Research Adjacent episode 47 Christian Tidona\_mixdown

Mon, Jul 01, 2024 4:30PM • 27:25

**SUMMARY KEYWORDS**

startup, heidelberg, institute, mentors, people, managing director, work, company, projects, biometrics, running, research, israel, moving, started, call, researcher, university, phd, academic

**SPEAKERS**

Christian Tidona, Sarah McLusky

**Christian Tidona** 00:00

I have two hearts in my chest one of the scientists and one of an entrepreneur Teaching values and helping the next generation to be a nicer and better researcher human being and creating impact. That's the best thing you can you can do as a as a scientist and as a human being.

**Sarah McLusky** 00:18

Hello there. I'm Sarah McLusky and this is Research Adjacent. Each episode, I talk to amazing research adjacent professionals about what they do, why it makes a difference. Keep listening to find out why we think that research adjacent space is where the real magic happens. Welcome, and thanks for lending me your ears for another episode of Research Adjacent. Today the research adjacent in question is Christian Tidona. Christian is a serial biotechnology entrepreneur who currently owns and runs the Biomed X Institute in Heidelberg in Germany. This unique independent facility brings together the brightest academic and industrial minds to find creative real world solutions to big health problems. Christian is the managing director a rule that he rather magically describes as being a guardian of time, you'll have to listen on to hear what he means by that. We also talk about why he started his first company straight after completing his PhD, what he's learned along the way, and why both mentors and mentoring are so important to him. If you liked this episode, and we'd like to hear more entrepreneurial stories, go and check out academic adventures, a podcast series that I helped create all about academics who also run businesses. I'll put a link in the show notes. But for now, here is Christian's story. Welcome to the podcast. Christian, thank you so much for coming along today to join us. I wonder if we could begin our conversation by hearing a little bit about what it is that you do. Thanks

**Christian Tidona** 01:49

for having me, sir. Yeah, in a nutshell, what I'm doing is I'm trying to bridge the gap between academic research and industry. So what we're trying to do with my biometrics institute is to help convert this creativity and knowledge that has been produced in biomedical research in universities and translated help translate it into something that will ultimately help the patient. Yeah,

**Sarah McLusky** 02:14

really valuable place to sit there. Because certainly the people I've spoken to that that bridging that gap can be a bit of a challenge sometimes, can't it? So tell us a bit more about your role within the company? Yeah.

**Christian Tidona** 02:28

Well, I'm, I have two hearts in my chest, one of a scientist and one of an entrepreneur, and actually did my PhD in this beautiful city of Heidelberg, Germany, where I'm still based and did my PhD in biology, and in the late 90s, and then found that the university is not for me. And I started a company diagnostics company at the time. And then, after a while, didn't go too well. The first one, then I started another one, and moved my way towards a situation where ultimately, in 2013, I started my own Biomedical Research Institute called Biomed X, of which I'm still the owner and Management Director, and with a long term perspective of building something that creates impact. And that's still what I'm doing today and helping this to organically grow this institute with its values and its impact in Heidelberg. And meanwhile, also in other places like the United States and Israel.

**Sarah McLusky** 03:28

Yeah, fantastic. Yeah. So you've said that they're about the company. Maybe we can hear a little bit more about that. So. So you've said you're not just based in Germany? I'm guessing that's where you started in Germany. But you've no, right?

**Christian Tidona** 03:39

Yeah, we started Biomed X a little more than 10 years ago on the campus of the University of Heidelberg, which is one of the oldest universities in Europe, the oldest in Germany, and with a very large biomedical research campus, and on this campus, we started with a lab space in the technology park with framework agreements with major institutions in Heidelberg, because we're working very closely at this interface between academia and industry. So for us, it's very important to have a vibrant academic environment. And we built it from there. So at the moment, it's roughly 7075 People in Heidelberg. And we have since last year, we have a new site, which is built very similarly close to the campus of Yale University in New Haven, Connecticut, in the US. And also we were part of a consortium that operates a startup venture studio, close to the Weitzman Institute in Israel and Hobbit.

**Sarah McLusky** 04:38

Fantastic. So it sounds like it's been real. Journey, real growth there to reach the point you're at now. So you've said Biomed X is biomedical company, maybe you could tell us a little bit about the kinds of research that you're involved with?

**Christian Tidona** 04:51

Yeah, it's based on a completely novel model how to how to bridge this gap between academic research and industry and the way it works is that Most of my time I spend with researchers and big pharmaceutical companies, and help these researchers to ask very big future questions, which there's currently no solution, neither in academia nor in startups. And once we identify such big questions, we call them challenges. We publish them on our crowdsourcing platform worldwide, at the best universities and research institutions and invite early career academic researchers to Apply by submitting online, a very original project proposal how to solve this particular problem. And usually we get between 200, 300 proposals from 60 70 80 countries, so it's truly global. Then we select the 15 brightest individuals and we fly them in for a five day bootcamp to our site, where they meet each other for the first time, we help them to associate in five different groups. And we help them to combine this collection of academic ideas into something we'd call a truly brilliant project proposal, which they present on the last day of the bootcamp in front of the jury, which includes the sponsoring pharmaceutical company. And then once we agree on a winner, this winner is then moved with his or her family, to our site, we organize visa jobs for their spouses, new homes, kindergarten, spot, school, whatever they need, and then they live in work for up to five years in our institute on the campus of the University of Heidelberg to implement that research, very close mentorship from mentors from academia and industry. And usually, its actual project has a research budget of roughly 1 million euros per year. So for five years, that's up to 5 million. And at the end, the pharmaceutical company has an option to internalize the results and then turn it into something that will help patients. Yeah, and that's the main concept. And we've grown from a few projects until now, the last 11 years in Heidelberg, we've started 22 Such research groups, so Big Pharma has invested more than 100 million euros into our projects. And as I mentioned earlier, also we have no site in the US and in Israel, where we're doing similar things.

**Sarah McLusky** 07:01

Yeah, that sounds I mean, even just thinking about the application project, that process that's a huge undertaking to do that. But clearly something that's been successful when you've you've grown, so maybe you could give us a couple of examples of some of the technologies products that have come out of that. Yeah.

**Christian Tidona** 07:21

So most of the projects we're running to, I would summarize, is exploring deep disease biology, human disease, biology and finding novel arcs are no novel ways out to address very complex diseases in a new way. So many of our teams are working with what we call auger, but organotypic, in vitro models. So human gut in a dish, human brain in a dish, human knee, in a dish, human lung in a dish. So and then we're looking at at this very complex interactions between human cells, and how in disease, this can be influenced in a way to turn them back to the healthy situation. Many of these projects are in the field of oncology, cancer research, quite a few on the field of immunology, soft immune diseases, for example, we've run quite a few projects in neurosciences in the field of psychiatric disorders, schizophrenia, or depression. And also some of the teams are developing platforms and sensors. For example, one team we're having at the moment, as asked is answering the question, how can we measure the pharmacology in the brain of a freely moving map? So but so,

**Sarah McLusky** 08:33

yeah, lots and lots of different things going on. So your role, your role in all of this, this company and everything that's going on? It's you're the managing director? Is that the right title? Yes, yeah. So for anybody who hasn't kind of worked with that sort of situation before? What does the managing director do? Day to day? Yeah, what does that entail?

**Christian Tidona** 08:55

Well, I'm, I'm the guardian of everybody's time, and making sure everybody can spend their time as creatively as possible. So as a managing director, you can imagine in such a big operation every day, something's not going well, and needs to be fixed. And these issues usually end up on my desk. So technically, I make sure that everybody else can do that work. And also, what I'm doing is developing new business. So for example, when we moved from Heidelberg to start a new site in Israel, or to start a new site in the US, or moving into new business models, this is something I'm elaborating at the, at the frontier, discussing with potential future customers and partners. So business development in general, but the Managing Director and this is not just very specific points to as a managing director, you need to fix things so that people can do their work. Yeah, that's

**Sarah McLusky** 09:51

a nice way to put it. Yeah. So coming back to think a bit about your journey. You touched a little bit on earlier that you did studied had a PhD, but then it sounds like quite quickly you went into entrepreneurship was that like the first thing that you did after your PhD was set up a company?

**Christian Tidona** 10:08

Yeah, we started this during my PhD. I was in Heidelberg, I was in a very, very good Institute, the Institute of Medical biology, with an excellent academic mentor, very gholamreza data, a very experienced virologist, with hundreds of publications in peer reviewed journals. And from the beginning, I wanted to become a professor. But then what happened, which told me that this might not be the right way, we got the new head of the institute. And then the first thing this young person did was moving my my very experienced mentor into a basement laboratory, and sort of changing everything and moving people around. And this is something that told me, it's probably not a place where I want to stay. And because it's, it seems to be very political. And I don't like spending wasting time on politics, I'd rather invest my time into creativity. And so I decided, I told my mentor I, it's not for me wanting to do something else. And but my mentor said at the time, because I had an offer, also coming from a publisher in Heidelberg, because I had just published a book, the spring it index of viruses, 1500 pages on viruses, and they've made me an offer to join. But then my mentor told me, I've educated you for many things, but not to become a publisher. So do something, do something proper within and, and then if necessary, if you want to leave university, start your own company, and he was involved in a startup in the Regensburg, Germany diagnostics company. And I said, Okay, why not? And I tried it. And I was the managing director and founder of this company, it had a crazy value proposition at the time, it was 1999. And our punch line was 100 tests in one droplet. Of course, it didn't work. On other companies, even the founders went to jail. I didn't. I never heard of Elizabeth Holmes and Theranos in the US with the exact same value proposition, but of course, much more money. Right? Okay. Yeah, it's work. But I learned a lot. So

**Sarah McLusky** 12:25

yeah, yeah. Well, that's I was gonna ask about, it must have been a massive learning experience to come, you know, just straight from PhD into starting a company. And you know, they're from all the people I've spoken to, you've done similar things. They're very different worlds. So what sorts of things did you learn from that first experience? So

**Christian Tidona** 12:48

first of all, in your currency in, in the university, is publications. And once you're in the startup, cash flow is the most important thing you need to deal with. So understanding the basics of finance, of accounting of legal, because you have to sign agreements, and you need advisors and partners not to make all of those mistakes. And so I think these two things were the most important things to learn quickly is is basics in law and basics in accounting and finance. And then, after the first startup, you know, learning by doing, everything went well, but I learned it the hard way, because I didn't have really a very experienced mentor on my side. Did all the mistakes.

**Sarah McLusky** 13:36

Yeah. Well, I mean, I think that's, that's the time you want to be making the mistakes, though, isn't it when you're just starting out stakes are lower, you know, it's not going to be the end of the world if if things don't work out? Yeah. Well, I

**Christian Tidona** 13:50

was, you know, at the time, it was tough, failing with your first startup and having everybody saying to you, well, we told you stay at university and become a professor. I said, I tried and failed. And what was it that

**Sarah McLusky** 14:03

made you want to keep going, even though that first business didn't work out?

**Christian Tidona** 14:07

I liked many aspects of it. And I thought after having made all those mistakes, you probably don't make them again, and probably next time is going to be better. And that's exactly what, what, what, what happened next was much better. And then the next one was even better. And now I'm running my own institute. So

**Sarah McLusky** 14:26

So is this your third or fourth?

**Christian Tidona** 14:29

So if you only count the ones where I was the managing director, because I was investor and co founder of quite a few startups, also being the managing director, the first one was the diagnostics company. The second one was seitan it in Heidelberg, there was a cell therapy company third one was a Stem Cell Institute high stem Heidelberg Institute for stem cell technology and experimental medicine. Then Regional Development Company bio RN, which is audible in which I was coordinating the local bar medical research cluster with a very large grant from the federal government in Germany. This I did for eight years. And then my own my own institute iomed X. So that's more or less the journey. Yeah.

**Sarah McLusky** 15:12

Now, Goodness me. And so along that journey, I am sure that there have been a few things along the way that you're really proud of, maybe you could give us a couple of examples. That's,

**Christian Tidona** 15:24

that's, that's a good question. Of course, my my personal pride, or let's call it satisfaction from what I'm doing is seeing younger people, younger, talented people, who embrace the value concepts we are teaching, and bringing that to the next generation. So at Biomed X, for example, we have several 100 alumni, by now also many hundreds who have participated in our boot camps. And what we always teach is our three core values. And and, and this is teaching values, and helping the next generation to be a nicer and better researcher, human being and creating impact, that's the best thing you can you can do as a as a scientist and as a human being. So creating this type of impact by teaching values, I think that's, that's what I'm most proud of, because this group of former Biomed XFellows is like a global family. So people are still, it's despite the fact that I've left our institute, they get to positions in academia and industry and remain connected to us, we have once in a while the joint celebration like our 10 year anniversary last year, where they all came and we celebrated together. And they're helping each other and teaching this to their peers. So that's that I'm most proud of, and also the fact that Biometrics is Biometrics is my first start, it's not a startup anymore. But it was a startup, which I was able to start without external investment. I'm still the owner of the institute, there is no venture capital, no public money involved, which gives us a long term perspective, because if you if you cannot start with external funding, venture capital, for example, in startups, you, you have to return the money at a multiple at some point. So you need to work on something that has a natural end, which is I wanted to build something that surpasses my lifetime, and is not dependent on making money for investors. And this could only work in an organic way. And in order to do this, you need to get to a certain age and get to a certain point that you're able to do this. And this I'm most proud of,

**Sarah McLusky** 17:35

yeah, that does definitely sound like something to be proud of to get something off the ground like you've done the scale that you're talking about without bringing in external investment. So do you is it all about the kind of sponsorship that you get from the pharmaceutical companies or Yeah, that's rather than, you know, government funding or that sort of thing. So there's

**Christian Tidona** 17:56

no government funding involved is government financing in Israel, because that's, that's the main difference. If you win a bootcamp in Heidelberg, or in New Haven, you become a full time employee of our institute, and you get something that looks like a research grant, which comes Big Pharma, if you went to boot camp in Israel, you become the first employee and shareholder of your own startup and the money is provided by but it's done in a way where the Israeli government is co-investing into those startups. So this is the only place where we receive government funding is the investments in Israel. in Heidelberg, everything is driven by revenues, and we have these revenues from the beginning coming from other pharmaceutical partners.

**Sarah McLusky** 18:38

Yeah, yeah, that sounds a really interesting model, and quite different to anything that I've heard other people talk about. I'm not an expert in this area. But But yeah, to me, that sounds like quite a different model. And obviously working for you. So that's great. Yeah, I am. So with all the things that you've been through, you've talked about, you know, the reasons you left academia, the first company that didn't go to, there have no doubt been many challenges along the way. If you had a magic wand, and you could change something, anything about the world that you work in, to make it better, easier? What would it be?

**Christian Tidona** 19:20

So it's really unlimited. So you mean basically, basically, if

**Sarah McLusky** 19:23

money and time were not matter at all, no matter what would you do?

**Christian Tidona** 19:28

This is super big. You know, if I would not wish for anything, which is specifically connected to my startups or my companies, you know what, what bothers me most is the fact that talent is distributed evenly across across the globe, but the ability to develop the talent, it's not. And especially in the current times, things where things are getting worse, people start killing each other again, and where there's wars out there. If If I had a magic wand, I would, I would generate a global system that gives basic scientific education to all children. Because I am a firm believer that once you are sufficiently educated, the concept of war becomes obsolete. Because it's in wartime and in wars, everyone loses. And there's so many more things out we are we could spend our creativity and the talent we're generating worldwide. And if I could change this, I would I would give everyone a proper scientific education

**Sarah McLusky** 20:35

that sounds like both are fantastic, tangible thing. But also with an amazing goal behind it overarching goal. And that's interesting. Yeah, I hadn't thought about the connection between education and war, but I'm sure there must, there must be. The

**Christian Tidona** 20:50

concept of war doesn't make sense from an educated, it's something where you can everyone can gain much more by collaborating and helping each other than like each other. And it's usually very, not very well educated people who will also say, misguided by all the fake news that have been spread at the moment, because their critical perspective is lacking, the broad view is lacking. And also the respect for other cultures, other beliefs, the diversity of humanity is lacking. When our kids were young, we had a rule that several times a year, we would travel to a place on the planet, and the kids could show choose where this was the only needed the only rule was they needed to agree on place. So we've visited quite a few places in the world. And we wouldn't go to these fancy luxury hotels, we would go to the place where the local people are, eat the local food, talk to local people in order to give to this next generation, that sort of this respect, and the awareness of diversity of humanity and the values that are connected to it. And many kids are not brought up that way. And they do not see people from other cultures, other beliefs, other genders, other religions. And this is why it makes it very easy to polarize societies into very simple constructs of seeing society. And the wars are the result of what we're seeing. Yeah,

**Sarah McLusky** 22:12

there certainly is some very worrying divisions at the moment isn't there? So yeah, that would be an absolutely amazing use of the magic wand, if only it were real. Yes, yes. Oh, well, I wonder if given the journey that you've gone on? If there's anybody listening to this podcast? Who's thinking that they might want to do something similar to what you've done? What advice would you give them?

**Christian Tidona** 22:37

That's a very good question. I found out quite late, that the biggest value as a young entrepreneur or as a young, very, very early on in your career, the biggest value is having mentors, who have done it before, so that you don't repeat all the mistakes over and over again, as one of my mentors always says, it's good to learn from your mistakes, but it's even better to learn from other people's mistakes over and over again. So if I had a piece of advice for early career, people who want to do something big, and something new, find mentors, and who will help you not to make all those mistakes, and not to make really painful decisions, there is a much more cost efficient way to learn about startups than running against a wall with your first startup. That's the most, most expensive way for society and also by yourself, how you can learn

**Sarah McLusky** 23:36

much better ways. It doesn't feel like I love the image. They're running against the wall. Do you feel like that's what you did with your work?

**Christian Tidona** 23:43

And looking at it from today's perspective, what I was trying to achieve as a product was impossible at the time. The people I chose as, as poor shareholders are people who I would today not not really started a company with. So I made all the mistakes and there was no chance from the beginning, from the perspective of a more experienced person that this could have succeeded. No.

**Sarah McLusky** 24:08

And do you have any advice for people on how to find mentors? Because I think it's something that comes up a lot, but then people go, where are they? How do I do it?

**Christian Tidona** 24:17

Well, it's it's serendipity. You need to be ready and not to shy you need to be a good networker. So, how I found my mentors was always by serendipity. Just give you an example. Ashok Rao was still my mentor. Next in a couple of weeks is a 75th birthday. Very successful entrepreneur based in Houston, Texas. And, and I was opening this was in the early 2000s. We were we're opening an entrepreneurship chapter with friends of an entrepreneurship society in Leuven, Belgium. And he was the chairman of the global society called tide in the entrepreneurs. And he came as a keynote speaker For the open, and I have not met him before very successful person. And, and he gave a talk that really inspired me. And, and I managed to get close to him when we were moving from one lecture hall to the other lecture hall. And then as first I said, I really enjoyed your presentation. And this is what I learned from it. And by the way, your shoelaces broken, his shoelace was broken. So I ran into the shoe maker shop and bought him a shoelace. And this is a story is still telling today, we became very close friends. And it was, I was always sort of asking him whenever I had to make a big decision, we would sit together, have a nice drink and discuss and he would give me advice. And of course, I would listen to that advice.

**Sarah McLusky** 25:37

That sounds like there's both a great story, but also a fantastic person to have in your life and as a guide through what you've done, and I'm sure contributed to the success and how you got where you are today. Fantastic. Well, great advice. And, yeah, thank you so much for sharing your story, I think we should think about wrapping up our conversation. If people would like to reach out to you find out more about the company, where's the best place to go? Ha,

**Christian Tidona** 26:04

LinkedIn is, is the place to connect for everyone who wants to develop their career and find mentors and communicate so anyone can address me via LinkedIn or send me an email. And I will respond always. And otherwise, my contact details are public so that you would find them on our website BioMed X and, and it was a great pleasure being on your on your program

**Sarah McLusky** 26:30

You're You're very welcome. Thank you. We'll get those contact details. Put them all in the show notes. And yeah, thank you so much for taking the time to come along and have a chat. It's been really interesting. Thank you.

**Christian Tidona** 26:40

My pleasure. Thank you. So

**Sarah McLusky** 26:43

thanks for listening to Research Adjacent. If you're listening on a podcast app, please check you're subscribed and then use the links in the episode description to find full show notes and phone podcast on LinkedIn or Instagram. You can also find all the links other episodes at www.researchadjacent.com. Research Adjacent is presented and produced by Sarah McLusky and the theme music is by Lemon Music Studios on Pixabay. And you yes you get a big gold star for listening right to the end. See you next time.