

College of Letters & Science

Alumni Spotlight

This month's Spotlight features Kelsey, a former Biochemistry major who works in vineyards around the world, using science to produce better wines.



What are you up to now, post-graduation?

I'm currently working at two different wineries and making my own wine. As an enologist, my biggest responsibility is monitoring the fermentations. I've monitored as few as 30 and as many as 150 fermentations (in up to 200,000 liter tanks) during a harvest. I monitor the sugar levels, which tells me where the yeast are in their development—they eat sugar and produce alcohol. I measure temperature, looking for spikes, which might mean the yeast are growing too fast and could throw off the taste of the wine. The other tool I use that's totally invaluable as a winemaker is my sense of smell and taste. Tasting fermenting wine isn't as glamorous as it maybe sounds, but we taste through a lot every day. As you gain experience, the fermentation smells and tastes give you clues as to how the wine is doing.



One of the most important decisions we make is when to pick the grapes. So winemakers are often out in the vineyard sampling grapes, then running them through the winemaking process as if we were doing a real run. I destem, crush, and press them, measure the acid, the pH, the sugar in the juice. We taste it, smell it, and talk about it. Do we pick this tomorrow? Should we let it hang a little longer? We take it all in to try to make the right decision.

Having a finished product that you've put your blood, sweat, and tears into that you can enjoy with other people is the ultimate reward. But I think my favorite part is that there are limitless variables with every fermentation. It's always changing and always challenging.

"It's your life, your mind, your education—get out of it what you want to get out of it."



How did you get to where you are?

I came into UCSB as a transfer and majored in Biochemistry. At first I thought I wanted to go to med school, but decided, nah, that's not for me. I took a job offer to work in biotech down at the Scripps Institute in La Jolla with a UCSB alum doing mass spectrometry research. If you're studying science at UCSB, a research university, and you've spent a lot of time in labs, biotech seems like a natural step. Plus I figured money sounds good, right? Pay off my student loans. Buy a new car. But being in a small space doing repetitive tasks wasn't working for me. I loved the science part, but also realized that to be doing the designing and more stimulating part of the work I would need a PhD and wasn't interested in spending that much more time in school.

So I got my teaching credential and spent five years teaching high school Chemistry. I really do enjoy

that. But in high school, if you're a teacher, you're at the top of where you're going to be unless you're interested in admin, which I wasn't. I asked myself, could I do this for 25 more years? Do I want to come to this same school and open this same door? Does it sound like a bad life? And part of me said, no, that sounds fine. But there was another part of me that always wanted to...get myself out there a little bit more. Use my degree and challenge myself. So I decided now or never. If I don't do this now, I will get too comfortable in my job and not want to leave.

I dove 100% into winemaking. I did five harvests in a year and a half. After I worked harvest in 2014 here in California, I went to South Africa and New Zealand to work harvests there. South Africa was an extreme cultural experience for me. I lived on the vineyard with all the ranch staff and my friend, who's the winemaker there. There was just the two of us, some interns, and some ranch hands. We harvested 90 tons of

grapes and processed them with almost no equipment. In a regular winery, you have pumps and forklifts, etc. For comparison, in New Zealand, we processed 27,000 tons, the winery operating twentyfour hours a day, with big trucks and huge presses and hoppers. Where we were in Africa, we didn't have any of that. We were bare bones. Everything was gravity fed. But this place produced wines that were getting ratings in the 90s, which is like getting an A+ on a paper. The whole experience was outrageous. At the risk of sounding cheesy, it gave me a better appreciation for humanity.

There are ultimately great earning opportunities in this industry, but at the beginning, you won't be making much. The drought is taking a toll on the wineries and you may get a call saying there's no work for you that month and you have to scramble to find somewhere to go. So you really have to love it. I had to be willing to take a

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pay cut and cross my fingers that I could find a permanent position.
Thankfully, just before this article's posting, I did became a full time enologist at the Fess Parker Winery and Vineyard. For all the uncertainty, it's been an incredibly rich experience.

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

Internships. That's actually the reason I went to UCSB. During community college, I was able to get a lab internship at UCSB. It really just changed my whole perspective. I fell in love with Santa Barbara, with the school and just the vibe, people are happy and it's academic and beautiful. That first lab experience drew me to continuing research throughout my time at UCSB. One was with a professor who had a grant, the other two were through UCSB RISE, in the Materials Lab, and UCSB INSET. I even took one of my projects to a national science conference in Denver. Those experiences put real problems in front of me that needed solving. Obviously, that was important for biotech, but being able to problem-solve on my feet has been an asset in all of my jobs.

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

Unless you're really exposed to the wine industry when you're young, it's hard to know that it's something you want to do before you can even taste wine legally. I didn't even get into wine until I was able to drink and I graduated from UCSB when I was 21. I wish I would have had a better idea that this was something I wanted to do. I would definitely be further along. But I'm playing catchup. I did the winemaking certificate through UC Davis—that's five upper division science classes that span everything from viticulture to production to sensory analysis of wines. It wouldn't be enough without practical experience, but it's definitely helping me a lot. That would have been something I would have loved to have known was available to me a long time ago.

As of last year, students in winemaking classes who are under the age of 21 in California are permitted to taste wine as long as they spit it out. So it's possible if you take a summer or a quarter to spend at one of the schools that does it. The difficult part is that a

student interested in this would need to work the harvest, which is usually from August through the end of October, which encroaches on fall quarter. I'm actually working with a UCSB student right now. You need to take a heavier load in other quarters or go to summer school to make it work, but if it's interesting to you, getting a head start in undergrad is worth it.



"...my outlook is: don't be afraid to change your mind."



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www.facebook.com/ AskJoeGaucho

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

What was the best thing about being a Gaucho?

When I was looking at colleges to transfer into, I just felt how welcoming UCSB was to transfers. It felt like I was going to integrate right into the community. I lived in transfer student housing—other schools didn't offer that. They were like, you can live in the dorms...with all the freshmen. I was an incoming junior, I didn't really want to be living with freshmen.

I think UCSB is the ultimate college experience. The social environment and research opportunities are fantastic. We used to take our books to the beach and do our homework. I'm outdoorsy, so having the mountains and the oceans...I couldn't have asked for anything more. I actually work with a ton of UCSB alumni. The owner of one of the wineries I worked at was a UCSB alum and does a Sauvignon Blanc that's an

Alumni Association label.

Any final words of wisdom for the current Gaucho generation?

Obviously, I've turned my life completely upside down more than once, so my outlook is: don't be afraid to change your mind. And if you're gonna do something new, go all in. It's never too late. Don't keep doing something just because you feel stuck.

Most of all, do what makes you happy. The UCSB degree can get you all kinds of things. You don't have to follow the most obvious path. I get to use my degree in all sorts of different ways and I'm creating something I'm proud of. What you end up doing might not be what you thought you were going to do, but it may be the thing you find you want to do, ultimately in the end. It's your life, your mind, your education—get out of it what you want to get out of it.



Kelsey welcomes UCSB students to contact her via email for mentorship and with questions about winemaking. Inquiries about open positions will not be responded to.

Kelsey recommends Margerum Santa Barbara County Grenache (Red) and Tablas Creek Esprit de Blancs (White).

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