WEBVTT

A Decade of Innovation: How NCATS Is Impacting Translational Science through Small Business Growth

December 8, 2021

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00:00:40.200 --> 00:00:50.130

Monique LaRocque: Okay we're at the two o'clock hour. Just wanted to make sure everyone is back and ready about to go live make sure you get your last drink of water. If you're not speaking turn your mute off.

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00:00:53.580 --> 00:00:54.090

Great.

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00:00:55.470 --> 00:01:00.900

Monique LaRocque: Thank you everyone. The webinar will begin shortly. I'm going to move to record.

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00:01:03.750 --> 00:01:11.880

Monique LaRocque: If you have questions or comments, please share your questions in the chat window on the right side of your screen and the questions will be viewed in the Q and A period.

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00:01:12.270 --> 00:01:20.460

Monique LaRocque: This is going to be a slightly modified session. We're going to have this more as a panel so you're here an interactive discussion with our experts here today.

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Monique LaRocque: I did want to note that we're offering closed captioning and zoom technical support.

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Monique LaRocque: And we really want to know what you have to say about what you want to see in the future, so please offer your feedback and join the conversation, you can follow us on our Twitter handle and follow the NCATS SBIR hashtag.

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Monique LaRocque: And now it's my honor to officially welcome you to the 10th anniversary NCATS SBIR program: A decade of innovation, How NCATS is impacting translational science through small business growth.

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Next slide please.

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Monique LaRocque: Today we're going to hear from real life experts who have successfully navigated the program.

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00:02:14.400 --> 00:02:26.700

Monique LaRocque: and have created wonderful startups and are advancing along different milestones. You'll hear from Chris Gibson. Dr gibson is the co-founder and CEO of Recursion Pharmaceuticals.

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00:02:27.390 --> 00:02:41.130

Monique LaRocque: We also have Dr Chang Hee Kim. He is CEO of GoDx, Inc. We also have Dr Lena Wu. She's the co founder and former CEO and President of Intabio Inc.

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Monique LaRocque: A moderator and lead today is going to be Lili Portilla, who is a director of the office of strategic alliances at the national Center for advancing translational sciences.

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Monique LaRocque: Before we get into our full presentation, next slide, I wanted to give you a quick overview of what we're going to be talking about today.

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Monique LaRocque: So you'll hear a little bit of an intro from our panelists how they've leveraged a program and Lili is going to kick us off on a discussion fireside chat.

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Monique LaRocque: And then we will have a moderated Q and A so we have accepted some of the questions we received during registration I've considered that, for the panel discussion.

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Monique LaRocque: But if you have any questions that you think of during this discussion, please use the Q and A feature and you'll be able to send your questions in and we'll ask them at the end of the event.

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00:03:32.850 --> 00:03:36.240

Monique LaRocque: We are recording this session and we'll be posting it on our site.

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Next slide please.

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Monique LaRocque: With that I'm going to turn it over to Lili Portilla. We want to make sure everyone is grounded in the basic elements of the SBIR and STTR programs and how they can help your small business.

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Lili Portilla: Thanks Monique and good afternoon everyone. I just wanted to spend maybe five minutes going.

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Lili Portilla: Over a few things with the program and especially since we may throw these terms around during our conversation with the panel.

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Lili Portilla: SBIR is a three phase program that is not to be confused with clinical phases, but the phase one of a SBIR grant typically includes a feasibility studies and there are.

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Lili Portilla: A program a budget amounts that you can ask for. There's a hard capthat we have listed here, but NCATS does allow for higher budget dollar amounts for certain topics and projects, usually last anywhere between six months to one year.

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Lili Portilla: Phase two is full R and D research, the NIH hard cap is $1.7m, but we do allow again higher budget dollar amounts at NCATS for certain topics.

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Lili Portilla: And projects typically last anywhere between two to three years. There's something called a fast track to that combines both the phase one and phase two when reviewed.

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Lili Portilla: And the caveat is that you meet, if you meet the specific aims at the phase one you can go ahead and move over to the phase two without having to go to review again.

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00:05:13.440 --> 00:05:23.280

Lili Portilla: And then, a direct to phase two program, which allows you to skip the phase one and that's assuming that you have all the data that you would have gotten under a phase one SBIR or STTR grant.

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Lili Portilla: And we do have a program called phase two B, which is a continuation of a phase two award, something that we do offer companies that we have funded for phase two.

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Lili Portilla: And if you're interested in applying for that it's always good to have a conversation with us about what you plan to do under the grant as well as any.

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Lili Portilla: Budget, you were proposing and the time that you're proposing to get these experiments done so, have a conversation with us around the phase two B.

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Lili Portilla: And then phase three is typically commercialization and always keep in mind that in in most of the instances NIH is never going to be the customer here. That you are going to be expected to graduate out of the program and in some way develop strategic partnerships.

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Lili Portilla: leverage the funding that you get through SBA or with other mechanisms that may exist out there.

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Lili Portilla: And or also if you're lucky enough to get venture funding to move the technology forward. So let's go to the next slide.

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Lili Portilla: What are the benefits of the program? There are several. One is that it's stable and predictable because it's always linked to the NIH budget.

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Lili Portilla: If we have a budget, there will be an SBIR set aside that has to be awarded to us, small businesses. It's non dilutive. The government does not take any IP or retain any IP that you develop.

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Lili Portilla: And once you're in the program you do get access to some of the technical assistance programs that exist and commercialization programs.

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Lili Portilla: support that may exist through just by having an SBIR grant and some of our panelists have actually taken advantage of some of these programs that existed that exists through.

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Lili Portilla: You know that we that we allow our grantees to participate in as because there are grantees in for this program and another very important aspect of SBIR and STTR that projects undergo.

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Lili Portilla: NIH is rigorous peer review and that peer review can be leveraged for potentially attracting other funding or collaborations as well. Let's go to the next slide.

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Lili Portilla: So I'll end this portion of the conversation by saying that NCATS is always looking for great applications to address translational bottlenecks that exist out there.

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Lili Portilla: We typically fund in three areas that I've listed here preclinical drug discovery development tools and technologies.

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Lili Portilla: Biomedical clinical health research informatics tools and technologies.

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Lili Portilla: and clinical dissemination and implementation research technology, so if you're in one of those three broad categories, we encourage you to speak to us and see if.

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Lili Portilla: It would be your what you're proposing would be a good fit.

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Lili Portilla: The applicant and the folks that are on this panel did that, and you know successfully were able to get an award but it's always good to have a conversation with us to make sure that.

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Lili Portilla: What you're doing really does fit our technology priorities so I'm - I'll also say that if you want to get in touch with us, let's go to the next slide,

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Lili Portilla: Here are various ways that you can engage with us.

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Lili Portilla: You can send us an email, if you have a specific aims page that you want us to review prior to your submission, please take advantage of the fact that we are here to help you and to guide you through the program, so I think with that, that concludes this portion of.

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Lili Portilla: This discussion on just setting the stage of what SBIR is, what it does. So I'd like to go ahead and introduce the panel now.

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Lili Portilla: So.

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Lili Portilla: As Monique mentioned this month marks our 10th anniversary of harnessing the power of translational science to speed solutions for many diseases, at a time.

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Lili Portilla: Our mission is to remove and bypass or bypass scientific and operational obstacles that stand in the way of getting more treatments to patients quickly.

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Lili Portilla: We do this by advancing what's called translational science. Translational science looks at the big picture, to identify common pitfalls and develop innovative solutions.

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Lili Portilla: Thus, enabling a promising discoveries technologies to become real world applications that improve people's health.

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Lili Portilla: or activities we hope exemplify translational science principles and that are they are boundary crossing, bold and rigorous approaches that that help with the efficiency and speed of getting something to a patient.

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Lili Portilla: The NCATS SBIR program plays an integral role in addressing the center's translational priorities.

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Lili Portilla: We recognize that U.S. small businesses are poised to play a significant role and addressing these translational bottlenecks that exist out there.

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Lili Portilla: And because we know that they offer innovative approaches and an out of the box solutions in in addressing these issues.

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Lili Portilla: So with that I am honored to present our panel participants to mark this auspicious milestone for NCATS and its SBIR and STTR program.

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Lili Portilla: So I would like to introduce Chris Gibson. Chris is from Recursion Pharmaceuticals.

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Lili Portilla: While he was still in graduate school he developed an artificial intelligence based high throughput screening approach to screen thousands of drugs to for use in treating rare diseases.

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Lili Portilla: Recursion is a clinical stage biotech biotechnology company decoding biology, by integrating technological innovations across biology chemistry automation data science, engineering.

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Lili Portilla: With the goal of radically improving the lives of patients and industrializing drug discovery since it's since its founding and.

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Lili Portilla: Recursion has doubled its venture capital rounds raising $239 million in 2020 and recently this past spring went public and a very auspicious milestone. Congratulations. So I will go to our introducing our next panelist, which is Dr Lena Wu.

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Lili Portilla: Lena Wu is the Co founder and

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Lili Portilla: former CEO and President and President Intabio.

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Lili Portilla: Lena co founded Intabio to develop and market their proprietary Blaze system, an automated instrument that combines mass spectrometery with.

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Lili Portilla: a type of protein imaging streamlining and speeding up the characterization and protein structures for biologics and biosimilars drug production.

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Lili Portilla: In 2021 Intabio and IT staff were acquired by side effects, which is a large analytical technology company which allows it to take and scale up their Blaze technology for global manufacturing sales and support, so a very different type of of acquisition happened here and then our last.

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Lili Portilla: panelist or the last person I'd like to introduce Dr Chang Hee Kim, CEO of GoDx from Madison Wisconsin. Chang Hee developed a paper based diagnostic test for digestive diseases his company GoDx has since.

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Lili Portilla: pivoted and developed a with the same platform developed a rapid test for COVID-19.

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Lili Portilla: Since the onset of coven the COVID-19 pandemic GoDx has been specializing and delivering COVID-19 test results within 24 hours.

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Lili Portilla: GoDx Inc, I believe has clear approval to do this so GoDx has an edge on other COVID testing sites in the Madison Wisconsin area because GoDx is both a testing site.

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Lili Portilla: and diagnostic laboratory and I will get into more of what they're doing in this particular space. So.

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Lili Portilla: That is our panel and like I said I'm very excited to introduce everyone and I'm going to jump in and do a little round robin here of setting the stage of.

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Lili Portilla: Talking a little bit more about the technologies that these companies.

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Lili Portilla: That NCATS funded for for these companies so so Chris, very, very briefly and I'll pose this question to everyone else, very briefly, can you tell us about the technology that you developed under this NCATS SBIR grant

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Lili Portilla: and specifically what was the translational problem that you were trying to address with the technology?

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Christopher Gibson: Yeah thanks Lili I really appreciate the invitation to be here. We've always thought about NCATS as our very first.

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Christopher Gibson: Independent investor and so it's fantastic, to be able to be back so many years later, to talk about how that helped us so much in the early days.

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Christopher Gibson: You know I did a dissertation in the lab in the University of Utah and one of the projects we were working on was trying to understand a disease called cerebral cavernous malformation.

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Christopher Gibson: And the lab and I worked on this for a decade and I I came in as a bio engineering student and worked on it for a couple of years, and ultimately.

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Christopher Gibson: We use the traditional molecular biology approach to hunt down what we thought was causing the disease, which was activation of a specific protein.

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Christopher Gibson: And it turned out when we inhibited that protein in my we actually made them worse and so after a decade, this kind of reductionist approach to biology had failed.

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Christopher Gibson: But what we noticed was that, when we had modeled this disease and human cells, they look really different in a microscope.

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Christopher Gibson: And so what we did was use computer vision and machine learning to automate and unbias the ability to screen molecules against diseases, using.

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Christopher Gibson: Images of human cells and so when you model diseased cells look really different, and you can use a computer vision system to take a lot of the human bias out and measure, all the way the all the ways that cells are different.

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Christopher Gibson: And so, a few months after we started that approach, we had to potentially new medicines and put those into mice.

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Christopher Gibson: And both those ended up significantly reducing the number of lesions in the mouse model, and in fact Recursion is kicking off a phase two clinical trial of one of those drugs and human patients here just in the next quarter or so, which is really exciting.

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Christopher Gibson: Great well, we came to NCATS with was essentially the idea to scale, this could you take the same approach that we used in cerebral cavernous malformation?

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Christopher Gibson: And could you scale that across many different genetic diseases and so that was the very first thing I did when when we started the company was sit down and write and direct to face to.

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Christopher Gibson: SBIR grant where we propose to go from the one time to this at work to explore whether or not this could work in a couple hundred other genetic.

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Christopher Gibson: Indications and we worked on that, and it was fantastic. Really appreciate that support, and I can talk more about how it helped us later.

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Lili Portilla: That's great. So, Chris to so I'm I might help our listeners to when when you put the grant together were you did you.

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Lili Portilla: branch out from the company or were you still part of the University of Utah the time of, can you tell us a little bit about the timing of putting the grant in and what you did?

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Christopher Gibson: Yeah so I was part of an MD-PhD program and I defended my dissertation on October 30 of 2013 and started a company four days later.

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Christopher Gibson: licensed all of the know how from the University over the following few weeks, and then the company was kicked off.

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Christopher Gibson: You know, for the SBIR grant I sat down to start writing in January 1 2014 we submitted, I think, in April, something along that line we got our score in July.

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Christopher Gibson: And then you know it took a little while to get the actual money but we use that as you said earlier that summary statement as a really important point for some of the angel investors who follow it on during those years.

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Lili Portilla: That's great, that's great. Thank you Chris and so I'm going to go to Lena.

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Lili Portilla: Lena could you give us a brief summary of the technology that was developed using the NCATS grant and you know also addressing what the technology with the translational problem you were trying to solve with the with blaze.

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Lena Wu: Yes, so again like Chris really have found NCATS to be was really important to Intabio's development and so really appreciate appreciate the invitation to be part of this panel.

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Lena Wu: So what Intabio was focused on is one of the biggest challenges in manufacturing biopharmaceuticals. So these are large complex protein based drugs like antibodies and vaccines.

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Lena Wu: And one of the big issues is is how do you ensure product quality, how do you ensure that the cells that are in the manufacturing workhorse.

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Lena Wu: are actually making the drug in exactly the way that you need it to end, you know any sort of structural change, even small ones, then the structural structure of the protein can cause really significant have a really a significant impact in terms of the efficacy and toxicity so.

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00:18:34.410 --> 00:18:45.510

Lena Wu: And if you can't make the drug right you can't test it in the animals, you certainly can't take it and tested into humans, so it's kind of a dead stop for the translation of drugs so it's really important.

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00:18:46.620 --> 00:18:53.310

Lena Wu: analytical testing piece of information that can really affect go-no go decisions for an entire program.

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Lena Wu: So there are there at the time, and there are today to gold standard analytical classes. One's called capillary isoelectric focusing. It basically detects whether there's.

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Lena Wu: A structural change has occurred, and then the second test is mass spec it characterizes the change in detail.

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Lena Wu: Well, the problem is these two tests work great, the problem is, it can go it can take days literally sometimes weeks, sometimes months to go from the detection, to the characterization. It's a super complex workflow.

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Lena Wu: So it ends up being a huge, huge bottleneck in drug development, so what Intabio did was we decided to focus on addressing this bottleneck.

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Lena Wu: We developed a rapid automated analytical assay that actually seamlessly integrated these two assays, the detection, the CIF to the mass spec.

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Lena Wu: So it's now less than 30 minutes, completely automated, really fast and compared to traditional workflows basically it's 100 X greater throughput. Literally fraction the cost.

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Lena Wu: And the most important is that now, you can have a comprehensive analysis, a comprehensive understanding of the structure of your drug.

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Lena Wu: and make these critical go-no go decisions literally months and months earlier so that has a really big impact on cost, likelihood of failure, and also time to market, time to have that first in human study, for example.

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Lena Wu: We actually applied to a fast track so that combined phase one and phase two.

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Lena Wu: You know, we we applied for it at the end of.

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Lena Wu: sort of the end of our seed as we're looking towards our series A and I think similar to Chris's experience you know.

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Lena Wu: It really helped us. We used it to sort of accelerate our product development, so we had a consumable that was a microfluidic chip and early on, we were literally.

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Lena Wu: It was plastic and we were literally gluing the pieces to get ourselves that's obviously not a commercializable manufacturing process, so we use the SP ir to help us develop a commercially compatible manufacturing process.

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Lili Portilla: Got it, got it. So, so that's how you were able to to leverage the grant was in this, manu- developing the manufacturing right.

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Lena Wu: yeah and that was in, and that was.

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Lena Wu: Certainly the technical impact, but again like Chris it was hugely important tool and very useful in terms of our acquiring and being able to get series S investors.

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Lena Wu: To come in and helped us in partnering because you know it's a huge market validation when you get a grant and word because you've been you've been reviewed.

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Lena Wu: by your peers, who are technical experts and and that really complimented a lot of the diligence that investors were doing so.

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00:21:58.710 --> 00:22:14.430

Lena Wu: I I would hand out the grant you know, to all the investors and they thought it was great to have this really concise compelling summary you know your value proposition, significance, innovation, it was a really great due diligence tool.

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00:22:14.910 --> 00:22:25.470

Lili Portilla: that's great that's great thanks Thank you Lena and Chang, so let's talk about GoDx and where you know I what we funded.

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Lili Portilla: And maybe if you could concentrate also a little bit on the pivot that you made during the pandemic, I think that would be really an interesting insight on why you did it and what was the market opportunity there, so please tell us.

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Chang Hee Kim: Yes, so our vision at GoDx, which stands for God Diagnostics, is to democratize diagnostics, which means to empower all people

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Chang Hee Kim: to know their health now.

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Chang Hee Kim: You know, instead of waiting for one week for a COVID test result, so we can do this by either bringing the lab to the people or developing a.

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Chang Hee Kim: Point of care or point of need diagnostics.

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Chang Hee Kim: So.

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Chang Hee Kim: diarrheal disease is the second leading cause of death in children under age five and every year 500,000 children die from diarrheal diseases, but if only we could.

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00:23:35.130 --> 00:23:50.100

Chang Hee Kim: develop a low cost and rapid point of care tests that can detect the major pathogens that cause the diarrheal disease, and it could help guide the therapy to appropriate.

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00:23:51.150 --> 00:23:56.460

Chang Hee Kim: drugs. So there was the translation a gap, we saw.

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00:23:58.680 --> 00:23:59.760

Chang Hee Kim: In our parent grant.

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Chang Hee Kim: Is that the diarrheal disease is a huge problem.

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Chang Hee Kim: In mortality, but, but there is really and there are some technologies to detect DNA, but nothing really made into product, so we.

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Chang Hee Kim: developed the very low cost and rapid method to extract DNA out of stool samples and the amplified to this DNA.

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00:24:32.310 --> 00:24:35.280

Chang Hee Kim: And then detected on strips of paper.

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00:24:36.570 --> 00:24:37.350

Chang Hee Kim: So, now.

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00:24:39.810 --> 00:24:57.720

Chang Hee Kim: We did have 400 patients sample a clinical study with NCATS, and we are also planning to test this tool in Africa in Kenya sites and then the COVID hit in 2020 and we.

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00:24:59.280 --> 00:25:21.420

Chang Hee Kim: Almost forced to pivot because our clinical sites or stopped collecting stool samples because labs were just inundated with thousands of COVID samples right, so we apply for a supplement funding from NCATS and then we were able to pivot to developing a rapid.

146

00:25:23.100 --> 00:25:25.230

Chang Hee Kim: low cost point of care test for.

147

00:25:26.700 --> 00:25:33.300

Chang Hee Kim: The COVID by using the same platform technology that's in the parent grant.

148

00:25:34.860 --> 00:25:35.820

Chang Hee Kim: But now the.

149

00:25:37.020 --> 00:25:39.270

Chang Hee Kim: You know FDA is actually.

150

00:25:40.290 --> 00:25:44.400

Chang Hee Kim: was kind of a translational block because.

151

00:25:47.130 --> 00:25:58.140

Chang Hee Kim: Not that I mean they were very working very hard, and you know it was easy to communicate with them, but they had a huge backlog of you know applications for the FDA EUA.

152

00:25:59.340 --> 00:26:07.500

Chang Hee Kim: So you know everybody's part is still in the waitlist so the faster way to get the faster COVID results.

153

00:26:09.060 --> 00:26:14.430

Chang Hee Kim: We found was to go to the CLIA lab route, CMS route.

154

00:26:15.540 --> 00:26:18.540

Chang Hee Kim: and get this van CLIA certified.

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00:26:19.560 --> 00:26:25.530

Chang Hee Kim: And the run our tests in the van but this makes us possible to access.

156

00:26:26.700 --> 00:26:37.020

Chang Hee Kim: Testing deserts areas in the, especially in the rural areas of Wisconsin where the COVID is surging right now.

157

00:26:37.260 --> 00:26:49.020

Lili Portilla: Yeah yeah. Very, very, very interesting yeah it's interesting how that whole thing really you know a lot of our grantees really did a pivot you know, had to do a pivot because of what was going on and and.

158

00:26:49.410 --> 00:27:06.360

Lili Portilla: and luckily for some of these platform technologies that NCATS funds, there was market opportunity there that they could pivot right so so Cheney I know that you participated in once you got the phase one grant I believe you participated in the I-Corps.

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00:27:06.990 --> 00:27:11.940

Lili Portilla: program that is offered to our phase one grantees if they want to go through.

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00:27:12.180 --> 00:27:26.820

Lili Portilla: The training program, we'll pay you to go through the training program. Could you tell us a little bit about your experience with with the I-Corps program and how that was a good thing to leverage at the time, and how that informs you going forward.

161

00:27:27.690 --> 00:27:29.790

Chang Hee Kim: yeah that's a fantastic program.

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00:27:32.310 --> 00:27:45.180

Chang Hee Kim: It's a very intense like 10 weeks, and you know, we need to interview 100 people either customers or stakeholders, and we have 10 interviews a week.

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00:27:46.140 --> 00:28:00.540

Chang Hee Kim: But, but the idea is to you know get out of the building; get out of the lab to talk to your customers; find out who your customers are so you're making you're developing a product that has a product market fit.

164

00:28:02.190 --> 00:28:05.160

Chang Hee Kim: Because the greatest fear is to make something that nobody buys.

165

00:28:05.370 --> 00:28:09.960

Chang Hee Kim: Right, so you want to talk to the customers first and find out how they do things now.

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00:28:10.770 --> 00:28:19.290

Chang Hee Kim: And you know what their needs really are and how are you going to develop the product that way right so I thought was incredibly helpful and.

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00:28:20.130 --> 00:28:38.310

Chang Hee Kim: really helped us with the commercialization plan when we apply for phase two and I believe that's how we got the phase two. I mean, and we were able to do all the networking to get the support letters, so we needed for the phase two grant application so I highly recommend it.

168

00:28:39.570 --> 00:28:40.320

Chang Hee Kim: For program.

169

00:28:40.650 --> 00:28:50.760

Lili Portilla: yeah no I I appreciate that and I also want to make a you know, a shameless plug here that the funding announcement is out on the street, so if you have a phase one grant.

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00:28:51.210 --> 00:28:57.930

Lili Portilla: And you're interested in going through the program please check out the funding announcement because, again, we will pay you to go through the training.

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00:28:58.350 --> 00:29:08.490

Lili Portilla: Because we think it's such a great opportunity. Chris there were other things that you, you didn't participate in I-Corps, but you did use some of the opportunities to.

172

00:29:09.240 --> 00:29:19.620

Lili Portilla: I think participate with some of the venture kind of pitches that we were able to arrange. Didn't your company do that as well too right?

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00:29:20.250 --> 00:29:28.080

Christopher Gibson: Yeah we took advantage of lots of those opportunities great chance for us to investors and practice our pitching your feedback on.

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00:29:29.520 --> 00:29:30.990

Lili Portilla: Right right so.

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00:29:31.020 --> 00:29:34.110

Lili Portilla: So, Lena, I can't remember, did you guys do the same thing too?

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00:29:34.170 --> 00:29:34.530

and

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00:29:35.610 --> 00:29:44.970

Lena Wu: yeah yeah so I actually participated in the I-Corps through an NSF, because we had an early NFS is one grant.

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00:29:46.050 --> 00:29:55.080

Lena Wu: And I thought it was really useful I actually you know I come, my wheelhouse is business development and marketing and commercial strategy so.

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00:29:56.670 --> 00:30:11.490

Lena Wu: I think when you do an nsf phase one you're required to participate, but I'm coming from the lens of this is really important activity, I was actually really glad I thought it was a well run program it definitely.

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00:30:12.570 --> 00:30:17.340

Lena Wu: hits all the major themes in and the interviewing is is so critical.

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00:30:18.720 --> 00:30:27.270

Lena Wu: I would highly recommend anybody who has any kind of a chance of doing that kind of exercise if you're a founder or an early technical.

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00:30:28.500 --> 00:30:32.430

Lena Wu: Ever early technical position in to start a company, you need to do that because.

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00:30:32.910 --> 00:30:46.020

Lena Wu: It is very likely going to end up making a break in your company. It's not so much the technology it's how you think about the market and how you strategize for your go to market strategy because, as a startup you only get one shot at this.

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00:30:46.620 --> 00:30:52.290

Lena Wu: So you better make it work and you need to understand how markets work and how to figure out product market fit.

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00:30:52.860 --> 00:30:55.710

Lili Portilla: That's great. Yeah, that's great advice so.

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00:30:56.850 --> 00:31:05.310

Lili Portilla: I'm gonna deviate a little bit here. I am curious that if you could go back to your yourself, when you first put the grant together.

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00:31:05.580 --> 00:31:12.450

Lili Portilla: And said oh hey I'm going to apply to NIH what is there something you would have done differently or wish you would have had or.

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00:31:12.870 --> 00:31:29.430

Lili Portilla: That maybe would have made the process a little easier or maybe there was something that NIH could have done better. Chris I'm going to start with you thinking back and getting that grant what, what do you think you would have done differently or what could have NIH have done differently?

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00:31:30.540 --> 00:31:35.070

Christopher Gibson: Lili to be totally honest there's a lot I wish I would have done differently.

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00:31:35.130 --> 00:31:36.900

Christopher Gibson: As a new CEO right.

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00:31:37.320 --> 00:31:44.910

Christopher Gibson: But there's actually not a lot that I would have changed about the work we did with with NCATS, it was one of the most.

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00:31:45.450 --> 00:31:54.660

Christopher Gibson: Important kind of foundational successes we had right when we kicked off the company, there was tremendous help from everyone and NCATS.

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00:31:55.590 --> 00:32:05.640

Christopher Gibson: great insight doing it ourselves, the first time, it can be a complicated process if you've never navigated you know getting all the different you know, Sam, I can't even remember all the.

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00:32:05.670 --> 00:32:06.000

Christopher Gibson: You know all.

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00:32:07.320 --> 00:32:07.590

Lili Portialla: Right.All those registrations

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00:32:07.980 --> 00:32:16.950

Christopher Gibson: All of that, but you know, aside from some of the paperwork burden which is not totally unexpected we found our reception to be extraordinarily

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00:32:18.030 --> 00:32:23.520

Christopher Gibson: helpful and even you Lili, Lili were a great help to us, you know, back then, so.

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00:32:24.210 --> 00:32:36.870

Christopher Gibson: You know I honestly would change a ton about the early days of Recursion and there's so much I've learned so much we did wrong, this is not one of those things, this is one of the things we counted as a huge success for the company yeah.

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00:32:37.080 --> 00:32:38.010

Lili Portilla: Lena how about you?

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00:32:40.080 --> 00:32:43.470

Lena Wu: So I would echo Chris's comments about.

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00:32:44.490 --> 00:32:59.010

Lena Wu: well run the program is this bear program so by the time we got around I got around to applying for the NCATS SBIR, this is probably my sixth or seventh grant and.

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00:33:00.270 --> 00:33:12.960

Lena Wu: It for a while I had 100% success rate for for now it's dropped off about 80%, but I think you know some of the advice that you mentioned early on, is you know a lot of scar tissue from those other grants.

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00:33:13.980 --> 00:33:22.170

Lena Wu: To one is definitely if you have an idea early on, talk to the program lead you.

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00:33:22.530 --> 00:33:38.760

Lena Wu: Because we had it was so helpful because we would have we would have to three different ideas, for you know what our project would be and I remember very specifically your guidance and helping us hone and optimize the project for what NCATS was looking for.

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00:33:39.780 --> 00:33:40.740

Lena Wu: I also think that.

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00:33:41.880 --> 00:33:46.110

Lena Wu: You know one thing that a lot of companies when they applied don't think about is.

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00:33:46.470 --> 00:33:57.600

Lena Wu: Is the letters of support and changing you talked about how important your I-Corps work was to network and identify support. I think you got to think about it this way, the.

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00:33:58.110 --> 00:34:06.600

Lena Wu: The reviewing committee is very good at the technical review, but it's hard to be an expert on every product every market.

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00:34:06.930 --> 00:34:12.840

Lena Wu: And so those letters of support are for you to validate to go out and say look I've talked to this customer.

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00:34:13.320 --> 00:34:22.260

Lena Wu: And they say yes, they want exactly this thing, and you have to provide that level validation otherwise it's it's not there and it's very hard for the review committee.

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00:34:22.710 --> 00:34:25.140

Lena Wu: To understand the impact and the significance.

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00:34:25.980 --> 00:34:38.250

Lena Wu: So, of course, this you know for the phase two or fast track, but it's really important to think about that, and how do you use your letters of support and as for the product in the market, not so much the technology.

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00:34:39.120 --> 00:34:52.140

Lena Wu: I think that's a big differentiator from, from my perspective, in terms of how well you position yourself for for the NCATS phase two.

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00:34:53.370 --> 00:34:56.760

Lili Portilla: that's great think that's great advice. Change Hee, what about you.

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00:34:57.840 --> 00:35:02.490

Chang Hee Kim: yeah I mean I agree with Lena about talk to your program officer.

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00:35:04.530 --> 00:35:20.610

Chang Hee Kim: I used to go to these at just the annual you know SBIR conferences and I highly recommend those if they come back or if they're being held virtually because so much advice you can get from those.

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00:35:21.660 --> 00:35:32.490

Chang Hee Kim: And then for first time applicants to maybe look at examples of funded grants that are on the NIAID website I think mm hmm.

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00:35:34.080 --> 00:35:41.850

Lili Portilla: very helpful yeah and actually there's more resources on that there's been other institute's that have allowed that whose grantees have allowed them to put their.

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00:35:42.810 --> 00:35:51.840

Lili Portilla: grant applications on successful grant applications online so there's more to look at right so that's always nice but I agree with you that it is a nice resource to get a sense of what.

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00:35:52.620 --> 00:36:05.130

Lili Portilla: NIH looks for when it comes to submitting these grants, because even within agencies, though, it looks different right when you may use at NSF may not necessarily work at the NIH right so.

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00:36:05.670 --> 00:36:17.820

Lili Portilla: Looking at those samples, are very important. Yeah yeah. So um I wanted to maybe focus a little bit on your specific experiences with your companies now what's going on, and maybe.

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00:36:18.330 --> 00:36:32.190

Lili Portilla: Try to figure out how we can you know your pearls of wisdom to to those that are listening on on what what's what state you're a you know what air and stage you're in, things you've learned.

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00:36:33.390 --> 00:36:45.060

Lili Portilla: And I thought it'd be a great opportunity to do that so I'm going to start with Chris, so Chris I did mention early on that you guys just had an IPO, which was you know congratulations.

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00:36:45.600 --> 00:36:56.580

Lili Portilla: Quite a significant milestone, and something you know from my perspective, as a program officer that I love to be able to tout out there is that you know where companies, you know, one of our companies did this so.

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00:36:56.880 --> 00:37:06.570

Lili Portilla: Could you tell us a little bit about more what that experience was like, what you learned and how is this going to change you guys going into the future.

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00:37:07.950 --> 00:37:15.420

Christopher Gibson: Yeah happy to Lily, so you know the IPO process is the first time i've been through it, hopefully, the only time.

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00:37:17.250 --> 00:37:17.610

Christopher Gibson: I'll go through it. It's

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00:37:17.670 --> 00:37:26.220

Christopher Gibson: it's you know it's a lot, a lot of work and we made the decision and about this time last year that it was the right time for Recursion to go go public.

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00:37:26.820 --> 00:37:32.310

Christopher Gibson: And we made that decision because we felt like we had the right proof points to kind of exit the venture sphere.

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00:37:33.090 --> 00:37:43.770

Christopher Gibson: With with more programs in clinical trials and lots more programs in our pipeline and also to access a broader set of investors who had you know different kind of horizon for investment.

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00:37:44.370 --> 00:38:01.440

Christopher Gibson: And because I think it creates enforces a lot of discipline on on the team and that's an important thing is signature of the company. So we went out in April, which was sort of just after the peak of the the NASDAQ cloud technology index, and it was a fantastic.

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00:38:02.700 --> 00:38:06.900

Christopher Gibson: Fantastic day for the team to kind of take a step back and reflect on everything that they'd done.

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00:38:07.290 --> 00:38:15.090

Christopher Gibson: And then the next day, we got back to work, because we have a long ways to go and it's still very, very early in the trajectory of the kind of company that we're trying to build.

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00:38:15.990 --> 00:38:22.530

Christopher Gibson: You know, the only thing that I that I sort of reflect on having learned is at every stage of growth of the company.

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00:38:23.430 --> 00:38:29.700

Christopher Gibson: As a founder or CEO you're faced with things you've never faced before unless you're a serial entrepreneur.

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00:38:30.480 --> 00:38:36.990

Christopher Gibson: You know, for me, operating as a public company is very different in some ways, then as a private company talking to investors is very different.

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00:38:37.950 --> 00:38:41.880

Christopher Gibson: You know you have to be much more cautious about all the things you say, and you have to have.

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00:38:42.210 --> 00:38:51.000

Christopher Gibson: This giant list of things that you've said to the public and you're allowed to say to the public, you always have to keep that separate from all the things that you know you know, like.

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00:38:51.300 --> 00:39:00.150

Christopher Gibson: The exciting things so a great example of this is that yesterday we announced a really exciting collaboration for a decade neuroscience with Roche and Genetech.

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00:39:00.720 --> 00:39:09.750

Christopher Gibson: And we've been working on that for a really long time, and you could never slip and let anybody know that that was that was in process even inside the company, we have to be less transparent.

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00:39:10.140 --> 00:39:19.680

Christopher Gibson: So, aside from about 15 or 20 people who were working on that deal, most of our nearly 400 employees were surprised yesterday morning when we called an all hands meeting.

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00:39:20.070 --> 00:39:34.470

Christopher Gibson: You know, for 8am to tell them more about the news that they had to read the press release, so it creates a very you know different kind of situation and company than when your private, but I think it's a really good milestone for us and you know, on to the next phase.

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00:39:34.980 --> 00:39:41.580

Lili Portilla: That's great that's great now and it's it's funny because I think you know when you think of a startup we think of everyone.

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00:39:42.180 --> 00:39:51.060

Lili Portilla: Knowing with what's going on right and people wearing multiple hats and in the example you gave you know it sounded a little bit like the federal government where.

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00:39:51.420 --> 00:40:01.050

Lili Portilla: You find out about something that day that it's released and everyone scratching their head going I didn't see that coming but yes, I am that's it's a really interesting.

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00:40:02.130 --> 00:40:09.810

Lili Portilla: juxtaposition to show where you guys were and where you are now right so that's interesting very interesting yeah absolutely.

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00:40:09.840 --> 00:40:19.650

Christopher Gibson: And get part of the ideas to set the team up for success, you know so that, even though they were surprised, many of them by the news of the specific partner in the scale of the partnership.

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00:40:20.190 --> 00:40:29.070

Christopher Gibson: All of the knew about what the roadmap, we were going to build application was are becoming for 18 months with respect to neuroscience and oncology

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00:40:29.340 --> 00:40:36.090

Christopher Gibson: And so, our goal is to really change right we have aligned for four months, what we wanted to build.

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00:40:37.020 --> 00:40:48.750

Christopher Gibson: To kind of prepare for the partnership, and so the teams didn't feel overwhelmed they felt some sense of relief that we had a fantastic partner to work with hand in hand on the work that they were already planning to do.

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00:40:50.160 --> 00:40:53.040

Lili Portilla: That's great congratulations, by the way, that's great news.

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00:40:54.810 --> 00:41:03.330

Lili Portilla: Okay Lena so your situation is very different, with your company and the fact that it was it was acquired by Sciex, is that right.

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00:41:03.750 --> 00:41:10.170

Lili Portilla: Correct so so, can you give us a sense of what that's like you know I'm being a stand-alone company.

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00:41:11.310 --> 00:41:20.040

Lili Portilla: You know, being approached and the whole negotiation of that and and and we're and how what role you guys are going to play.

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00:41:20.430 --> 00:41:23.070

Lili Portilla: yeah moving forward under this arrangement?

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00:41:24.180 --> 00:41:33.960

Lena Wu: Yeah, so I think you know, the thing to realize is that, while the the M and A didn't really happen overnight it actually.

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00:41:34.620 --> 00:41:39.690

Lena Wu: The actual first call to close a deal was less than three months so that was fast, but.

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00:41:40.170 --> 00:41:49.650

Lena Wu: It was based on a three year relationship that we had you know, been working on from the very beginning of Intabio, so you know it started out with.

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00:41:50.340 --> 00:41:58.170

Lena Wu: We knew who our target companies were going to be for an M and A and that was part of our exit strategy or corporate strategy from the very beginning.

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00:41:58.800 --> 00:42:09.990

Lena Wu: And so we you know network for introductions warm introductions and then we were able to secure a small pilot project, and then we went from that small pilot project to.

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00:42:10.770 --> 00:42:22.830

Lena Wu: A funded multi year development and then that led to the M and A and all along, even in between those big milestones of a collaboration funded development.

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00:42:23.130 --> 00:42:39.780

Lena Wu: There were steps there's a steady cadence of meetings that you're developing the relationship. You're getting to know the other other party their strategic goals their weaknesses their strengths and also just human beings right? Who's making what decision and how did they make that decision.

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00:42:41.130 --> 00:42:52.500

Lena Wu: So that's what really led to the M and A and it helped us honestly to understand you know, because at the time we were talking to all the major mass spec companies and and had.

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00:42:52.980 --> 00:43:01.650

Lena Wu: collaborations of some sort in it helped us really I think pick the best partner for Intabio. Um.

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00:43:02.160 --> 00:43:11.670

Lena Wu: You know startups, as we all know, startups are really good at innovation, we can take big risks, we can do the big projects.

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00:43:12.150 --> 00:43:24.450

Lena Wu: And big companies are good at building robust products, manufacturing, sales and service, so you know when we thought about our exit strategy we knew that,

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00:43:25.170 --> 00:43:32.070

Lena Wu: especially given the type of product we had, we were we were going to sell to pharma an analytical instrument.

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00:43:32.520 --> 00:43:36.390

Lena Wu: That was making go-no go decisions about their billion dollar drugs.

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00:43:36.750 --> 00:43:45.600

Lena Wu: So we could we could meet their technical requirements perfectly, but we would have been too big of a business risk they would never started using us.

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00:43:45.960 --> 00:44:05.580

Lena Wu: Integrating us into their real drug development process and then real manufacturing process, so you know, because we could disappear, we could suddenly not be able to supply you know the consumable or we didn't have 24/7 sales and service. So I'm in you know, in an.

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00:44:07.110 --> 00:44:25.410

Lena Wu: Sciex was the best partner, because they had expertise in the two core technologies, the electricophoresis, imaged capillary isolectric focusing and the mass spec they already had market presence, they have products and the really good at building robust instruments to really good at making robust consumables.

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00:44:26.490 --> 00:44:42.090

Lena Wu: And they have a sales and service global infrastructure, so you know our role going in was we brought the innovation, and that is still Intabio's role, we are now on R and D unit within Sciex.

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00:44:43.380 --> 00:44:52.200

Lena Wu: And you know we're still focusing on the innovative aspects and fine tuning and optimizing the asset itself.

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00:44:53.340 --> 00:45:04.680

Lena Wu: And the consumable but things like the instrument, you know we built the beta but now you know we're working on handing that off to Sciex for.

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00:45:05.610 --> 00:45:13.680

Lena Wu: You know the commercial manufacturing and as soon as our you know consumable gets to that stage we will hand that off to them too, so.

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00:45:14.220 --> 00:45:24.690

Lena Wu: I think it's a really great partnership, and you know it's always was Intabio's goal to innovate and build something that addresses this bottleneck and makes a really big impact.

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00:45:25.380 --> 00:45:41.850

Lena Wu: But to get it out to the market and allowed to have the biggest impact that it can for for drug development biopharmaceuticals and by partnering with Sciex, we can stay focused on what we're good at, and we let somebody else do what they're good at, and that turns out to be Sciex.

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00:45:42.150 --> 00:45:47.520

Lili Portilla: Yeah. So what's what's the big change, though, from being you know stand alone.

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00:45:47.760 --> 00:45:47.970

Lena Wu: Yeah.

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00:45:48.390 --> 00:45:51.900

Lili Portilla: You know I'm pounding the pavement trying to.

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00:45:51.900 --> 00:45:54.570

Lili Portilla: find partners, now that you're there what what.

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00:45:54.600 --> 00:45:56.400

Lili Portilla: What do you see as the biggest change?

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00:45:56.910 --> 00:46:07.950

Lena Wu: Biggest change well, so I have formally left the the company intervenes is because okay you don't need somebody to manage the board, you don't need to you don't need someone to raise money.

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00:46:10.110 --> 00:46:17.160

Lena Wu: You know in in the decision making is obviously a lot more layered complex there's a lot more process.

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00:46:18.450 --> 00:46:26.070

Lena Wu: But you know that's that's something that I miss, but I can also see it's good for the company because.

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00:46:26.790 --> 00:46:36.120

Lena Wu: Robust manufacturing is all about process. The things that haven't changed our it's still important to maintain good relationships with the customers.

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00:46:36.660 --> 00:46:58.650

Lena Wu: Intabio focused a lot early on, on developing relationships with customers and that those early relationships are still being the core of development and marketing and validating the technology and the instrument and the data, even now, so you know it's not a fast paced startup.

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00:46:59.820 --> 00:47:05.790

Lena Wu: But you know we wanted it to mature the technology, we wanted to build a mature robust product.

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00:47:06.810 --> 00:47:21.000

Lena Wu: So the focus, the focus is different it's more about not so much innovating and creating new technology it's about building a robust project so product so that's a that's a different technical focus.

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00:47:21.120 --> 00:47:29.460

Lili Portilla: Right right great great great insight. Um, okay, Chang Hee, he so you're in a different situation and I know that.

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00:47:30.180 --> 00:47:42.990

Lili Portilla: You alluded to this early on in the thing about the frustrations that you had early on, with the regulatory piece of this, especially during the pandemic and and but it looks like you you've.

292

00:47:43.770 --> 00:47:52.140

Lili Portilla: rethought your your your strategy, a little bit, and I remember you coming to me with a request for a supplement.

293

00:47:53.190 --> 00:48:02.220

Lili Portilla: During the pandemic and you rethought things a little bit in terms of a different approach that you wanted to go. I just was wondering if you could tell us a little bit about.

294

00:48:02.610 --> 00:48:12.420

Lili Portilla: You know your journey to where you are now and where do you guys still need to go and what would be the end end game here for for GoDx.

295

00:48:14.100 --> 00:48:14.760

Chang Hee Kim: Yeah.

296

00:48:16.140 --> 00:48:19.260

Chang Hee Kim: We're the other kind of company that wants to go on forever.

297

00:48:21.390 --> 00:48:33.630

Chang Hee Kim: So we want to grow our revenue through our services and products. Now I think the COVID pandemic has really readyied the market for us.

298

00:48:35.310 --> 00:48:36.990

Chang Hee Kim: In terms of the need for.

299

00:48:38.730 --> 00:48:40.320

Chang Hee Kim: Democratic diagnostics.

300

00:48:41.580 --> 00:48:51.330

Chang Hee Kim: And people know about PCR tests, you know, and antigen tests and people hear about the diagnostics test on the news.

301

00:48:52.500 --> 00:48:55.170

Chang Hee Kim: So we have some products in the pipeline.

302

00:48:56.370 --> 00:48:58.260

Chang Hee Kim: such as the STI.

303

00:49:00.120 --> 00:49:12.210

Chang Hee Kim: test, which we have a grant, an NIAID grant for and then also sepsis and then antibiotic resistance.

304

00:49:13.980 --> 00:49:25.830

Chang Hee Kim: Detection. It will be a huge area and also in the future, so we want to both to the CLIA lab service and innovate.

305

00:49:27.150 --> 00:49:30.330

Chang Hee Kim: Innovative tests there and as well as.

306

00:49:31.410 --> 00:49:33.030

Chang Hee Kim: Make the products.

307

00:49:34.200 --> 00:49:39.030

Chang Hee Kim: that are innovative and help us to democratize diagnostics.

308

00:49:39.390 --> 00:49:48.330

Lili Portilla: Right and and and Chang Hee, you you you you brought up something that I want to make sure people glom onto, which is.

309

00:49:48.810 --> 00:50:00.300

Lili Portilla: You have a platform technology but you're utilizing other Institute's to move certain aspects of the platform forward, which is exactly what we want to see happen.

310

00:50:00.600 --> 00:50:04.410

Lili Portilla: With folks that are developing this kind of technology is to leverage what.

311

00:50:05.040 --> 00:50:15.330

Lili Portilla: You know, NIAID may want versus what NCATS may want and we've seen many of our platform companies do that, and I think that's something to keep in mind when it comes to.

312

00:50:15.780 --> 00:50:21.780

Lili Portilla: You know, getting funding from the NIH, there's there's not necessarily just one IC- Institute.

313

00:50:22.230 --> 00:50:35.160

Lili Portilla: That may be able to help you out in terms of building out a platform, depending on what you do, if you're going to be disease specific or organ specific, you may go want to go to those respective Institute's too so.

314

00:50:35.790 --> 00:50:43.890

Lili Portilla: I think your your gave a great example of how to leverage that you know with the other institute so that's great that's great.

315

00:50:45.300 --> 00:51:00.000

Lili Portilla: So I want to make sure that we have a little bit of time for questions here and I'm going to ask one last parting question and you know being that we are commemorating NCATS' 10th year, which is to me hard to believe that it's been 10 years.

316

00:51:02.010 --> 00:51:19.110

Lili Portilla: But I want to know, like 10 years from now, whether you know if you're coming from your company perspective or from yourself, where do you see what you're working on to be envisioned 10 years down the road so Chris I'm going to start with you.

317

00:51:20.910 --> 00:51:37.140

Christopher Gibson: Thanks Lili so you know we've come a long way in the last eight years since we started Recursion almost a 10 year anniversary of our work, and I think we've got a few more decades to go before we fully realize the vision which is you know really to.

318

00:51:38.220 --> 00:51:48.150

Christopher Gibson: To radically improve the lives of patients around the world, and you know, the way we see that happening is by using technology at every step of the drug discovery and development process.

319

00:51:48.600 --> 00:51:58.170

Christopher Gibson: To make it more efficient and you know today it costs about $2 billion worth of R and D investment to get one new medicine approved if you kind of look at the industry as a whole.

320

00:51:58.620 --> 00:52:03.960

Christopher Gibson: And it's our belief that with technology and an amazing team, we might be able to significantly lower that and also.

321

00:52:04.200 --> 00:52:11.130

Christopher Gibson: Significantly, broaden the types of diseases and the number of diseases which they're really good medicines for so decade from now.

322

00:52:11.580 --> 00:52:21.060

Christopher Gibson: You know I'm not known for being bashful on these things but but I imagine that we will be working on hundreds of medicines and have many new medicines to patients.

323

00:52:21.480 --> 00:52:28.290

Christopher Gibson: and hopefully have a lot of drugs that are already making a huge difference in the lives of patients at that point, and ultimately.

324

00:52:28.620 --> 00:52:38.700

Christopher Gibson: driving down the cost of medicines as well, while building a really compelling business that's that's the vision that we have set for the future and we're really excited to work on every day.

325

00:52:39.090 --> 00:52:43.650

Lili Portilla: That's great and and I look forward to that, too. I think we all do right.

326

00:52:43.950 --> 00:52:45.270

Lili Portilla: So that's great working.

327

00:52:45.360 --> 00:52:45.990

Christopher Gibson: Yes.

328

00:52:47.040 --> 00:52:48.060

Lili Portilla: Lena please.

329

00:52:48.810 --> 00:52:55.830

Lena Wu: Um so I'm, as I said, I'm no longer directly involved in Intabio and Sciex.

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00:52:56.670 --> 00:53:02.250

Lena Wu: I'm still doing some consulting, what I would like to see the for the entire ecosystem and that.

331

00:53:02.640 --> 00:53:11.640

Lena Wu: In 10 years time the Intabio instrument Blaze is the gold standard for product quality. I think, if it is, we have the opportunity to.

332

00:53:12.030 --> 00:53:18.270

Lena Wu: drastically reduce the cost of of these standard drug development program by literally.

333

00:53:18.690 --> 00:53:33.570

Lena Wu: 10s maybe hundreds of millions dollars and speed these drugs to the market by years earlier, and so that's and that's it we're talking about having an impact on two thirds of the drugs that are in development today because two thirds of the drugs in development today are biopharmaceuticals.

334

00:53:34.680 --> 00:53:46.290

Lena Wu: So that would be my hope for the product and the technology that we developed. For myself right now I'm what I would call a recovering CEO.

335

00:53:47.460 --> 00:53:51.660

Lena Wu: I don't know what I want to do next, but one of the things that is important to me is to.

336

00:53:53.130 --> 00:54:12.510

Lena Wu: encourage more women into entrepreneur entrepreneurship and you know I think we have a lot to contribute and there's just not enough women involved thing CEOs being on board being founders, and so that's something that I'm very interested in in in in helping make happen.

337

00:54:12.870 --> 00:54:13.440

Lili Portilla: That's great, that's great.

338

00:54:13.470 --> 00:54:17.220

Lena Wu: I'd like to see parity in 10 years for women yeah.

339

00:54:17.520 --> 00:54:29.160

Lili Portilla: Now that's great and and and I'm I know that your mentorship in this area to other women, it would just go a long way, so kudos to you that's great. That's terrific.

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00:54:30.300 --> 00:54:30.960

Lili Portilla: Chang Hee

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00:54:32.130 --> 00:54:40.380

Chang Hee Kim: Yes, so our vision in 10 years is GoDx selling these diagnostic tests.

342

00:54:42.780 --> 00:54:47.160

Chang Hee Kim: In Africa, and India, the.

343

00:54:48.390 --> 00:54:55.140

Chang Hee Kim: I mean, we have a global health vision, so we need to get the low cost point of care diagnostics.

344

00:54:56.490 --> 00:55:05.520

Chang Hee Kim: Out there where you know where the health disparity is just huge, you know compared to like what's even in the United States and we're really thankful that.

345

00:55:06.720 --> 00:55:22.950

Chang Hee Kim: With NCATS actually our grant was considered a rare disease, because in in developed in developed countries, the children don't die of diarrheal disease, but in the developing world, you know, like 500,000 children die with diarrheal disease, like every year.

346

00:55:25.050 --> 00:55:25.800

Chang Hee Kim: So.

347

00:55:27.030 --> 00:55:36.300

Chang Hee Kim: We want us sustain a business, sustain a business that can get the diagnostics out to the developing world.

348

00:55:37.020 --> 00:55:46.230

Lili Portilla: That's great it's a wonderful vision, thank you very much. Okay, um, Monique I believe we're going to open it up for any questions from the audience.

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00:55:46.560 --> 00:55:53.940

Monique LaRocque: that's right, and thank you Lili and thank you to our panelists here today, you have lots of nuggets of wisdom that we can all benefit from.

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00:55:54.840 --> 00:56:02.280

Monique LaRocque: I wanted to note, if you have questions you can use the Q and A chat feature. We're going to proceed with the questions that we've received thus far.

351

00:56:03.090 --> 00:56:13.200

Monique LaRocque: So one question is as a small business, there are many things to focus on you're trying to advance your research, but then you also have to think about.

352

00:56:14.280 --> 00:56:20.610

Monique LaRocque: Approval and reimbursements and VC funding and marketing how have you all balanced that?

353

00:56:25.980 --> 00:56:27.660

Lili Portilla: Do you want to go in order here or.

354

00:56:27.780 --> 00:56:29.580

Monique LaRocque: Maybe, maybe let's start with.

355

00:56:30.630 --> 00:56:35.160

Monique LaRocque: Lena Wu because you talked about some of the marketing experience that you had it, are you mentoring other companies.

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00:56:36.720 --> 00:56:46.140

Lena Wu: It's hard it's definitely hard but um I think Chris spoke about it really well and that you know you really and also changing as experience.

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00:56:46.440 --> 00:56:56.250

Lena Wu: You you really can't develop your technology in isolation, because you don't know what you're developing and before you start on that long, hard journey.

358

00:56:56.700 --> 00:57:04.050

Lena Wu: Make sure you validated that your goal is the right goal, but you define the product well and that you're addressing a really important need.

359

00:57:04.920 --> 00:57:20.970

Lena Wu: Because again, you only get enough money to try one thing and that's got to be successful, so that you know early marketing early talking to customers has got to be the activity that guides your research and development.

360

00:57:22.380 --> 00:57:31.200

Lena Wu: It's a it's a tension. That is for sure, but if you don't have that tension I'd say you're in trouble, I mean Chris and Chang Hee, what do you guys think.

361

00:57:32.580 --> 00:57:42.300

Christopher Gibson: Well, you know I'm highly aligned with with what you just said, the other thing that I spent a lot of time, focusing on today is hiring and building.

362

00:57:42.330 --> 00:57:59.190

Christopher Gibson: Building the team yet so early days that's you know much smaller team than it is today, but hiring an extraordinarily good person who has familiarity with that that area that you need to work in and then setting them free to go deliver against that is the most powerful thing

363

00:58:00.930 --> 00:58:02.100

Christopher Gibson: And it's only way, you can scale.

364

00:58:02.190 --> 00:58:09.240

Christopher Gibson: In my in my kind of estimation, so I spent a lot of time in those early days, finding other really smart.

365

00:58:09.630 --> 00:58:22.560

Christopher Gibson: folks who could teach me and guide the company on some of those things where I had no experience whatsoever, and then I learned a ton from now over the last you know, several years so that's one of the other things that I'd add.

366

00:58:22.680 --> 00:58:25.680

Lena Wu: And I think you know picking the correct.

367

00:58:26.820 --> 00:58:31.620

Lena Wu: Strategic advisors getting help you; picking board members who've been through it.

368

00:58:32.100 --> 00:58:40.020

Lena Wu: Because if you've never been through it, it is hard to prioritize and you've got to be super rigorous about prioritizing. That's what gives you.

369

00:58:40.740 --> 00:58:50.310

Lena Wu: enough time to do the things you have to do, you cannot do everything at once, so getting help and advice and thinking through your problems with somebody who can help you prioritize.

370

00:58:50.670 --> 00:59:02.550

Lena Wu: enables you to do the things you have to do. The right answer is not to do everything. The right answer is to prioritize get help prioritizing if you don't know how and then you can get stuff done and you get the important stuff done.

371

00:59:04.140 --> 00:59:06.090

Monique LaRocque: That's great. Thank you.

372

00:59:06.870 --> 00:59:16.650

Monique LaRocque: yeah we've had experience with the I-Corps, how did you use those lessons to fine tune your future applications and did the learnings change your budget allocations.

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00:59:18.780 --> 00:59:19.770

Lena Wu: I think Chang Hee should -

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00:59:22.770 --> 00:59:23.220

Chang Hee Kim: um.

375

00:59:24.420 --> 00:59:25.200

Chang Hee Kim: Yeah I-Corps

376

00:59:28.650 --> 00:59:36.270

Chang Hee Kim: I mean, it was very helpful I don't think I could have you know apply for the phase two grant without I-Corps

377

00:59:38.940 --> 00:59:43.410

Chang Hee Kim: And it's a lot of time invested but.

378

00:59:45.030 --> 00:59:46.380

Chang Hee Kim: The return is really good.

379

00:59:47.460 --> 00:59:48.990

Chang Hee Kim: And you know you.

380

00:59:50.100 --> 00:59:55.740

Chang Hee Kim: You don't want to be working in the wrong direction so that's why you want to follow.

381

00:59:58.020 --> 01:00:03.270

Chang Hee Kim: What the customer is going to want to buy or need.

382

01:00:05.850 --> 01:00:06.600

Chang Hee Kim: So.

383

01:00:08.670 --> 01:00:11.250

Chang Hee Kim: What was the question about budget allocations?

384

01:00:11.310 --> 01:00:21.330

Lili Portilla: dinner yet did you have to change your budget allocation when you when you pivoted and went in the direction, you know, because you because of the information you got did you have to change anything in your grant.

385

01:00:23.370 --> 01:00:24.120

Chang Hee Kim: Um.

386

01:00:25.500 --> 01:00:27.510

Chang Hee Kim: Yeah I mean, I think there were some.

387

01:00:28.590 --> 01:00:39.480

Chang Hee Kim: Differences in which pathogens we're going to go after, but it was within the scope of the original aims. I just got that approved through the Lili.

388

01:00:40.710 --> 01:00:41.400

Chang Hee Kim: was fine.

389

01:00:42.300 --> 01:00:43.950

Lili Portilla: Lili and many other people, I just want.

390

01:00:43.950 --> 01:00:44.010

Lili Portilla: to.

391

01:00:46.770 --> 01:00:47.550

Chang Hee Kim: Be on this call.

392

01:00:49.740 --> 01:00:51.930

Lili Portilla: I wish I did that much power, but I just.

393

01:00:51.960 --> 01:00:54.840

Lili Portilla: Yes, yes yeah right um.

394

01:00:55.260 --> 01:00:56.970

Monique LaRocque: I was just going to note that we have.

395

01:00:58.020 --> 01:01:12.270

Monique LaRocque: We have some awardees on the line, but we also have some early time folks who are thinking about applying in the first place, so do you have any of your top tips, so if someone who's thinking about getting into the program and was it worth it for you.

396

01:01:14.610 --> 01:01:15.870

Lena Wu: Yes, definitely worth it.

397

01:01:19.050 --> 01:01:23.580

Lena Wu: Read the instructions carefully. Think about your.

398

01:01:25.170 --> 01:01:29.130

Lena Wu: And it is especially if it's your first time this is not an academic grant.

399

01:01:30.360 --> 01:01:44.100

Lena Wu: So you know you need to adjust your mindset so don't assume you know you are you've written many other grants, this is different, so read the instructions and there is a lot of really good advice and examples.

400

01:01:45.240 --> 01:01:55.710

Lena Wu: You know what you should be trying to talk about what you should be trying to prove in terms of the innovation, the significance, the letters of support again.

401

01:01:56.940 --> 01:02:04.650

Lena Wu: Do your do your research. Acquire all the data, you know use your scientific skills and do that research and look at the examples.

402

01:02:05.760 --> 01:02:16.050

Lena Wu: To best position yourself and then go talk to the program heads. Get help it's the NIH all these programs are super helpful reach out take advantage of that feedback.

403

01:02:17.190 --> 01:02:19.440

Lena Wu: Early early right right.

404

01:02:21.000 --> 01:02:23.400

Chang Hee Kim: and be be very persistent.

405

01:02:23.670 --> 01:02:24.330

Lena Wu: Yes.

406

01:02:27.720 --> 01:02:39.540

Chang Hee Kim: Be prepared to resubmit you know this, a lot of times you don't get the score that's wonderful, and you can resubmit an NIH you know it gives you feedback from the peer reviewers.

407

01:02:40.410 --> 01:02:49.710

Chang Hee Kim: So oftentimes people succeed the second time after you really need to believe in your vision and be persistent. It's key. yeah.

408

01:02:50.430 --> 01:02:56.130

Lena Wu: I think, also one of the big differences, perhaps in terms of thinking about academic versus SBIR is.

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01:02:57.240 --> 01:03:02.490

Lena Wu: Academic when you write a grant your there's a lot of shooting for the moon.

410

01:03:03.960 --> 01:03:20.550

Lena Wu: Whereas, you know the SBIR grants, I think, are a little bit different in that you have to be very pragmatic and very rigorous about proposing a project that the work can get done in the time and resources, you asked for.

411

01:03:20.700 --> 01:03:36.960

Lena Wu: That's right. It doesn't help you to go shoot for the moon, because it's like well we're going to give you $250,000 and you're only going to complete 20% of what your project is. That's a failed project right that's a very so that's one example of the change in mindset.

412

01:03:38.730 --> 01:03:39.870

Lili Portilla: that's a great that's a great.

413

01:03:40.920 --> 01:03:44.970

Lili Portilla: example Lena. I think you drive home that point about.

414

01:03:46.050 --> 01:03:55.710

Lili Portilla: The differences between you know you know standard investigator initiated type grants that NIH funds versus what you would expect, for an SBIR so yeah totally agree.

415

01:03:56.580 --> 01:04:01.470

Chang Hee Kim: I mean the other differences, you need to show innovation.

416

01:04:02.610 --> 01:04:14.400

Chang Hee Kim: Over what's in the market already so you, you need to know what your competition is, and you know differentiate yourself. You know, otherwise you know why should they give you the money right?

417

01:04:17.070 --> 01:04:18.000

Chang Hee Kim: That's very important.

418

01:04:18.810 --> 01:04:25.440

Monique LaRocque: Alright last question is folks are thinking about understanding the fast track application.

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01:04:25.830 --> 01:04:38.130

Monique LaRocque: And so they're saying, I understand that it combines phase one and phase two, but how do we decide if we should go for a phase one phase two or go straight to the fast track, can you elaborate a little bit that may be.

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01:04:38.760 --> 01:04:39.330

Lili Portilla: Yeah.

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01:04:39.540 --> 01:04:51.210

Lili Portilla: For you yeah, so I think the best piece of advice regarding making one decision versus another is, I do think that it's advisable when you're submitting a fast track.

422

01:04:51.690 --> 01:05:03.300

Lili Portilla: To think about if you have some data, preliminary data that maybe could support the you know the assumptions that you're making just not in just the phase one but potentially what you're going to be doing in the phase two.

423

01:05:03.960 --> 01:05:09.960

Lili Portilla: So um you know that's what we advise our grantees to think about it from that perspective.

424

01:05:11.670 --> 01:05:27.210

Lili Portilla: You know what what data, do you have that would set you up into you know be seriously considered for not just the phase one, but the phase two and Lena you you guys did go for a fast track right?

425

01:05:27.540 --> 01:05:35.010

Lena Wu: And we were actually we had that very same decision, do we just apply for phase one or do we apply for the fast track.

426

01:05:35.370 --> 01:05:43.770

Lena Wu: And we put together a little presentation we mapped out the two different scena- scenarios we explained what our existing data was.

427

01:05:44.160 --> 01:05:55.530

Lena Wu: And we brought it actually I don't think I met with you, I think I met with somebody else from NCATS but they're like Oh, you should do you should do the fast track. You have enough here, you know so.

428

01:05:56.670 --> 01:06:01.560

Lena Wu: again go talk to a program manager don't make the decision by yourself, go ask the expert.

429

01:06:02.880 --> 01:06:14.730

Lena Wu: The other thing that helped us was is that we you know, we had done like you said we had done a fair amount of work to really help both.

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01:06:15.720 --> 01:06:24.480

Lena Wu: validate our phase one proposal and the phase two and we had a lot of the information around the corporate strategy and the commercial plan.

431

01:06:24.780 --> 01:06:36.930

Lena Wu: We had that in place to so it was for us to be able to write a commercial plan, it was a lot more straightforward since we'd figured out a lot of that stuff for the company itself.

432

01:06:37.860 --> 01:06:38.430

Lili Portilla: Right. All right.

433

01:06:38.790 --> 01:06:51.870

Monique LaRocque: Some of you have talked about not being fun at the first time, and perhaps dealing with rejection, initially, but still come back and resubmitting for folks who need that inspiration any final parting words?

434

01:06:55.980 --> 01:06:59.400

Chang Hee Kim: They really need to believe in your vision.

435

01:07:00.510 --> 01:07:02.460

Chang Hee Kim: and be passionate.

436

01:07:05.160 --> 01:07:14.100

Chang Hee Kim: So, and then get yourself out there, you know, because if you don't go to the bat, you're not going to hit that home run right.

437

01:07:14.910 --> 01:07:31.590

Chang Hee Kim: So I mean I when I put myself out there, I went to a Shark Tank pitch competition at the American Gastroenterology Association and I never did such competition before, but I was really pleasantly surprised I won the whole competition.

438

01:07:35.760 --> 01:07:42.840

Chang Hee Kim: Yeah so and then I did another one at the Tropical Medicine conference and came in second place so.

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01:07:44.160 --> 01:07:49.050

Chang Hee Kim: I think it's important to believe in your vision, and you know get yourself out there.

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01:07:51.060 --> 01:07:52.290

Chang Hee Kim: That's my advice.

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01:07:52.500 --> 01:08:02.940

Lili Portilla: That's great yep all right, well, I think we're gonna wrap things up, and I want to thank Chris Lena chunky for your time today.

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01:08:03.990 --> 01:08:13.710

Lili Portilla: really appreciate it, and for the audience for hanging in there, I think it was a great discussion and a wonderful way to commemorate our 10, 10 years that we've been.

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01:08:14.520 --> 01:08:24.180

Lili Portilla: running this program out of NCATS and you know, hopefully 10 more years as well too. Right? Maybe not necessarily with me but 10 years so yeah.

444

01:08:25.980 --> 01:08:26.670

Christopher Gibson: Congrats Lili.

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01:08:26.760 --> 01:08:39.870

Lena Wu: Right yeah this has been a great program really super important for many entrepreneurs to thank you for doing this and for doing such a great job at leading the organization.

446

01:08:40.770 --> 01:08:48.930

Lili Portilla: Great. Yeah Thank you so much, and I wish everyone happy holidays and a very happy new year as well, too, so thank you.

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01:08:50.100 --> 01:08:50.730

Monique LaRocque: Thank you , everyone.

448

01:08:51.060 --> 01:08:51.450

Chang Hee Kim: Thank you.