

URL: <https://stvp.stanford.edu/clips/a-process-for-innovation>

Margo Georgiadis, CEO-partner of Flagship Pioneering and co-founder and CEO of Montai Health, explains Flagship's institutional process for creating successful deep-tech companies and the culture they've built to make the process possible.



## Transcript

- Everything we do starts with a very simple leap of faith.. 00:00:07,500 What if the world could be dramatically different, fundamentally, at a science level, in this area? So as Ravi said, my company is focused on something that if you're in life sciences, you know, is hard to say.. How do we actually make small molecules predictable to develop? Right now they have a 7% chance of success, on average, in the clinic.. But what if we could think differently, using AI and more human-qualified chemistry, to unlock the beauty and the molecules that nature has already generated, and use AI to match them into our pathways and make it much more efficient and predictable to make drugs that are more tolerable for chronic consumption.. It's a hairy audacious idea.. And then we have to break it down into its principles and pursue it.. And we call that emergent discovery.. We start really with an evolutionary process of the principles, that it would underlie an idea.. We generate different hypotheses for how you would actually prove that that's possible.. And then we whittle it down..

And only the best ideas survive.. And then as we build that platform, we reverse plan what is the story of the future, and we back it up and we build it systematically.. And we've made this entrepreneurship into an institution.. In fact, I was first introduced to Flagship Pioneering when I was at Google, because Google X was actually founded on the fundamental principles that Noubar had created at Flagship.. How do you start with big what-if questions? How do you create explorations where you can systematically understand the pillars of an idea? How do you take those surviving ideas through the process of evolution and experts, use those to create ProtoCos? And then as you continue with very tight resources to evaluate your ability to succeed.. And it's really interesting, we actually don't give a company even a name until it becomes a NewCo.. 'Cause we don't wanna fall in love with it.. It's just a number.. Because it's about proving what's possible in the fundamentals.. It can't have any emotion in it..

It has to be about facts and data.. And then when we get a NewCo, then we actually bring in a more seasoned management team to step on the gas and really scale that into a company.. And then it spins out and becomes a GrowthCo.. And to do that, we've really built a culture that enables this to be possible.. It's based on four pillars, being hyper-adaptive.. So how do we have this immigrant mindset where we're going to these new places? We are paranoid optimists that this idea is possible, and we are attacking it just relentlessly in terms of proving at a fundamental level and innovating to prove that.. But then we are continuously learning in parallel.. So we often pursue the idea in three or four ways at the same time to make sure that there is an alternative hypothesis that could work equally as well.. And then what we do is we actually grind that idea into a true

platform that has scalability.. And again, we're testing all those elements..

And this is what's enabled us to do this 100 times.. So we've created a hundred different companies; 30% of them has gone public, as Ravi said.. Probably the most famous that you guys all know is Moderna, but there's probably many other companies on this page that you've heard of.. All of them were based on fundamental science that was created in Flagship Pioneering, innovative teams that came at these problems and put together diverse scientists and people from all different backgrounds to make them possible.. So that is kind of the foundation, and hopefully that's a helpful set of frameworks as you think about your pioneering journey...