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CHRIS DAVIS: Welcome to the *Career and Academic Resource Center Podcast*. I'm your host, Chris Davis, the Associate Director of the Career and Academic Resource Center here at Harvard Extension School. I had the chance to catch up with two remarkable people to talk a bit about the i-Lab at Harvard University.

As many of you may know, the i-Lab is the central component of the Harvard Innovation Labs, a cross-disciplinary ecosystem for the Harvard community to explore innovation and entrepreneurship. The i-Lab provides advising and subject matter experts to help Harvard students move their startup ideas forward. Harvard Extension School admitted degree candidates in ALB and ALM programs with a minimum eight credit current course registration can schedule virtual office hour appointments with i-Lab coaches, participate in periodic events, and apply to the venture program.

I spoke to Andy Chen, a 2020 graduate of the ALM in bioinformatics program, which is now a retired field. His venture, Matic Biosciences, originated from a student-initiated Faculty Aide project that Andy had initiated with an assistant professor from Harvard's Department of Stem Cell and Regenerative Biology. That project led to the creation of Matic, a biotech venture, led initially through the Alumni Launch Lab. This past spring Andy and Matic won the \$75,000 alumni track grand prize which is awarded in the annual President's Innovation Challenge.

I also spoke with Joanna Smith, a 2016 Harvard Extension School ALB alumna, who is currently an admitted ALM management student. Joanna created AllHere, an edtech startup, at the i-Lab when she was in the ALB program. AllHere combats absenteeism in K through 12 schools throughout the United States using a specialized tech platform.

Since its creation, AllHere has grown considerably. It received nearly a million dollars in federal grant funds in 2018. And since the beginning of the COVID-19 pandemic, AllHere has grown its revenue by 700% and expanded from being in 1,100 schools when the pandemic started to over 8,000 schools nationwide now, while also having received an additional \$8 million in VC funding, a remarkable record. I chatted first with Andy about his work.

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Thank you so much for taking the time. So I wanted to hear how you're doing, and to see how Matic is doing, and to talk a little bit about what the journey for that was like, your work there, what your next steps are, winning the President's Innovation Challenge, a little bit of what that's like. So yeah, tell me a little bit about-- so you graduated last year with your ALM in bioinformatics if I'm--

ANDY CHEN: That's right.

CHRIS DAVIS: Correct? Yeah. And yeah--

ANDY CHEN: So last year it was offered, I think. They have since converted the program to just the biotechnology program.

CHRIS DAVIS: That is correct. It is now a retired field. Your story is a remarkable one, and you're clearly doing amazing work. And you had connected with-- is her name Professor Whited? How did you-- how do you pronounce her name?

ANDY CHEN: Jessica Whited. That's right.

CHRIS DAVIS: Jessica Whited, OK. Right. So yeah, you had worked as a faculty aide for her, I think, in Fall 2017.

And that's when you had started-- you expressed interest in the i-Lab. And I think that was the first time you had gone there. So how did Matice start? And what is Matice?

ANDY CHEN: Yeah.

CHRIS DAVIS: I watched the pitch video, and I read a little bit about it. But I'd love to hear in your words.

ANDY CHEN: Definitely. So Matice Biosciences is a consumer biotechnology company. And for us, what that means is we are taking-- we're commercializing and translating some of the breakthrough regenerative biology work that we've been doing in the Whited laboratory and turning them into consumer products. So the traditional route that biotechnology affects people in the day to day, like the way that it gets translated is generally in therapeutics, so traditional medicines. But we weren't necessarily interested in that route for a lot of reasons.

One of them is it generally takes, on average, about a billion dollars and 10 years of R&D to turn something into a FDA drug, into a therapeutic. That goes through getting an investigation of new drug, which actually, there's drug discovery. And there's drug development, in which you have in vitro, in vivo, ADME-Tox, pharmacodynamics-- pharmacodynamics-- in vivo animal work. And then you apply for what's called an investigation of new drug.

And then it goes through phase one, phase two, phase three clinical trials. And then you get either a new drug application for a small molecule or a biologic license application for a biologic drug. And we were trying to see what kind of business models we could play around with that is not in the traditional biopharma route for commercializing our work. And we decided to try to make a very interesting breakthrough business model in consumer biotechnology.

So it's translating some of our work for topical skincare products and some of these other FDA adjacent product categories that will allow us to go to market in the next year or two as opposed to 10 years. So that's what we are. We're a consumer biotechnology company, taking some of these molecules and assets that we've identified from our regenerative biology work and helping human beings regenerate and heal better as well, as a topical skin care or in the future other product categories.

CHRIS DAVIS: So how did-- and as concisely as you can, how did this come about? Did you-- I think you have a partner in Matice, also a Harvard student or a Harvard grad, at this point I think. Did you-- had you approached Dr. Whited and said, this is an idea I have? Or how did this come about?

ANDY CHEN: Yeah. So I had started taking classes at the Extension School in the Fall of 2016, I think. This is right after undergrad. And I had originally had plans to do a bioengineering PhD program in Taiwan. But I also have founded and was running a public health NGO in East Africa, in Kenya.

And so I was going to, after that fall semester of taking classes at the Extension School, go to Kenya to run my NGO, and then go to Taiwan to do my PhD in bioengineering. But the Taiwanese government, the fellowship that was supporting that PhD program, it understandably wanted to fund a student who could be in Taiwan full time and not be jumping back and forth between East Africa. And so I ended up giving up that fellowship and dropped out of-- or dropped out, I didn't attend that PhD program, took classes the Extension School, and then went to Kenya, and they came back.

But before actually, I went to Kenya, one of the first classes I took was a developmental biology course. And one of Professor Whited's papers was a subject of discussion in one of those classes. And she was in-- well, at the time, she wasn't in STRB, which is Stem Cell Regenerative Biology. But she was at BWH and Harvard Medical School.

And so I reached out to her and expressed interest in doing some work in her lab. And the timing wasn't right, because I was about to literally hop on a plane to go to Kenya for a year. But we had kept in touch. And then when I came back, that's when I think I talked to you about using the faculty aide program to become a researcher in the Whited laboratory.

And at the time, I'd already started thinking about ways that we could try to commercialize that work. I had a bit of the entrepreneurial bug in running my NGO. And when I came back, I also became the first hire at c16 Biosciences, which is actually another i-Lab company. But that was my first exposure to for-profit technology venture, and I had gotten that kind of bug.

And so I was working for that company, and I was talking to Jessica. And one of the first things I did when I came back and gone to her lab was set up a meeting with Professor Jeff Karp. He was in her department, and he has a number of companies in his own right.

And yeah, for the next like-- I don't even know what the timeline is, like a year or two years. I was working at the laboratory, doing some bioinformatics works and single cell RNA sequencing work, and applying to various competitions to various programs. And that's sort of how the idea for a company was commercializing some of the work she was doing in her lab came to be.

CHRIS DAVIS: So and now at this point, I think, if I'm not mistaken, I think in your pitch video, you had mentioned a million-five in funding or something along those lines? Is that--

ANDY CHEN: Yeah.

CHRIS DAVIS: Yeah.

ANDY CHEN: So we were in the process of raising our pre-seed round. Most of it's been committed. And yeah, but it's taken us a while to get here. But it's a very exciting place for the company.

CHRIS DAVIS: So what comes next?

ANDY CHEN: We have some consumer clinical trials that we're running over the summer. And then once we get data back from there, we have to work a little bit on our go to market strategy, which is branding, marketing, figure out distribution, finalizing who are vendors are going to be. It's just figuring out all of the supply chain. And then we can launch. We can go to market in Q1, Q2 of 2022, which is pretty cool.

[LAUGHTER]

CHRIS DAVIS: Right around the corner.

ANDY CHEN: Right around the corner. Yeah. And then we'll raise a seed round of financing around that time too, probably. We'll see.

CHRIS DAVIS: Yeah. Well, that's exciting. That sounds wonderful.

ANDY CHEN: Yeah.

CHRIS DAVIS: So is-- yeah, I'm trying-- I mean, you clearly had an idea for this, and it developed over the last couple of years. But would you say that this was kind of a result that you anticipated from starting doing something at the i-Lab? Or did it exceed your expectations? Did it go in a different direction than you would have without that experience?

ANDY CHEN: It was something I had definitely planned from the get-go. However, I had no idea how to do it.

[LAUGHTER]

And there's a lot of falling and, somehow, not falling completely flat on my face. And I guess that's how you learn. So there's a lot of falling, learning by falling, and being in a structured environment like the i-Lab is-- had got me to-- got us to where we are, to a company that seems to actually be running. It lets you speak candidly.

But I think there's nothing that can really prepare you for learning-- for running a company. You just have to kind of do it, but I would say, going through c16 and the i-Lab, and sort of the entrepreneurial community of Cambridge at Harvard and MIT is immensely helpful for preparing yourself. But I don't think anything compares to actually just getting out there and doing it.

CHRIS DAVIS: If you have advice for students who have entrepreneurial desires or specific ideas who are Extension School admitted degree candidates, what would you tell them from your experience?

ANDY CHEN: I think that the way that Harvard, as a university, is structured is that the schools are very separated amongst themselves. And it can feel unnatural or uncomfortable to reach out to colleagues, and professors, and mentors, and co-founders at the other schools. But some of my best friends and professors or supporters have been professors at HBS, or Harvard College students, or Harvard Medical School professors. And I think you have to be comfortable reaching out across that chasm and taking advantage of the Harvard University ecosystem as a whole.

I think-- this is something that applies not just to Harvard or the Extension School but to entrepreneurship in general. I think none of this stuff gets built by yourself. It's an entire ecosystem of stakeholders. And if you don't leverage, or if you don't take advantage of all the resources that are available to you, it's just you're putting yourself at a disadvantage. And so I would say very much put yourself out there, and be open minded, and think don't-- just be confident and then go ask for help when you need it.

CHRIS DAVIS: Thank you. Thank you very much. That's great to hear, and my experience tells me the same too. So it's good to hear that for others. Yeah.

Next, I had the opportunity to catch up with Joanna Smith. She had originally been a guest on this podcast in 2019. However, there have been so many updates and achievements in both her professional and academic life that it was time for me to sit down and hear more about her and also about AllHere.

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First of all, you're a mom now. Congratulations.

JOANNA SMITH: Thank you so much.

CHRIS DAVIS: How old is your little one?

JOANNA SMITH: She is 19 months old. Her name is Sienna. She is a joy.

She is a baby girl who is bright, who is active, who is inquisitive. And maybe who knows? Maybe one day, she'll head to Harvard Extension as well.

[LAUGHTER]

CHRIS DAVIS: Well, we can hope. We can only hope.

[LAUGHTER]

But that is incredible. So you've been raising a child.

JOANNA SMITH: Yes.

CHRIS DAVIS: You have come back to get your master's degree.

JOANNA SMITH: Yes.

CHRIS DAVIS: AllHere is expanding. All of this has been going on during a time that has just been incredibly uncertain. And it's just remarkable to see this progression. How have you managed to do it? I'm just in awe of how you've managed to do this.

JOANNA SMITH: Thank you so much. I think-- and when you ask me that, I actually think of all the folks who have to manage what it means to work and raise kids during COVID, which no one has a playbook for. And I'm fortunate to have had a ton of support, have a lot of support, and a lot of grace that folks extend me that makes it super helpful.

I think, well, I'll answer that question in two parts. One is company side. I think what was really important for us was to have a sense of empathy. So empathy for clients.

I still remember when one of our clients sent us a message saying that all the schools in their state had been shut down. This was March 2020. And having a moment of reckoning like, wow. If we're a student attendance platform, which we are and were at the time, what does attendance look like during a pandemic?

And honestly, the only way to answer that was with a sense of patience and a sense of empathy, was waiting for schools and school systems to figure out what that process was going to look like for them and be as supportive as possible, and to really just try to be good humans. And one of the first things that we decided to do was not sell explicitly during COVID. One of the first-- we created a meal finder, where any student, any family attending a K-12 school could enter their address, their physical address or an address of a landmark or a marker closest to them and surface nearest to them a school based meal pickup location.

And we created that based on feedback from school leaders. And we put that out into the world for absolutely free. And luckily, it definitely I think we got thousands and thousands of hits to that. But ultimately, what it did was generate this sense of goodwill that, hey, we were going to take the position of being a company that is empathetic, and responsive, and puts people first. And I think by putting people first, we've certainly been able to grow and evolve alongside our clients.

And just personally, thinking about what putting people first did in my home life, it's like realizing that I'm raising a toddler during a pandemic with no playbook. So we had our bubble of people who we trusted to interact with, so that our daughter would still have some kind of social interaction. And then taking every day one step at a time, while being as safe as possible.

CHRIS DAVIS: So I just want to give a sense of putting in numbers some of it. Because it's truly remarkable to read. So I think this comes from a recent Crunchbase article which was written about AllHere and your work in the last year. So AllHere revenue has grown 700% in the last year. And you've expanded from being in 1,100 schools nationwide when the pandemic started to around 8,000 schools now.

That is a remarkable growth and acceleration. And one of the things that's also remarkable and noteworthy, so I want to make sure I get this right, so recently, you announced I think up around \$8 million of new VC funding, which brings the total VC funding that has come to AllHere in the last several years to \$12 million. Is that correct?

JOANNA SMITH: Thank you so much. So we have-- so we did raise a \$8 million round that brings the total of the company is raised to just over 12 million, which is phenomenal. We're so excited.

Our company did grow tremendously last year. We started off the year with about 1,100 schools. We closed it out over 7,000, actually just crossed 8. And it's amazing.

So our customer base grew dramatically, that 700%. Our revenue did not grow by that same factor, but we're on the way there. We're on the way there for sure. Our goal last year was just to be able to keep up with all of the schools that wanted to sign up and use us.

And the purpose of this new capital for us is really putting it to work in growing our customer base, growing our capacity to proactively find schools who are looking for help and support, in the areas that our platform offers help and support in, and thinking about using this fresh funding to also extend what we've been able to do in attendance to other key moments of truth throughout a K-12 student and K-12 family's life cycle. Or in other words, their journey to and through school. How can we support family, support school students 24/7 using conversational AI? That's, I think, the TLDR of why we did this round and why we're so excited to have Spero on board as the rounds lead.

CHRIS DAVIS: I also don't want to under-emphasize that, during all this, you also were selected as one of the Forbes 30 under 30, which was remarkable. How did that come about?

JOANNA SMITH: Thank you. That was such an amazing honor. I believe I got nominated by one of our investors at Rethink. And once I-- you know you interview for these things, and you have no idea how it's going to turn out. But I was so pleasantly surprised to learn when I was named to the list, and when I-- and even doubly so when I was named as the featured honoree for the education category.

So I had a wonderful experience, where I got to go to New York for a day and be treated like a celebrity for a day in terms of the photos that they did that were taken by a young photographer of color, which was even so that much more exciting for me. And it just was a wonderful experience. The Forbes team is very exciting, very, very supportive to work with, and just have gotten nothing but positive feedback in terms of what this means for elevating the issues and the challenges that education faced last year, but even more so, the potential of schools and families and students to be so resilient. So to be able to elevate that and honor that through the Forbes piece was a very special treat.

CHRIS DAVIS: You are now getting your ALM in I think management.

JOANNA SMITH: Yes. I am getting my ALM in management. I think what-- it's definitely harder going to school and working full time now with a toddler as well. But I'm so fortunate that I get to do that at Harvard Extension.

There's a ton of support in navigating my course load. I found the scheduling options for my classes to be super flexible, especially as someone who's working full time and someone who's raising a toddler. And finding the experience this time to be even that much more rewarding, because I don't have to learn in a vacuum.

I take a class in marketing, guess what? I'm going to work the next day, and I lead and manage a marketing function. Isn't that cool? Where I get to-- sometimes my team laughs when I come up jazzed about a new concept that I've learned about that they've been implementing and using for quite some time.

But it does make me a more thoughtful, I think, leader, a more intentional leader, a more intentional team member. But I'm certainly no expert in all the topics that I'm learning about, as I'm early in the path towards my ALM. But I do think it helps me to be a good leader and a good contributor by just shoring up those areas where are new to me in terms of leadership or new to me in terms of management.

And what I also find is that the way that my coursework has been structured, it's a great complement to working. Because when I'm working at AllHere, I'm concerned about execution, KPIs. How are we doing against these really rigorous goals we've set? When I'm in class, I get to learn about how other companies that have walked this path have taken them. I get to apply those concepts through projects. And when it works out, even better, I get to make some of those projects, things that I'm working on at AllHere.

And it's this beautiful synergy of those two worlds that I think makes my ALM possible for me. Because I couldn't imagine stopping work completely to be in a management or in a graduate level program in any topic. But I love that the Extension School is more than friendly but very encouraging of that interplay and the richness of learning that results when a student is working full time and is also learning full time essentially, as I'm managing to do mostly well as a student in the management track.

CHRIS DAVIS: It's great to hear you say that. And yeah, that's been my experience as well and what I've heard from other students. Most of our students are working professionals.

So exactly as you said, they are learning about things that they're actually working on, applying it to work, taking their real life experiences and bringing it to the classroom. And it all feeds into each other. And that's really remarkable to hear.

And you're also back at the i-Lab too. I wanted to ask you about what that experience has been like. Because I know that you've been in the venture program again recently.

JOANNA SMITH: It's really great. I think that the AI lab has done a wonderful job of adapting their programming to meet the needs of students who just at a much larger clip are attending classes in the remote or a hybrid environment. And that with that shift, we've been well supported with the i-Lab as well. Their programming continues to be super relevant and tailored to the different stages of a-- excuse me-- of a company's life cycle and needs.

And it's really been great to be able to participate and engage in that way and still be part of this community of other ventures who are learning and doing the exact same things as they're growing and scaling their companies. It's always great to be in that learner mindset. And what the i-Lab does is always really encourage me to embrace that. And every stage of a business, of a company's life, it's we're doing that learning. We're doing that growing and never to advance, to still be a student in a lot of areas.

CHRIS DAVIS: What's next for Joanna though? I have to ask. I mean, there are so many exciting things, I'm sure. And I've talked to a few other students recently who have worked at the i-Lab. The sense I got from some folks who are starting ventures is they're taking one step at a time in terms of what's coming up in the next year or two and with the economy, with the different markets.

It's a little hard to predict right now. But I mean, you are firing on all cylinders. You are at school, personally, professionally. What are you-- I'm curious to hear. What are your goals for the next year or two?

JOANNA SMITH: Yeah. Someone told me recently that I always have tectonic size plates spinning at the same time. I think that's plenty for me.

[LAUGHTER]

We're on a real growth clip at AllHere in terms of taking the work we've done with conversational artificial intelligence in K-12 schools and expanding that to other moments throughout the student K-12 life cycle. So that'll be where all my work energy is focused, doing that further faster. And then raising a happy family. I did, personally, just recently just got married, very, very recently.

CHRIS DAVIS: Oh, congratulations.

JOANNA SMITH: So my name-- So in case you see my name change on platforms to Joanna Griffin, and when I make that change, which is my new name, then I haven't been phished. That's my name. So just entering this new phase of life and working and CEO/momhood that I think just provides me with an opportunity to take what I've learned so far and keep learning and apply it as intentionally and as robustly and as energetically as possible. So really fortunate to be in that place.

CHRIS DAVIS: Wow, that's-- well, that's amazing. And again, congratulations. And personally, I can't wait to see what comes next for you, what comes next for AllHere. I think we'll have you as a student for a little while longer. And I'd be curious to touch base at the end of that and see where you're at and how things are going.

JOANNA SMITH: Thank you so much. Yeah, the time has certainly flown. And absolutely, I would love to be able to keep you posted on how we go and grow from here.

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CHRIS DAVIS: You have listened to the *CARC Podcast*. This is the podcast for the Career and Academic Research Center here at Harvard Extension School, and I hope you will join us again.