feared it would be a hard life without financial success—so I agreed to their plan and went to college to study biology.

April

I went to a University straight out of high school and graduated with a bachelor’s degree after four years. Today, I am twenty-eight and only in my second year of a Ph.D. program. In the four years between my bachelor’s degree and the start of my Ph.D. program, I did not attempt a graduate degree and participated in academia as minimally as possible. I spent the majority of my time working a variety of odd jobs (i.e., “working-the-grind”) and in my off time, trying to have fun. The time I took “between degrees” was a necessary part of my need to grow and mature before I made the commitment to graduate school.

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I started college in 2008, during the midst of the financial crisis and just prior to the Obama era. Because of a full academic scholarship and the insistence of my traditional Filipino parents, I didn’t have to work while pursing my degree, a privilege that was not the reality for many of my classmates. While I excelled as an undergraduate and was able to volunteer my time to a research lab, by the time of my graduation in 2012, I had no paid work experience outside of the academic world. To compound that, while I had a general inclination towards the biological sciences, health, and teaching, I wasn’t set on a career trajectory.

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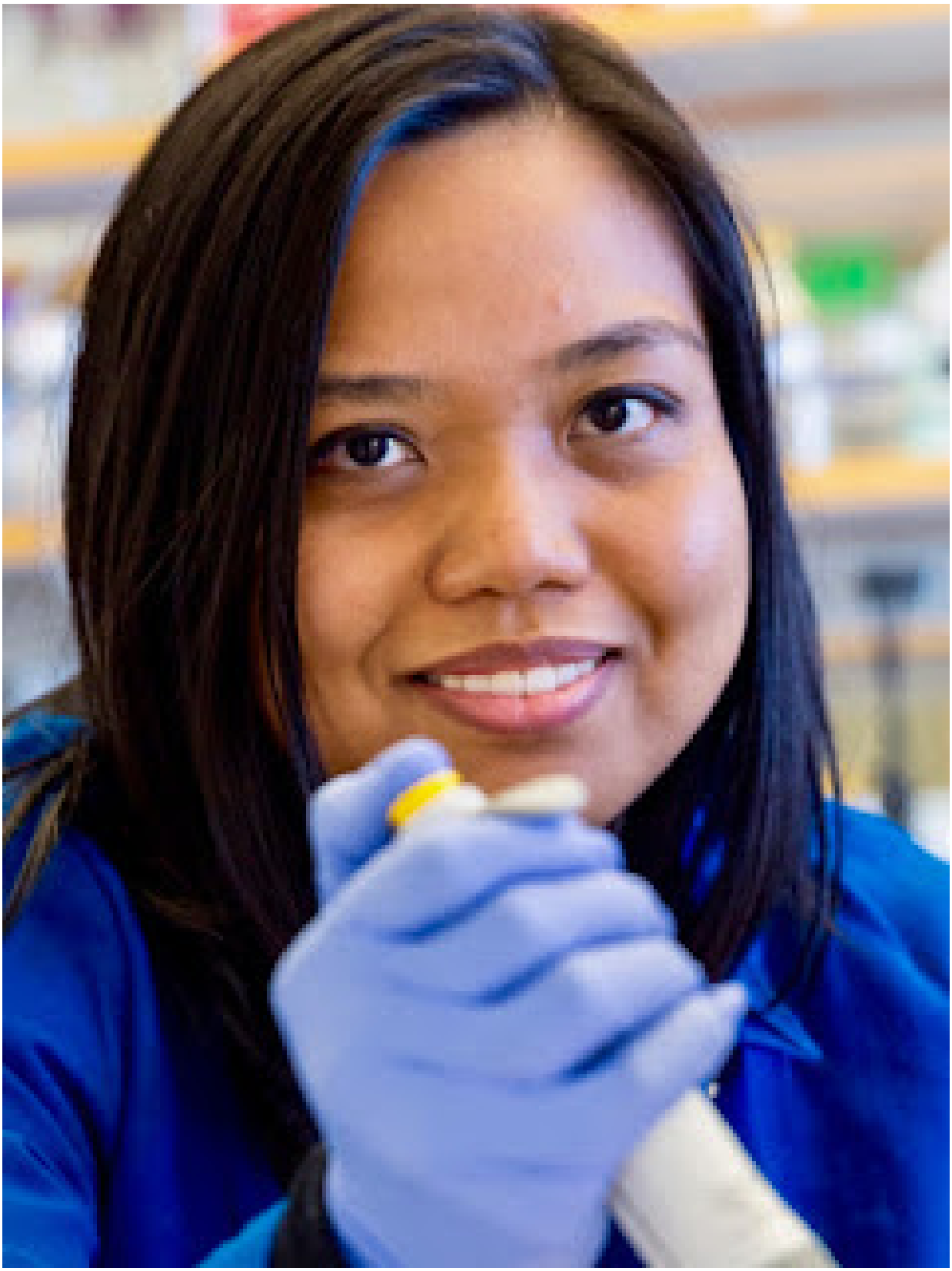
http://faculty.ucmerced.edu/abeaudin/



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Not everyone's career path is traditional. Gabriel Leung and April Apostol are "more seasoned" graduate students in the Quantitative and Systems Biology program at the University of California, Merced. Here, they share their atypical trajectories to graduate school, and why they think embarking on a PhD a bit later in life better prepared them for the road ahead.

I mostly excelled, but never pushed myself. I pursued research opportunities but was never really invested in them. At the end I half-heartedly started the process of applying to graduate school. Then, I came upon a quote from the Bible, “There is nothing better for a person than that he should eat and drink and find enjoyment in his toil.” Emboldened by this quote I traded grad school for culinary school. And it was in the kitchen that I grew up. I learned efficiency, discipline, and perseverance in pursuit of technical skills. I learned to troubleshoot, think through problems, and also to train others. The precise measurements and calculations imperative for using sourdough starters (essentially a yeast and bacterial co-culture) reminded me of my yeast genetics research experience. I spent seven years in the baking industry, worked in four different kitchens, played five different roles as a part of bread bakeries, pastry shops, hotel culinary staff, and cafes. My technical skills were specific to preparing food, the overall professional development that I underwent prepared me to work in any field.

At the end of seven years in the kitchen, I began to think ahead to the future, of my aging parents and what my family might need in the next ten years. And I could not see that my culinary career could provide for them, so I began to consider returning to science. I talked with friends and acquaintances in academia and biotech, and ultimately decided to charge forward to prepare for graduate school by taking the GRE, reconnecting with academic mentors, and researching graduate programs in the biomedical sciences. But it wasn’t a totally foreign transition, I had always seen myself having been doing science, but now was shifting my research interest from bread to immunology. Surprisingly, this was received well in my application to the University of California Merced. It was this perspective that showed through in my personal statement to the University of California Merced, and in my interviews here, where I spoke at length with a faculty member about my experiments to define the function of individual ingredients in the ubiquitously enjoyed chocolate chip cookie. Even in the kitchen, I never let go of my scientific background, and the discipline of the kitchen now works to support me as I study developmental pathways in the immune system.

After graduation, I had to start supporting myself financially. Because of the state of the job market and my lack of prior work experience, I did what many new grads did at the time and worked retail. Working for minimum wage meant working full time to pay my rent, so I took a break from research as I hadn’t quite learned how to balance the demands of work and lab commitments without, quite frankly, going crazy. During this time, I was also sending out job

applications left and right. My perseverance paid off and I eventually found work in medical administration, a well-paying (to this date, the most money I've ever made) and much-needed reprieve from the customer service industry. This transition allowed me to find structure, a work/life balance, and importantly, some semblance of financial stability. It was only then that I felt confident enough to pursue my interests in education and science.

After two years of working and (kind of) saving money, I was able to move cities to pursue a summer teaching position. I also began an unpaid internship in an analytical chemistry-based laboratory. At the end of my teaching position, I began working odd jobs to support myself, echoing my earlier experiences as a recent graduate a few years prior. But now, with more maturity and experience, instead of feeling stressed out and uninspired, I thrived off of the challenges that came with balancing my internship and multiple jobs. Thankfully, this all paid off when I was hired as a full-time laboratory technician. After two years of tech work, I learned how to manage my time effectively, prioritize tasks, and, most importantly, learn from my mistakes. I also knew that the receptiveness and lack of novelty of the lab tech life wasn't my end-goal, and it was then that I finally felt ready to go back to school. Today, I'm a more prepared and flexible researcher because of my atypical career path. Going into grad school a little later in life has given me a chance to live, learn, and acquire some outrageous stories. I also don't feel like I'm missing out on anything (except sleep) when I'm practically living in the lab.