

URL: <https://stvp.stanford.edu/clips/the-genesis-of-a-startup>

You don't have to be pursuing entrepreneurship to find yourself founding a company. Verge Genomics founder and CEO Alice Zhang describes how she moved from an academic discovery to founding a startup. She discusses the importance of learning how to communicate scientific findings with simple, accessible language.



## Transcript

- So right now in even the first phase of drug discovery, it takes about five years and over a quarter billion dollars to even just screen through drugs and find drugs that work.. And this is because a lot of pharma companies are paying for failures.. So oftentimes they're brute force screening tens to hundreds of thousands of compounds just to identify one that works in the lab.. And I thought, "There must be a better way to do this." And so, back in grad school, I started coding up some of the first algorithms to find new drugs for nerve regeneration.. So spinal cord injury, nerve injury.. And quite shockingly, the very first drug that was predicted by the algorithm when we put it into mice with crushed nerves, helped them recover function of their nerves much faster than even the leading standard.. And this was just the first drug we tested.. And so when compared to kinda the current pharma success rate, I thought, "Wow, this is really a compelling finding." But, when I was writing it up for publication, just writing up a manuscript, I kinda thought, like, "Do I want to just publish this "and let it sit on a bookshelf somewhere? "Or what is the best path to actually "getting this product to patients?" And I realized that really, if I wasn't going to be the one to push it up, there'd be very few other people that would be as qualified to really advance this to commercialization.. And I think the second thing that was happening for me at the time was I went into this PhD with a really big hopes that I could make a discovery that would impact billions, but what I realized was the kind of realities of day-to-day academia were very much still focused on publications first and not so much on direct patient translation.. So in many ways, it's ironic because the actual reason I went into the MBA PhD ended up being also the reason I left, which was I found that starting a startup was the most direct fulfillment of creating patient impact as quickly as possible..

This is also another reason I ended up leaving my program, which was we got into Y Combinator.. I actually learned about Y Combinator through two Google searches.. The first was what is an incubator, and then the second one was what is the best incubator in the world.. And this was the first thing, so I clicked on it, and I realized that the applications were due in about a week, so my co-founder and I went and we like, spent a week writing up this application.. And the day before it was due, I gave it to a friend that had started a startup, and he just tells me, "Alice, you're gonna need "to forget everything they taught you in grad school.. "And write this like you would write it for your mom, "so your mom could understand." And now this is another light bulb moment for me, which was like, they taught me all this specific way to write and the specific jargon in grad school, like, I had to unlearn, but that was also a huge blessing for me, and just entrepreneurship, which is the first step is actually learning how to communicate your idea in a way that's as simple as possible and figure out what people you're talking to care about and communicate it to why they should actually care about your idea.. So I ended up scrapping it and pulling an all-nighter rewriting it, actually thinking that my mom was gonna read it.. And we got in...