Phase I Commercialization Support: I-Corps at NIH Program Webinar Transcript

January 17, 2024

Eric Padmore: Good afternoon, and welcome to the I-Corps at NIH webinar. I am Eric Padmore, Senior Advisor for Entrepreneurial Development with the Small Business Entrepreneurial Education and Development Office, or SEED, as we call it, at the NIH. And we'd like to welcome to you to the session. And let me begin with just a couple of housekeeping notes and that is that much of the information that we are going to share with you this afternoon is located on our website where you see seed.nih.gov. And in particular, this is around current SBIR and STTR awardees, which you see there in the center of the screen at the bottom. We'd also ask that if you have questions at any point during the presentation this afternoon that you enter those questions into the Q and A, which you will see either to the side or to the top of your screen. Please don't enter them in the chat. We are monitoring the Q and A, and we will have a moderator relay those questions to us in about a half an hour as we complete the formal part of the presentation.

In terms of our setup this afternoon, I'm going to take about 20 minutes to give you a general overview of the program itself, and then we have a guest speaker, who I'm happy to say is an alum of the program and who will share particular insights based on their experience, having gone through this in our second most recent cohort, which was the spring of 2023. So with that, let me start by saying that the funding opportunity announcement for I-Corps is in PAR-22-073, which gives you all of the information, again, that I'm about to share and then some additional details in terms of the participating institutes and centers, which includes some components of the CDC. A further notice with the dates relevant for 2024 are in NOT-OD-23-188. And let me also say that these slides will be shared with participants who signed up after this presentation, so you will have this information available to you.

It's not necessary to try to copy it all down.

Hopefully your aware that the deadline for our upcoming cohort will be January 31st, and that deadline is 5 p.m. your local time. So whether you're on the West Coast or you're in Central, it's 5 p.m. your time on that Wednesday to get your application in. And again, the more information can be had at the website that you see there. So to start, let's talk about what I-Corps at NIH is all about, and it's really focused on empowering entrepreneurs and helping you to validate strategic business models through diverse customer discovery in order to meet unmet clinical needs.

It's designed to enable and accelerate the transformation from invention to actual product with impact. And so we have designed it to really create an innovation ecosystem where entrepreneurs can approach health care problems through data-driven decision making and avoid some of the pitfalls that lead to 50 percent of health care start-ups failing after the first 6 years. So you see the outcome goals there on that slide, and now I'm going to walk you through how this program actually helps you to do that. So as you see here, one of the principal things that happens in your involvement with the I-Corps program is defining the value proposition for your product or technology.

In order to save time and money in R and D only to find at the end of it that you don't actually have a market for what you've developed. You're also assessing your intellectual property and regulatory risk, so we're helping you to understand what your competitive landscape looks like and whether or not there are actually any significant barriers to entry from the regulatory side or from the IP side in moving your product towards commercialization. And then you're also gathering information from strategic partners or potential strategic partners and other stakeholders so that you understand the opportunities to develop partnerships, collaborations or exits before, again, develop ... delving into the science and spending significant resources or potentially opportunities that are not there.

Now, the eligibility for this program, and I'm going to cover this in a couple of slides, but again, this is laid out in quite some detail in the funding opportunity announcement. You must have an active Phase I SBIR or STTR from the participating ICs or offices of the CDC that are listed on the notice of funding award. You have to be in ... You can be in a Fast Track award only if you're still within the Phase I component of that award, and you're only eligible for one supplement application per parent of the

extant SBIR/STTR Phase I. There are some instances, and again, I would refer you to the funding opportunity announcement to identify those Phase I contractors who, within their contract, have an I-Corps at NIH options, and you would apply to exercise that option through the acquisition office of your extant institute or center. In some cases, some ICs will allow Phase I awardees who go into a no-cost extension to apply, but that's on a case-by-case basis. So the best thing to do there is to speak to your sponsoring program officer to determine whether or not their IC will allow you to be in a no-cost extension while in I Corps or whether or not they don't support that particular facet of it at all.

The bottom line there being that Phase II, direct to Phase II or entities that are in the Phase II component of their Fast Track awards are not eligible for this program. So in this instance, we're talking about what the program requirements are. And where I want to draw your attention here is around the composition of the team, and we get asked a lot of questions about what this looks like. So as you see in that diagram in the center of the page, technically, or, rather, typically, I'm sorry, there is a technical expert on the team who is the assigned principal investigator on the Phase I award.

There is a C-Level officer. That can be a CEO, a CFO or anyone of that ilk who has decision-making authority and who is focused on the business end of the company's development. And then an industry expert who is really functioning as an advisor, someone who has prior business development expertise in your target industry. And they may or may not have a formal relationship with your company in that they may be a board member, they may be a consultant advisor, or they just may be someone who steps in in a mentorship role, and we tend to see a lot of that from folks who are recently retired and just looking to give back to areas of science where they have their own personal link.

Now, that structure, as I laid it out, does have a lot of flexibility to it, and what this chart is showing you is that, for example, if the PI on the extant Phase I award also functions as the C-Level executive within the company, they may be the CEO. They may be the individual who spun it out. Then, it is perfectly acceptable to add a second person. In many cases, we tend to see someone like a postdoctoral candidate who has familiarity and has been involved in the scientific development of the project to come in and act as that technical lead. And then, again, the industry expert can be someone else within the company, as I laid out, playing a different ... a number of different roles so long as they have the

kind of background that is going to serve your efforts in understanding the marketplace as you work through the permit. Oh. Now, in terms of the format of the program, typically teams will fall into one of the three diagnostic, therapeutic of medical device track that you see at the top of the slide. And within those tracks, we have organized the teaching teams around industry domain experts in those three areas and I-Corps note instructors who have specific knowledge, expertise and who have been teaching the I-Corps program to really understand customer discovery and lean launch pad.

But in the case of I-Corps at NIH, these tracks and the instructors are ... have tailored the curricula specifically to the life science. So if you have, for example, previously done an I-Corps program at the National Science Foundation or any of the regional nodes that exist around the country, what you will find about I-Corps at NIH is that specific life science curriculum and knowledge that is not common to programs that you might encounter elsewhere. So the course format, again, is a 3-day kickoff event followed by six weekly virtual classes, webinar series and then a 2-day lesson learned closeout that happens at the end of the program in which we will be, in this case, with this upcoming cohort, bringing you back to Bethesda, Maryland to interact with other members of your cohort.

The budget and, again, information that is readily available in the funding opportunity announcement, can be up to $55,000, and it requires, as you will see in the application, a budget justification. Of that $22,000 is mandatory for course registration, so that goes to our vendor partner, the folks who actually run this program for us, and the remainder of the funding covers what you see in the allowable expenses listed beneath there in terms of personnel time, travel and so forth. You can see also that we've got a couple of things. We could ask questions about purchasing additional equipment. That is not allowed as part of this program. And I would, again, recommend that you ... As you put together your budget justification to reach out to your program officers that you're sponsoring at IC for additional guidance on what they are willing to accept as expenses in the ... in your budget.

So again, the program dates, application due date, you see at the top there January 31st. After we receive those applications, there is some first-line processing and review, and then from all the applications that we see, we conduct screening phone interviews with each of the applicant teams. All members of the team are required to be part of that interview, and those typically happen over a

2-day period. So you see here we've blocked out March 11th and 12th in order to do those, and then within about 3 weeks, we notify the folks who have successfully been admitted to the program and then queue up for a course kickoff, which will happen May 6th through 9th in San Diego, California this year. The additional dates for the webinars and the close-out are also shown there. So just a quick work about expectations, once folks are admitted into the program, we expect that between 20 to 25 hours a week in terms of homework, interview time for each member of the team is required over that 8-week period.

And so we ask folks before they even apply to look at those dates, make sure that they have the time to commit to this because it is a very intense and immersive program, and it is not a situation where, 2 weeks in, you can say, "Oh, I had scheduled my family vacation, my kids' spring break," excuse me, "and I need to be absent." So again, it's very important for full participation. We kick off webinars and the 2-day close-out, and the requirement is a hard on that you conduct at least 100 customer discovery interview and then develop a 2-minute presentation video and a lesson-learned presentation to close out the program.

So at this point, it is my pleasure to introduce Mr. Steve Waddell, who is president and CEO of Nasoni. Steve and his team were participants in the spring cohort of I-Corps at NIH in 2023, and I invite Steve now to share a little with you about his experience in the program and the kind of benefits that the Nasoni team took away from it. Steve?

Steve Waddell: Thanks, Eric. I really appreciate it. Will you be advancing the slides? Yeah, okay. Eric

Eric Padmore: Yeah. I've got you.

Steve Waddell: So when Eric says, "It's an immersive event," he really means it. It really is. But it is very, very rewarding. So when we first learned that we were going to be accepted into the program, we started lining up interviews before we started. Getting to 100-plus interviews in 8 weeks is challenging. But it means ... It does require your full dedication. None of us had vacations planned. We made sure we dedicated our time appropriately, that those 8 weeks were committed completely to this program because it does. It yields extremely valuable information for your project. The best way to learn about whether you're going to be a hit in your target market is to talk to them. And that's what

you're going to get out of this. It's extremely important. One of the things that we found really valuable is the Fireflies Notetaker app. That's just a ... There are others maybe out there on the web. The one we found is this one, and whenever we had interviews, this app would log in with us in Zoom, and it would automatically capture all the things that were said, and it would summarize them for us. And you can see in the image it's the very top one, says I-Corps Discovery Call, NIH I-Corps. We interviewed. You've can see interviews below that. But all of those are interviews, and we could go back to those because you're not going to ... Taking notes is extremely important when you have these calls. You're not going to remember what is said, so you have to do that. So if you're interviewing someone and you have to write it down yourself, you're not going to have time to do that. You have to have someone, a second person, in the interview. And they'll coach you through this in the program. But having this app was really, really helpful. Next slide, please.

Be open to changing customer focus. Why? Because you're going to learn in this program that maybe who you thought was your target customer is not. That's the whole point of this. Learning is key, and being flexible and adaptable is crucial because we learned in the program that who we thought was going to be our beachhead market was not. Next slide. Expect the unexpected. So I say this to be ready for spontaneous opportunities. You've heard Eric say that there is money in the budget for conferences and things like that. Well, as we were interviewing customers, there was one we were interviewing in California on a ... perhaps a Wednesday, and they said, "Oh. Guess what? There is this conference called Ability One. It's happening in California starting on Friday and running through the weekend." So Thursday was our report out with our advisor, and as we talked to her, she goes, "You need to be at that conference." So I had to cancel plans for Friday, schedule a flight to California from Virginia and fly out that Friday and then attend the event over the weekend.

Now, again, part of the unexpected was I'm standing in the registration line, and while I'm waiting for it to open, because I like to be early, I'm telling the lady why I'm there. I'm there to interview potential customers for the product. We're part of an NIH program. So she asks me to step aside for a minute, and next thing you know, the conference event president came up to me, and he said, "You can't come in here and interview our customers. If you want to do that, you need to buy a booth."

So that was totally unexpected. Just a heads-up and a lesson learned: If you're going to do these things and interview people, make sure they're going to allow it. But needless to say, I was able to go ahead and attend the event and do it discreetly, do those interviews discreetly. But again, as a word of warning, make sure you talk to them and make sure it's okay. Another thing you're going to learn in this program is, you're going to get the use, the free use, of software called the business model canvas tool. And you're going to come up with hypotheses around the nine key areas of the business model canvas.

The two most important areas at first to focus on, in my opinion, are the customer segments and your value proposition. They need to align. What is it you're proposing, and to what customer? And the cool thing about this is, you get the use of the business model canvas tool for six months for free after the I-Corps program ends. So it's a great tool to use. And I'll also add this, that every week, as you interview customers, you need to be validating those hypotheses and making sure they don't need to change. You're going to end up changing a lot of them, and it's not a problem. There's nothing wrong with doing that. In fact, you want to do that because you're trying to come up with, what are the correct hypotheses for your product or [Indistinct] or whatever you're building here? Next slide.

Maximizing office hours, you get office hours time with the advisors, and I want ... I highly recommend you take full advantage of these office hours. I don't know, Eric, if it's the same ... It is Dave Chesam? No. What was his name? Jerome ...

Eric Padmore: No. There will be different ...

Steve Waddell: Okay. Okay.

Eric Padmore: ... advisors for each cohort.

Steve Waddell: Got it. Okay. So either way, take full advantage of the advisors, and use all of them because every one of them can bring a different perspective. At least, that's what we learned as we met with them. And we discovered unique insights from each of their specializations. They were outstanding, and we learned a lot in talking with them. And talk with them about your canvas. Walk through your hypotheses, and sometimes they can help you see it from a different light because you've

been so close to it, forest-for-the-trees type of thing, maybe you don't recognize something, and they can help you see things differently. Next slide. Unexpected insights from customer interviews, as you go through this, interviews can reveal surprising needs. So, for example, what Nasoni is producing is a smart sensor fountain faucet for spinal-cord-injured patients to help them live more independently. And we were interviewing a rapper that was shot in the neck in 1988 and became a quadriplegic. And one of the things he told us was, "I don't need your faucet in the morning to really help me as I prepare for the day. But in the wintertime, throughout the day, I'm always freezing. I can never warm my core, and your faucet would be a lifesaver because I could get warm water any time I wanted it."

And so for me, that was fantastic because we never thought about having warm water come out the fountain mode. And so unseen opportunity came up from this customer interview. And so it was a unique contribution. The other thing is, he was so excited about this solution that he actually wrote a rap song about our faucet. That was just, I think, an NIH first. Next. Another thing you're going to learn about is storytelling and three-part story structure. You're going to get this in the training. There's a beginning of the setup and the middle and the end. And you're going to create a graphic like this.

And in the beginning for us, our mission was for Nasoni to make lives easier. The inciting incident was we were ecstatic because we were accepted for I-Corps. An exampl4e of the doubts, when we interviewed Richard Gaskins, the rapper, we learned that he was low-income and couldn't afford a faucet like this because of Medicaid limitations. And so there's other obstacles that you build along the way. You can't find that win-win [Indistinct] our disaster and crisis. And then all of a sudden, we interviewed some new customers, and we learned of a twist, that, oh, maybe we could work with the VA because they end up having anywhere like $5,000 for bathroom remodel budgets. And so the VA became our beachhead, the Veteran Affairs Administration. And now, we're starting to see this falling action because it's ... We're going to reach our end, our resolution, because we're coming up with a new beachhead.

But it didn't happen until we were able to interview people. And the reason we interviewed the VA was actually because I was at a conference in Florida, and I just sat down with our faucet at a table, and people walked by me. And a guy that walked by stopped and asked me what it was, and I talked to

him, and he worked for the VA in Richmond, and he worked in their assisted living department or assisted technology department. And that's how I got my introduction to the VA, was by being at that conference. So get out there and meet with people at the conferences related to your ... whatever your subject matter is, and it will pay off. It will help. So we attended ... I attended one of the Florida and one in California. I flew quite a bit during this 8-week period. Next slide, please.

This is the ... At the end of this, you're going to be asked to produce a video of your experience for the program and what you learned. And this is the one we created. Now, they're going to give you some other examples in the video. I thought it might be interesting for you to get to see this going in. And I'll give you another tip. I don't have the necessary video skills. I used Final Cut Pro on a Mac, but I hired a guy on Fiverr to help me clean it up and make it look nice, so that's a tip for you. Find a good Fiverr expert on ... that can help you clean your video up. Eric, you want to go ahead and play the video?

Eric Padmore: Okay.

Steve Waddell: Sound is not coming through. Might have to share sound again.

Eric Padmore: Give me one moment. [Indistinct] from the slide again.

Steve Waddell: No, no sound. Were you able to share computer sound in the upper right?

Eric Padmore: Is that still not coming through?

Steve Waddell: No, sir.

Eric Padmore: Okay. Let's try one more. Not happening, though. Okay. Well, we seem to be having a little technical problem here unfortunately. But we will be able to share the video with the other materials once we post them after the presentation today. So hopefully you'll be able to see that and enjoy the work that Steve and his team did in putting that together. But, Steve, thank you for sharing your thoughts and insights with us this afternoon, and I think it's very helpful for some of the other applicants to understand what you and your team were able to accomplish as part of this program.

Steve Waddell: I just want to say it's an incredible opportunity. Don't miss it. It's great.

Eric Padmore: Thank you. So at this point, I think we are open for questions. So if I could ask my colleague, Chris Sasiela, to cue those up for us, and we'll try to get you responses for the rest of the program here.

Chris Sasiela: Excellent. I've got you. Okay, so we have a couple of questions that all focus on eligibility, and I'm going to give them to you sort of as a group because I think you can answer them all at once. So the questions are, are contract awardees eligible to participate or AFWERX awardees of a Phase I through the Air Force program eligible to participate? Are people with no courage award who are very interested in a program eligible to apply? And are people who are or companies that are planning to apply for a Phase I in the April 6th receipt date eligible to apply?

Eric Padmore: Okay, so the short answer to that is that you must have a currently active Phase I from the NIH or the CDC to be part of this program. So if your Air Force or some of the other government organizations that do support SBIR/STTR, you are not eligible for this particular program. Contractors, there are some contractors, particularly through those through the National Cancer Institute who have as part of their contract award the option to exercise an I-Corps at NIH clause.

And if ... So if you have an NCI contract, check with your acquisitions officer, and they can help you understand whether or not your particular instrument includes that. there are a couple of other institutes that support contractors come into the I-Corps program, and again, it's best to check with your individual sponsoring institute to determine whether or not you're eligible. But bottom line is active Phase I I-Corps or rather NIH CDC, if you are an applicant and you don't have yet a Phase I award, then, no, you can't come into the program.

Chris Sasiela: Excellent, and just for complete clarity, can you define the bounds of what is an active award?

Eric Padmore: So an active award means that you are still within the Phase I project period. As I said, in some instances, your institute may allow you to go into a no-cost extension which is exactly what it sounds like. They will extend your project period with no additional funding to allow your project period to cover the duration of the I-Corps program, but that's on a case-by-case basis, institute by

institute. So again, you need to go back to your program officer and ask whether or not they will allow that accommodation for you if your Phase I project period were to expire at any time during the duration of this cohort of I-Corps.

Chris Sasiela: Excellent. Thank you very much. We have a number of questions about the budget. And so two questions that are very related. It was very clear that the $22,000 is used to pay the contractor, VentureWell. Does that mean ... What do you do with that other $33,000? How does that get justified, and how are indirect costs integrated into that?

Eric Padmore: Yeah ...

Chris Sasiela: Or are they?

Eric Padmore: Sorry?

Chris Sasiela: Or are they?

Eric Padmore: Typically, they are not. So you would bill the remainder of that $33,000 budget with a justification. We do have examples of the application as part of the SEED website and the specific page relating to the I-Corps program. I wonder, Steve, if I just might ask you to interject and reflect on how you put your budget together and what your key considerations were because that might be more helpful, to hear from somebody who did it themselves.

Steve Waddell: Sure, sure. A couple of it was dedicated toward travel. We also needed it for time spent, and so we had labor hours into it. And then I saw ... And I see a question in the list that says, "Does it have to be a three-member team? Can it be two members, specifically when the PI is the CEO?" I am the PI. I'm also the CEO, and I had two people, but I went out, and I used the budget to hire a researcher, that expert in the research that needed to be done. And she was our expert that we brought into the team, and budget was set aside for her time as well, and she was such a fantastic new member that we've kept her on after that.

Eric Padmore: Yeah. And let me just address that three-member question. It does have to be a three-member team. So as Steve said, if you ... And that's, if you recall the example that I had up on the slide, where we had that little matrix going. If you do have a PI who is also serving as a C-suite executive in

your company then you're going to want to add an additional person and either have them fill the business role if the PI wants to stay as the technical expert. Or, as I mentioned earlier, if you have, say, a post-doc who's been integrally involved in developing the technology, they can be the technical lead, and the PI then serves as the corporate officer within the team, but it does have to be a three-person team.

Steve Waddell: And then I'll add to that, Eric, if I can. Doing those 100-plus interviews, you're going to want three people because it helps.

Eric Padmore: Thank you, Steve. Chris, back to you.

Chris Sasiela: Excellent, thank you. There is another question about the team. Do all team members need to be US citizens or residents?

Eric Padmore: Residents, yes.

Chris Sasiela: So the work must be done by people residing within the US?

Eric Padmore: Yes.

Chris Sasiela: Perfect. At this point, the questions are coming in thick and heavy, so I'm just going to start reading through whereas the ones that we've already kind of grouped have came in earlier. Steve, what was the name of that note-taking app that you used?

Steve Waddell: Fireflies. Fireflies.

Chris Sasiela: Fireflies, perfect. Thank you.

Steve Waddell: Sure.

Chris Sasiela: Is it possible to do the final 2-day closeout session virtually?

Eric Padmore: No.

Chris Sasiela: Well, that was very clear. Thank you. For a SEED-stage therapeutic development company, do customers include investors from private capital?

Eric Padmore: Typically, if you're looking at a Phase I, you might be putting the cart before the horse a

little bit. Obviously as you develop that slate of 100 interviewers and your stakeholders, downstream financing is part of that conversation. So I'm not saying no, but it's not typically where folks tend to spend a great deal of that effort. You're really focusing on customer discovery for the product itself and making sure that your business hypothesis has been validated in the marketplace. So that's how I would answer that question.

Chris Sasiela: Excellent, thank you. And can you clarify again, please, who do people need to reach out to if they are currently on a no-cost extension and would like to participate in this program?

Eric Padmore: Yeah. So if you look at your Notice of Award for your predicate Phase I, there will be a program officer and most likely a grant specialist who are managing your award listed at the bottom or towards the end of that Notice of Award, and I would contact both of those individuals to ascertain your status and see if there's an opportunity for your project period to be extended.

Chris Sasiela: Thank you. We have some folks who are not developing therapeutics or medical devices but perhaps are developing education-focused or research tools or other types of technologies. How reasonable a fit are they for the I-Corps program?

Eric Padmore: Yes, all comers. So we have any number of digital medicine applications, platform tools. Anything that's eligible for a Phase I award is perfectly reasonable to come into the program. And helping to identify who the customers and the markets are for those types of tools and other instruments is exactly what the program is designed to do.

Chris Sasiela: Excellent. We have a question. Is January 31st, 2024, the only date for application?

Eric Padmore: For this round, yes. There will be ... Well, I say that because we haven't yet got our FY 2025 budget in place yet. So there is an additional date for National Cancer Institute SBIR app ... or awards which will happen later in the year, but those are specific to NCI only, and those are articulated ... Those dates are articulated on the PAR announcement that I referred to earlier.

Chris Sasiela: Thank you very much. You mentioned that grantees are only eligible for one supplement. Would participation in I-Corps prevent a company from applying, for instance, for a diversity supplement?

Eric Padmore: No. So that was in reference to you can only do this program once, essentially, as part of your Phase I. So again, your program officer and grant management specialist at your predicate institute will help clarify that.

Chris Sasiela: Thank you. We have some other companies who may have one currently active Phase I award or a given indication but have applied for additional Phase I applications to cover other indications. Can they apply for multiple indications, or must their application and work focus on just the one current active project?

Eric Padmore: It is for your current active project.

Chris Sasiela: Excellent. Thank you. For, I'm sorry, one more level of clarification in terms of what active means, does active mean that you have received your Notice of Award, or does it mean that the project must be already running and receiving funds?

Eric Padmore: Okay, now we're getting into the fuzzy stuff. So if you have a Notice of Award that has a project period defined, so a start date and an end date for that first award period, I think generally speaking that would be considered active. But again, talking to your program official at your sponsoring institute will make it definitively clear, right? So at the point that you get a Notice of Award, I believe you're good to go. That's a green light. But just to make sure, it's best to check in with your program officer.

Chris Sasiela: Always excellent advice. Can you give us an idea of what the success rate is for acceptance into the I-Corps program?

Eric Padmore: So that's not something we typically calculate. What I can tell you is that we take up to 24 teams per cohort, and we normally get between 30 and 40 applications, at least in the initial draw. Some of those folks, as it turns out, will not have listened to webinars like this one. So they'll be coming in with a Phase II application. They get tossed out. Some of them come in with problems on their grant. They haven't submitted their progress reports, so their program officers turn them down. So normally we're not oversubscribed by the end of the day for those 20 to 24, and then we look at those carefully to determine whether or not they're ready to come in, and that's really on a case-by-case basis, the

composition of the team. Are they committed to putting in the hours? Because you'd be surprised how many people come in and say, "Well, I'd love to do this, but I only have 5 hours a week to dedicate to it." And our response is, well, if you go back and read the announcement, we clearly say 20 to 25. So those are the kinds of things that tend to get people knocked out. Most people who apply, if they don't have those issues, will be successful in getting it.

Chris Sasiela: Wonderful. Thank you. I think this is a great question for Steve, not because the start of it is going to make sense, but the second part will. Someone is asking, "We have a drug product. Our customers are pharma companies. We will not be able to get 100 interviews with them. I wonder how we're going to get any interviews." Do you have any insights you'd like to share, Steve?

Steve Waddell: Yeah, that's a great question. You need to think about it holistically. You're thinking just, "Okay, who I'm going to sell to." But you got to also interview key partners, right? You got to have key partners in your product development life cycle. You'll be interviewing them as well, and so think more broadly of your customers. Who are your customer's customer that might be the end user of that, right? So there's multiple layers here that you'll need to look into, and your team that teaches you will help you understand that.

Eric Padmore: Yeah, well said, Steve. That's absolutely correct, and a lot of times people will come into this program with a product, and they don't think about payers, right? So insurance companies, they're going to have a lot to say about whether or not whatever your innovation is, is going to be covered under their plan, so drugs in particular. So those are the kind of folks that maybe you're not thinking of right now but that the instructors will guide you through that process and help you figure out how to round out that plate of 100 interviews that you need to conduct.

Chris Sasiela: Okay. The ... We're getting a couple of questions about the industry expert, and so questions that are covered here. First off, does the full team need to travel to the kickoff event? And then to bring in that third person, that industry expert, could they be, for instance, a subcontractor from the Phase I award, or do they need to be outside of the company? Can the additional $33,000 that isn't going to the contractor for the services of running the program ... Can that be used to hire an industry expert?

Eric Padmore: Yeah. So again ... Sorry, Chris, repeat the first part of what you asked with ...

Chris Sasiela: The first part was, does everyone need to travel to the kickoff event?

Eric Padmore: Oh, yeah. Yes. Yes. So the full team does need to be at the kickoff. The full team needs to participate in the weekly webinars, and the full teams needs to come to the closeout event. So it's 100 percent all-in, all the time. In terms of the industry expert, as I said, how that person relates to your company and what role they have in the company is really up to you. So if you want to divert ... No, divert is the wrong word. But if you want to utilize those funds for somebody who may be a subcontractor but who has broad industry expertise that you want to utilize as part of this program, and they're integral in moving your project forward, then that's an option that you may choose to take.

So how you define that really comes out in your budget justification, and that's why that's important. So in the application it's not just, "Oh, we're going to pay so-and-so to be our industry expert." You have to justify that to a level that your program officer and grant specialist are comfortable in green lighting that for you. So I'm going to sound like a broken record. Talk to your program officer first. Tell them what you're thinking about doing and let them guide that through your process because different institutes at the NIH ... this may come as a shock to you ... like to do things differently. So in each case, they have a different set of internal policies that guide them through this kind of effort.

Steve Waddell: And, Eric, I did just that. I talked to my program officer, told him our plan, and we did bring in that expert that helped us get through it. And she has, again, stayed on with us beyond the program.

Eric Padmore: Yeah. That's the way to do it.

Chris Sasiela: Excellent. Just for clarity, does that industry expert need to be working in industry at the time that they participate in the I-Corps team, or can they be retired or have research experience?

Eric Padmore: The latter. We have many instances where we have retired folks, former pharma executives, people who have exited out of their own start-ups and made enough money that they can sit back and be beneficent with their time and their knowledge. So, so long as they have the background and understanding of your market space, that's what's key, but they don't have to be

actively employed, as it were, in that space at present.

Chris Sasiela: Wonderful. Next question, will the NCI I-Corps program this year be open to both STTR and SBIR awardees or only to SBIR awardees?

Eric Padmore: That I cannot answer directly myself. I would refer you to Dr. Saroj Regmi, whose name is on the funding opportunity announcement, and maybe I can ask Vicki or one of our other staffs to drop his contact information into the chat. But he is the I-Corps program director at NCI which does a little bit of their own thing, and he'd be able to answer that question directly for you.

Chris Sasiela: Wonderful. Next question, does the entire budget need to be utilized before the end of the program or the closeout meeting?

Eric Padmore: Yeah, that's ... Nobody has ever asked that question before. I would think so. I'm not quite sure what you would do with it after the program ends, but again, in your budget justification, you're going to detail exactly what your plans are for that. And the idea is that you complete the interviews. You complete your market analysis over the course of the 8 weeks. So I can't imagine why you would have residual budgets after the program is completed.

Chris Sasiela: Wonderful. Perhaps, Steve, you can address, what recommendations do you have for finding an appropriate industry expert?

Steve Waddell: Great question. So I have a couple of resources you can consider. One is the SBA, the Service Corps of Retired Executives. Have you heard of SCORE? You can do a lookup in SCORE and find experts in different fields. That's one way. Another way is, I actually found our expert researcher on Upwork. Upwork is a freelancer website, and I found her there. We developed a relationship, like I said, and after interviewing her, I found out she had the background we exactly needed. But Service Corps of Retired Executives, SCORE, is another place, too, that you can look.

Chris Sasiela: Excellent.

Eric Padmore: Yeah, there are also regional Small Business Development Centers. The website for that is americassbdc.org, so as all one string, and that's a site where you can find local no-cost business

consulting, business training. And often they will have lists of industry experts that you can contact and reach out to, who may be willing to serve as your industry expert.

Steve Waddell: The SCORE program is score.org.

Chris Sasiela: Well, that's an easy one to remember. So I'm really excited about this program, and I want to increase my chances of getting in. Can I have all of my team members apply?

Eric Padmore: I'm not sure what you're referring to there. It's one application, and typically the PI or lead corporate person will submit that application. You will include the names of your team members as part of that, and you'll see the structure of the application. They ask you for that information. So, no, it's not like a lottery, where putting in ... In fact, I don't think the system will allow you to submit more than one application ...

Steve Waddell: Well, it's tied to your grant, right, Eric?

Eric Padmore: Right.

Steve Waddell: So it's ...

Eric Padmore: It's tied to your grant. So if your question is, "Is it like a lottery? Do I buy more tickets?" The answer is no. You only buy one ticket.

Chris Sasiela: Perfect. And for complete clarity, each of those three members of the team are expected to put in 20 to 25 hours a week, correct?

Eric Padmore: Yes.

Chris Sasiela: Okay.

Eric Padmore: At a minimum.

Chris Sasiela: At a minimum, oh, my. We're getting strict here.

Eric Padmore: Am I lying, Steve?

Steve Waddell: No! And that's because all the 100 interviews, 100-plus. We actually ended up doing over 120, and that's not anywhere near the record.

There are people that had done more than that but ...

Eric Padmore: Yeah, I think the record is 200 but ...

Steve Waddell: Yeah!

Eric Padmore: ... they were a little over the top. They got carried away.

Steve Waddell: It's well worth it. It's well worth it, though.

Eric Padmore: Yeah.

Chris Sasiela: Well, that brings up a question that we have here which is, what happens if we can't find 100 interviews, let alone go beyond it?

Eric Padmore: Somehow everybody seems to make it, and some people push it to the wire, but they get there. So have faith, confidence and a vision and believe in yourself.

Chris Sasiela: Excellent.

Steve Waddell: And when you do your interviews, ask your interviewee if there's other people they know that you might interview. Sometimes you can get more referrals that way of people to interview.

Chris Sasiela: That is an excellent suggestion. Is it allowable to ... Are costs allowed to pay interviewees or is this something ...

Eric Padmore: No.

Chris Sasiela: ... that people commonly do?

Eric Padmore: No. No, and that is the one thing we discourage. We do not want you to pay people, and it's not uncommon, particularly in clinical settings where you're trying to talk to surgeons or other practitioners who are on a procedure-based reimbursement situation, where they say, "Well, if you want me to take an hour out to talk to you, that means" ... Yeah, and you just have to use your persuasive skills, but we do not typically allow that.

Chris Sasiela: So that brings up the question of, Steve, how long would you say each interview lasted?

Steve Waddell: Well, we tried to keep it about 20 minutes. They've gone longer. They've gone maybe

15, but generally we were run 20 to 30 minutes, is what we were doing for the most part because, again, you're using valuable time from them, and that's how it worked out. But some people talked to us longer.

Chris Sasiela: That's great. So we have a couple of questions that I know we answered earlier, but people may not have heard the correct answer so ... or have heard the answer when it was originally given. So I want to just re-ask these two questions. First is, are there indirects for the supplement, like on the parent SBIR? Is there an indirect rate?

Eric Padmore: There is not, and I will confirm that, but I believe it is the case, that they are not in that.

Chris Sasiela: Okay, great. And there is a company on the line who submitted on January 5th, and they want to know can they apply now even though they haven't heard about getting a Notice of Award yet?

Eric Padmore: I'm sorry. They submitted their ...

Chris Sasiela: They submitted for the January 5th receipt date, last Friday.

Eric Padmore: Oh, for the Phase I.

Chris Sasiela: And even if they don't move forward with receiving a NIH award, is there a way that they could still apply to I-Corps separately?

Eric Padmore: No. No, you would need to have Notice of Award for your active Phase I before you can apply.

Steve Waddell: And part of the reason, I guess, Eric, is that's a supplement to the award.

Eric Padmore: Precisely, yeah.

Chris Sasiela: Excellent.

Eric Padmore: Yeah, but more importantly, programmatically, we want people who are in a Phase I, developing their Phase I and moving towards Phase II and their commercialization plan, which is really what this informs, right? So it's ... Think of it that way. We're helping you to make that bridge towards your Phase II by putting you through this program as part of your Phase I.

Chris Sasiela: Okay, I recognize we have only about 2 1/2 minutes remaining, but I really would like Steve to be able to answer this question. Can you help us understand how to approach the interviewees? What sorts of questions should we be asking? And what information do we really want to extract from these interviews?

Steve Waddell: Well, that's a loaded question.

Chris Sasiela: I know, and you only have 2 minutes to answer it.

Eric Padmore: Well, let me take a little pressure off of Steve by saying that that's exactly what the I-Corps instructors and what your one-on-one sessions with them is focused on, right? So they're helping you to craft those questions. They're looking at your business hypothesis and saying, "Here's how you're going to frame this in such a way that's going to help you answer whether or not this hypothesis is valid." So that's part of the answer to the question, but, Steve, if you want to throw in there, feel free.

Steve Waddell: If I could share one thing with everybody, this is the business model canvas. This is an example, right? There are nine areas. Customer segments and value propositions are your most important. What is it ... Who are my customers I'm going to target, and what is it that I'm going to offer them? So your questions, you're going to develop hypotheses for each of these nine blocks. And what you're going to learn is, right, desirability ... That's in this green area.

Do my customers want it? Feasibility, can I deliver it? And viability, cost structure and revenue streams. So as you talk to your customers, these are things you're going to be fleshing out. So that's why you're going to have different questions, and it's all around all of these areas, but you'll start with value proposition and customer segment. I know we're about out of time, so I won't spend much time on it.

Eric Padmore: Yeah. Yeah, so let me, just to wrap things up there ... Unless, Chris, you had anything that was really burning that we need to do in the last 30 seconds.

Chris Sasiela: I don't think there's anything that is specifically burning that cannot be addressed when the materials are posted.

Eric Padmore: Okay, great. Well, Chris, thank you for assisting us as our quiz master today, always appreciate your assistance. Steve, again, many thanks to you for stepping in and speaking from the perspective of a participant and one of our more illustrious alums in the program. And to everybody, again, we will be sharing the slide material with the folks who registered for our webinar today. We thank you, and please reach out, direct your questions to the email at the ... Actually, I guess I should throw that slide up at the bottom here. Just let me do that real quickly.

And we'll take you to the end here. So there we go. So you can see on that slide you could email us at seedinfo@nih.gov, also at the I-Corps mailbox at icorps@mail.nih.gov, and we'll get this information out to you and remind you again that the application deadline for our upcoming cohort is January 31st. Thank you all for your participation, and that'll end our program for today.