

URL: <https://stvp.stanford.edu/clips/reimagining-and-funding-better-treatments>

Margo Georgiadis, CEO-partner of Flagship Pioneering and co-founder and CEO of Montai Health, explains how amassing knowledge about the chemistry of the human body can lead to better treatments. Getting investors to fund those innovations, she says, requires reducing some risk by showing them proof that an idea can work.



Transcript

Interviewer What would be a competitive advantage 00:00:08,880 that can help a company clear out uncertainty in this field? - Yeah, it's really interesting.. 00:00:13,110 There's so many different ways it can be applied.. There is a lot of work going on right now to begin to solve these problems.. There's everything from digital twins in clinical trials, so that we make it easier to do trials.. There's stuff as we're doing on the front end, to try to discover or optimize molecules more efficiently.. There's many, many different applications.. I think if you're really interested in the space, it's thinking about what areas you really have passion for.. And I think there's many applications of AI that are really just, in my mind, automating what we do today and making it more efficient.. What we really need is to do things that enable us to reimagine.. What if we can combine two or three different things, like we're doing the chemistry, with the AI and understanding of pathways to fundamentally....

And going back to my hairy, hairy, audacious goal, is that if we can amass the world's largest understanding, now, you can see my Google coming in, of all this chemistry that's been in the human body and all these pathways and how all those things connect, In 10 or 15 years, we could actually build the knowledge to take your detailed RNAC data, know exactly what's wrong with you.. Because what I find really crazy, having gone through this in my own family, is treating people as trial and error.. You go to the doctor and they're like, "Well, if I look at your symptoms, I think this is what you have," especially in a lot of these chronic diseases.. "Try this, if it doesn't work, they called steps, you try that." If that doesn't work, they give you something else.. And you go through this.... That's crazy.. We should be able to take your detailed RNAC and say, "What's exactly wrong with you and what is it most likely to get to that outcome, not have to go through all those steps." But unless we amass this knowledge, we have no chance of getting there.. And so we have to think about, but if I went around to investors and said I was doing that, they'd think I was crazy.. It's like if we'd said YouTube was gonna replace linear or television, we said it inside Google, we did not say it outside Google.. - And that's exactly, I love this..

00:02:10,710 And so if you have that vision, which is a beautiful vision of how healthcare really should occur, and how do you solve the chicken and egg problem with funding? So if you go to VCs and you have a big heavy audacious goal, they're gonna ask you to come up with more validation points before they're gonna fund, but you need the funding to get the validation points.. If you're not in flagship pioneer and you don't have \$3.4 billion of capital to use, how do you overcome that chicken and egg? - Yeah, so I mean, as I said, 00:02:41,040 I am benefited by the fact that I have a benevolent, long only lead investor.. So Flagship will lead every round, they're still the largest investor in Moderna after what, 15 years.. So that is a

stability crater when you're trying to do something really audacious.. But it's not that they aren't other people that are equally audacious in their thinking, but we still have to raise money from outsiders by the time we get to our B round.. And by then we have to.... And that's one of the reasons if I have clinically validated targets, and literally every one of my targets is on the hot list for every pharma company.. So if an investor looks at that, they say, "Oh," and then I can show comparables that any of those could easily be sold for 4 billion a piece.. So I got nine of these moving.. You're taking a bet if I can't make....

If you believe in what fundamentally I'm doing, you got nine shots on goal and any of those would be a worth a billion dollars, would you like to gimme a little capital? And you've shown enough proof on the way that you can actually enable that to occur.. So you do.. That's why I said you have to take some risk off the table.. If I said, "Oh, I'm exploring pathways and I'm finding these new innovative ways to treat drugs and I'm doing all this new chemistry and do it..." They'd be like, "Come back.. Come back when you figured out a couple of these." And so there's a lot of good ideas that don't work just because there's so many things that have to go right that they run outta money before they can prove that...