



UNIVERSITY OF CALIFORNIA, SANTA BARBARA

College of Letters & Science

UCSB

Alumni Spotlight

This month's Spotlight features Gabriel, a former Molecular, Cellular, and Developmental Biology major and Art History minor who now designs cutting-edge technologies to improve patient care.



**Gabriel Martinez-Santibañez:
User-Centered Design Research Fellow
Harvard Medical School**

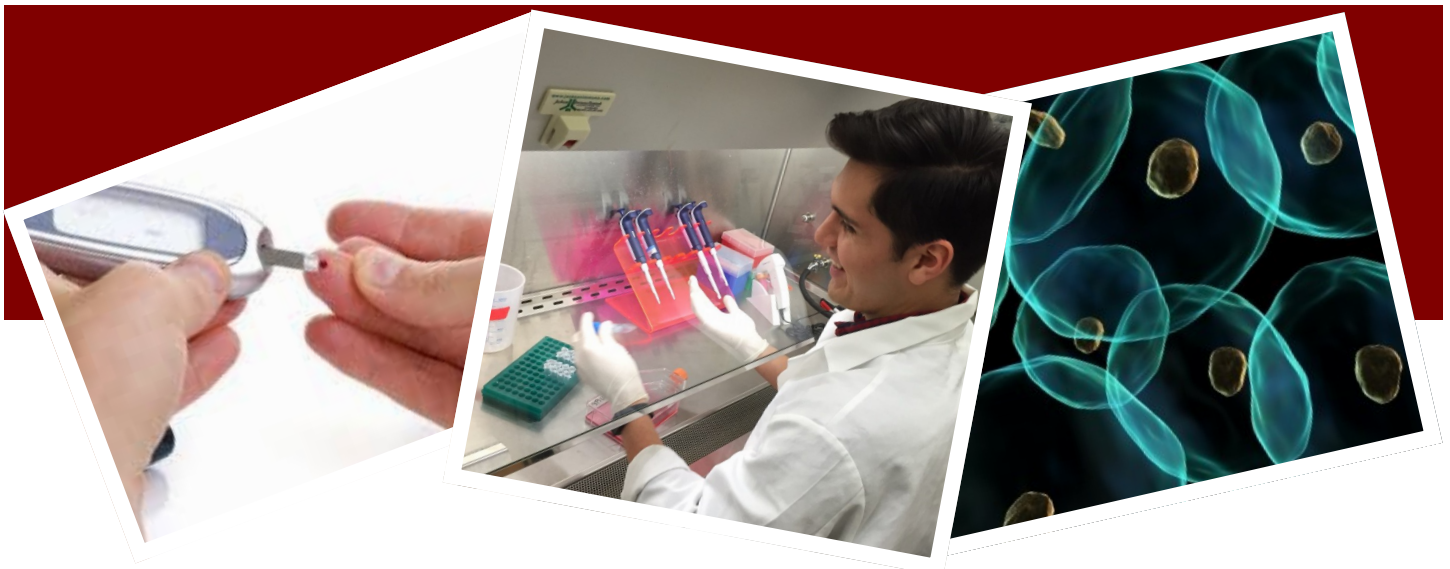
What are you up to now, post-graduation?

I work at the intersection of health and tech. My job is to research where the pain points are in communication and comprehension within the health care system and design technological solutions. My job includes a lot of talking to people—clinicians, nurses, chronically ill patients—asking tons of questions. What's the most frustrating part of a nurse's job and how do we make it better? On the patient side, what information do they not understand? If you're having issues with pain, what are your needs? We take the information we gather and develop tech—smart phone apps, wearable fitness trackers, blood pressure and sugar monitors that upload to a cloud for doctors to monitor remotely.

There's also research needed from the other side. Pharmacology companies will approach us with new medications, needing apps for patients to keep track of symptoms or dosage. Medical device companies bring me new products and I research how it might be integrated.

What I do now is way more rewarding than grad school was. In grad school, I was always in a dark room by myself, crunching numbers. But now, I spend my days interacting directly with the people I'm helping. I take their frustrations and confusion and translate it into pilots that scale up to the entire country. The human side to my career is what drives me and makes me feel like I'm doing something meaningful.

“As a first generation student, Imposter Syndrome hit me hard in college... like I didn't belong and that at any time, someone would realize it.”



How did you get to where you are?

At UCSB, I majored in Molecular, Cellular, and Developmental Biology, and did a Minor in Art History to balance out my, as they say, left and right brain. I did a lot of things while I was at UCSB, but the only constant was SCIENCE. It was when I was doing research during my junior year abroad in England and Ireland (yes, I studied abroad as a science major) that I realized that grad school was an option for me. I took two years to gain practical experience before applying, working at a biotech company and then as a lab manager to build on my lab experience. By the time I was ready to apply, I had experience in genetics, chemical engineering, bioengineering, and cancer research. I became interested in physiology, specifically the structure and function of bone, muscle, and fat. Obesity and Diabetes are two huge areas of research; there was so much media reporting that the obesity epidemic was at an all-time high. I wanted to learn

more about it at a molecular level, so when I applied to grad school, I looked for labs that studied that problem. Back then, I wasn't sure what I would do with the scientific training, and that was completely okay. Not many do.

During my PhD, I got the desire to feel more useful than I felt in the lab. So I took classes in business and entrepreneurship. I got addicted to the idea of health care tech innovations. I read blogs and books, went to conferences, talked with a group of like-minded folks about digital health and where it could go. By the time I graduated, I was ready for project management positions—that's what grad school is, managing projects—but I could also talk extensively and in an informed way about digital health. All that development outside the classroom not only helped me figure out where to go with my career, but demonstrated a dedication and passion for the field that made

me a perfect fit for my current position.

What was the best thing you did as an undergrad to help you get to where you are?

For me, it was the realization that I was in charge of my own life, and that I was learning in order to benefit myself, not to impress anyone, or fulfill an expectation. As a first generation student, Imposter Syndrome hit me hard in college—that is, I felt like I didn't belong and that at any moment, someone would realize it. My friends would have nervous breakdowns at the thought of their parents seeing a "B" on their report cards. My parents? Mine didn't say much. In fact, I didn't get much encouragement at all. What I did feel was a little bit ignored. So I always thought that I didn't belong and that everyone else was smarter than me because they had to reach a certain goal, a goal I didn't have.

“There is a sense of creative energy on campus that is hard to miss.”



“Once I had a clear goal, I reapplied and was accepted to all the [graduate] schools I applied to.”

It took me many years to realize this, but their lack of direction in my education wasn't because they didn't care, it was because they didn't understand. Neither of them had the luxury of an education beyond elementary school. My parents had never heard of a GPA, the SATs, or the GREs. How were they supposed to hold me to a certain standard if they themselves had no idea what the standards were? What they did encourage, though, was independence and emotional intelligence. In a way, them being hands off allowed me the time to evaluate my own skills and hold myself to my own standards. That is what carried me to where I am and I'm confident it has set me up to do great things in the future.

Because I wasn't trapped by expectations, I decided to look at undergrad as the ultimate opportunity to learn about everything, and this was the best thing I did for myself at UCSB. I took a ridiculous amount of classes in and out of my department because everything was just so interesting to me. Sure, my GPA suffered a bit because of my course load, but for me, learning was more valuable than a simple GPA on a piece of paper. All

in all, I've tried a lot of things, I've had many successes and many things not turn out all that great, but I got to where I am supposed to be.

What do you wish you had known while you were in undergrad?

That grad school is not a goal. It's another skill training program. You do your grad program, time passes, and then you still have to get a job. So you need to ask yourself, do you have a real reason to go or are you just delaying figuring out a career? Are you just trying to prove something? You need to think about where a grad program's leading you, or you're going to end up just as confused, but with a lot more debt.

I also wish I'd understood how important it is to develop yourself outside the classroom. Education is a tool, but only with experience do you know, and demonstrate to others, how you're going to apply that education. The skills, the project management and research, I learned in grad school. But the content, the digital health side? I went out and learned that myself. You have to think big picture and get creative on bridging gaps.

Lastly, thinking back, I realize how much it would have helped to ask myself what my values were and to make sure I was pursuing something that aligned with those. It's so important to feel proud of what you work on. I didn't feel that pride in grad school and was miserable. I'm happy now because I shifted toward innovation, design, and getting to work with people.

This was at one point embarrassing to admit, but I didn't get into grad school the first time I applied and I now know why. I had no direction or purpose and it was very apparent



“Shake it up. Stay curious.”



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If an alum's story is meaningful to you, consider reaching out with questions using the contact information provided.

in my applications. I had a lot of experience; but there was no mention of what my goal was, or why I needed a PhD. Taking the two years off school allowed me to find reasons why I needed five more years of education and rigorous training. Once I had a clear goal, I reapplied and was accepted to all the schools I applied to.

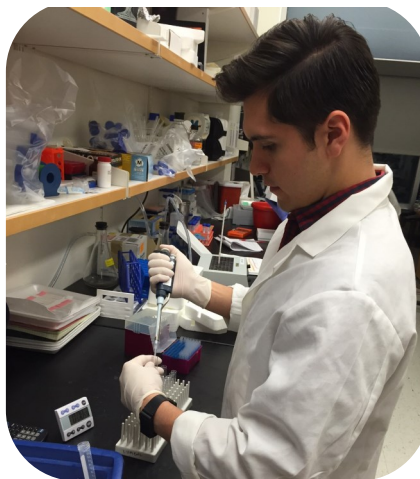
What was the best thing about being a Gaucho?

UCSB pumps out *world class* engineers, entrepreneurs, musicians, actors, artists, and everything in between. There is a sense of creative energy on campus that is hard to miss. Who knows, the person sitting next to you in class might become the next Steve Jobs (so you should probably make small talk with the stranger next to you, just in case).

Any final words of wisdom for the current Gaucho generation?

In undergrad, my Art History minor was considered a waste of time. The science side of me kept asking why I was spending my energy on such a non-practical field. But I loved it. Now I get that I was drawn to it because I had an eye for creativity and design, which is what I do now. I think of graphic design as architecture and I apply those skills every day.

So please, take classes outside of your major and don't let other people tell you what you should or shouldn't be doing with your time. Take classes in business, art, global studies, anything you might find interesting. If there is ever a time you're not feeling motivated or don't want to go to class, it is because you're taking the wrong classes. Shake it up. Stay curious.



Gabriel welcomes UCSB students to contact him with questions about the digital health field and for mentorship on how to use your time at UCSB to become competitive in the field. Requests to look over student resumes or inquiries about open positions will not be responded to.

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