

**Machine-generated transcript of UNBOXING BENGALURU, *From Garage Startup to India's Pharma Giant* ft. Kiran Mazumdar-Shaw | FCTC Ep. 1 | Pt. 1 (YOUTUBE, Oct. 8, 2024),**  
**<https://www.youtube.com/watch?v=fKVFUfX825w>**

[00:00:00] Kiran Mazumdar-Shaw: It was really quite by accident that I started Biocon.

[00:00:03] Kiran Mazumdar-Shaw: It was because I couldn't get a job as a brewmaster.

[00:00:06] Kiran Mazumdar-Shaw: Why can't I create a research services sector out of biotech and bioscience?

[00:00:11] Kiran Mazumdar-Shaw: That's always been my sense of purpose.

[00:00:13] Kiran Mazumdar-Shaw: How do I put India on the map of the world?

[00:00:16] Kiran Mazumdar-Shaw: I was the disruptor in the world.

[00:00:17] Kiran Mazumdar-Shaw: The rest is, of course, history.

[00:00:19] Kiran Mazumdar-Shaw: Bangalore is a very special city.

[00:00:21] Kiran Mazumdar-Shaw: It is a city of, for, and by citizens.

[00:00:24] Kiran Mazumdar-Shaw: Ask our investors.

[00:00:25] Kiran Mazumdar-Shaw: They keep telling us, why are you wasting so much money in R&D?

[00:00:29] Kiran Mazumdar-Shaw: It's so risky.

[00:00:30] Kiran Mazumdar-Shaw: Shareholders don't like you to invest in R&D.

[00:00:33] Kiran Mazumdar-Shaw: You're denying us profits.

[00:00:35] Kiran Mazumdar-Shaw: We want dividends.

[00:00:44] Prashanth Prakash: Kiran, absolute pleasure to have this conversation with you.

[00:00:49] Prashanth Prakash: And you know, you need no introduction, but I think as an entrepreneur,

[00:00:55] Prashanth Prakash: I'll have to tell you that you've been a garage entrepreneur much before entrepreneurship became so famous in the last 15 years.

[00:01:05] Prashanth Prakash: And I thought it would be nice to also have people understand what a true first-generation entrepreneur from the city really championed and how did this whole thing happen.

[00:01:18] Prashanth Prakash: And it's great.

[00:01:21] Prashanth Prakash: that we are having this conversation now where everybody's saying this is the India moment.

[00:01:24] Prashanth Prakash: And I mean, do you think that finally the moment that we were all looking for our country and to have our rightful place again in this world, does that make you proud today?

[00:01:39] Prashanth Prakash: And is that something that really you think we have as one of the best opportunities?

[00:01:47] Kiran Mazumdar-Shaw: Prashant, first and foremost, thank you for that very, very kind and generous introduction.

[00:01:54] Kiran Mazumdar-Shaw: As a first-generation entrepreneur, especially out of Bangalore, I've always been very, very optimistic of this moment.

[00:02:05] Kiran Mazumdar-Shaw: The fact that it's now finally being recognized, of course, makes us all very, very proud.

[00:02:11] Kiran Mazumdar-Shaw: But I never doubted the fact that we could put India on the map of the world very well in terms of global leadership.

[00:02:21] Kiran Mazumdar-Shaw: You know, I set up my company quite by accident, as you know, in 1978.

[00:02:28] Kiran Mazumdar-Shaw: And as I built the company, I saw the country also go through enormous change.

[00:02:35] Kiran Mazumdar-Shaw: So, you know, I started my company at the height of the License Raj.

[00:02:40] Kiran Mazumdar-Shaw: And then in the 90s, I saw this wonderful economic reforms being announced.

[00:02:46] Kiran Mazumdar-Shaw: And ever since then, of course, I've seen the country unleash its potential.

[00:02:51] Kiran Mazumdar-Shaw: Now, when I look at what's happened in this millennium,

[00:02:56] Kiran Mazumdar-Shaw: I think that was really the turning point because that was the start of the tech revolution,

[00:03:04] Kiran Mazumdar-Shaw: not just in the world, but in India.

[00:03:06] Kiran Mazumdar-Shaw: You know, the IT sector started being visible, started being globally recognized.

[00:03:13] Kiran Mazumdar-Shaw: The phenomenon of we will be Bangalore became very, very evident.

[00:03:19] Kiran Mazumdar-Shaw: And how much of that rub off or inspiration was there

[00:03:23] Prashanth Prakash: from what you were seeing in the IT to what you were doing?

[00:03:26] Kiran Mazumdar-Shaw: You know, let me be very honest, I started Biocon even before Infosys and other

[00:03:32] Prashanth Prakash: Right,

[00:03:34] Kiran Mazumdar-Shaw: software companies took root in Bangalore.

[00:03:37] Kiran Mazumdar-Shaw: So we were both growing together.

[00:03:40] Kiran Mazumdar-Shaw: And I always believed that we were intertwined.

[00:03:46] Kiran Mazumdar-Shaw: I never saw biotech as being a separate tech space, so to speak.

[00:03:52] Kiran Mazumdar-Shaw: I always thought that it was synonymous with information technology.

[00:03:56] Kiran Mazumdar-Shaw: Innovation that is both.

[00:03:57] Kiran Mazumdar-Shaw: So I just felt I was looking more at it from a point of view that these are new age businesses

[00:04:05] Kiran Mazumdar-Shaw: with new age technologies backing them and with new kinds of talent,

[00:04:12] Kiran Mazumdar-Shaw: you know, resources that required to grow them.

[00:04:15] Kiran Mazumdar-Shaw: So I looked at it in a very different way.

[00:04:18] Kiran Mazumdar-Shaw: I didn't look at it as IT and biotech.

[00:04:20] Kiran Mazumdar-Shaw: And I think I was the only biotech company.

[00:04:23] Kiran Mazumdar-Shaw: So like, you know, drawing inspiration from each other was the done thing.

[00:04:29] Kiran Mazumdar-Shaw: I think people celebrated many of the things that I did just as much as I celebrated a lot of what the IT sector did.

[00:04:38] Kiran Mazumdar-Shaw: And of course, I was very inspired by the IT sector.

[00:04:41] Kiran Mazumdar-Shaw: But there was nothing for me to really emulate in many ways, except I will tell you.

[00:04:49] Kiran Mazumdar-Shaw: And honestly, I must confess this, that in 1993, when I set up Syngene International as India's first research services company,

[00:04:55] Kiran Mazumdar-Shaw: it was borrowed from that concept of software services.

[00:05:03] Kiran Mazumdar-Shaw: And I just asked this question, if IT could create this software services sector for the rest of the world,

[00:05:10] Kiran Mazumdar-Shaw: why can't I create a research services sector out of biotech and biosciences?

[00:05:18] Kiran Mazumdar-Shaw: So that's what actually led to Syngene, because I felt it was a very logical kind of business model.

[00:05:26] Kiran Mazumdar-Shaw: And that's what I did.

[00:05:27] Kiran Mazumdar-Shaw: And it's now become a huge success.

[00:05:30] Kiran Mazumdar-Shaw: And it catered to a huge, huge need that, you know, the whole global pharma space wanted and required.

[00:05:40] Prashanth Prakash: So in fact, I mean, I think it's nice that you took what was probably not very high value services that was being offered in IT and applied it to a space which was much higher in terms of what we are capable of doing in IT.

[00:05:44] Kiran Mazumdar-Shaw: probably not very high value services that was being offered in IT

[00:05:47] Kiran Mazumdar-Shaw: and applied it to a space which was much higher in terms of what we are capable of doing.

[00:05:55] Kiran Mazumdar-Shaw: Yeah.

[00:05:55] Kiran Mazumdar-Shaw: And, you know, let me tell you, biosciences and the kind of research services that we offer to these companies is very, very high tech.

[00:06:02] Kiran Mazumdar-Shaw: And it involves very complex skills.

[00:06:08] Kiran Mazumdar-Shaw: So whilst IT is really, at that time, was just about coding and very, very simple, basic stuff, biosciences was far more complex.

[00:06:20] Kiran Mazumdar-Shaw: So those were the skills we had to put in place, you know.

[00:06:23] Kiran Mazumdar-Shaw: And today, of course, we have all these very complex integrated skill sets, which are just sort of moving the needle.

[00:06:30] Kiran Mazumdar-Shaw: And we're getting to a higher and higher level of competency when it comes to research and innovation.

[00:06:36] Malini Goyal: How easy or difficult was it to sell India in the 90s, like Syngene that you set up?

[00:06:42] Malini Goyal: Like tech story, one knows, you know, how difficult it was for Infosys of the world to go sell an idea to the world.

[00:06:50] Malini Goyal: So how easy, difficult was it for you to do this from India?

[00:06:54] Kiran Mazumdar-Shaw: It was very difficult, and it still is very difficult because let's face it, you know, building up credibility in an area where you're not known to be an innovator, but more like a sort of basically a follower is a difficult challenge, but we had to start.

[00:07:01] Kiran Mazumdar-Shaw: in an area where you're not known to be an innovator, but more like a sort of basically

[00:07:08] Kiran Mazumdar-Shaw: a follower is a difficult challenge.

[00:07:16] Kiran Mazumdar-Shaw: telling people that we had these skills and that we could actually, they could leverage it very effectively for, furthering their own pipelines.

[00:07:25] Kiran Mazumdar-Shaw: So I think it was difficult.

[00:07:28] Kiran Mazumdar-Shaw: There is a little bit of a bias towards research services companies from Europe.

[00:07:35] Kiran Mazumdar-Shaw: But, you know, I think the pendulum is swinging back to taking us seriously because of the

[00:07:44] Kiran Mazumdar-Shaw: decoupling that is taking place between US and China.

[00:07:47] Kiran Mazumdar-Shaw: I mean, China, let me tell you, actually took advantage of globalization and had suddenly decided to build credibility on scale, on sheer scale and dominance because of that scale.

[00:08:02] Kiran Mazumdar-Shaw: So I think China managed to create that credibility very, very rapidly.

[00:08:08] Kiran Mazumdar-Shaw: So what it gives me, you know, to understand is that you can build global credibility with sheer scale, which is what our IT software services sector has done.

[00:08:21] Kiran Mazumdar-Shaw: Today, our IT software services sector is so huge in sheer numbers and in the number of companies that operate in the space that we dominate the world, right?

[00:08:34] Kiran Mazumdar-Shaw: And we want the credibility so much so that even in Hollywood movies, if they want an IT expert, it's an Indian.

[00:08:41] Kiran Mazumdar-Shaw: So I think that's the same kind of credibility we need to build in pharma.

[00:08:47] Kiran Mazumdar-Shaw: In pharma, we have the scale.

[00:08:48] Kiran Mazumdar-Shaw: So we are the generics capital of the world, the pharmacy of the world, whatever we want to call it.

[00:08:54] Kiran Mazumdar-Shaw: But the fact that we don't innovate enough has kind of left us a little behind in terms of that credibility that we need to acquire.

[00:09:08] Kiran Mazumdar-Shaw: Biotech, again, is now becoming a very, very hot area where I think there is a lot of innovation taking place, but it needs to scale up.

[00:09:17] Kiran Mazumdar-Shaw: That's why I think our company, Biocon, is the only global scale biotech company out of India, because the investments are so deep and the way you manage talent is so different to the typical kind of Indian pharmaceutical enterprise.

[00:09:35] Malini Goyal: Do you want to dwell on Biocon and tell us a bit about the journey that Biocon had had?

[00:09:42] Malini Goyal: And since the 70s, you've also evolved, pivoted, reinvented, and you are still very, very relevant as one of the largest or the largest biotech company.

[00:09:53] Malini Goyal: Tell us a bit about the journey.

[00:09:55] Kiran Mazumdar-Shaw: Yeah, like Mani, I told you that it was really quite by accident that I started Biocon in my garage in 1978.

[00:10:06] Kiran Mazumdar-Shaw: Literally, it was because I couldn't get a job as a brewmaster, for which I had qualified myself from Australia.

[00:10:13] Kiran Mazumdar-Shaw: And having been rejected and feeling very dejected,

[00:10:18] Kiran Mazumdar-Shaw: I guess I started Biocon.

[00:10:20] Kiran Mazumdar-Shaw: Now, in the early stages, of course, it was about enzymes, because I was very familiar with enzymes, having learnt the use of enzymes and the fact that the brewing process is all enzymatic.

[00:10:34] Kiran Mazumdar-Shaw: So in the early, I would say for the first two decades, that is from 78 to 98, I really focused on developing enzyme technologies for a host of industries.

[00:10:45] Kiran Mazumdar-Shaw: So, for instance, I developed enzymes for the starch industry to convert starch to glucose.

[00:10:55] Kiran Mazumdar-Shaw: I developed a huge number of enzymes for the fruit juice industry, for the food industry, for the textile industry.

[00:11:06] Kiran Mazumdar-Shaw: I also developed a large number of enzymes even for bioremediation and, you know, effluent treatment.

[00:11:14] Kiran Mazumdar-Shaw: So it was a large number of diverse industries that I had developed enzymes for.

[00:11:20] Kiran Mazumdar-Shaw: And one of the industries that I'd also developed enzymes for was the pharmaceutical industry.

[00:11:25] Kiran Mazumdar-Shaw: So I had developed a lot of digestive enzymes for pharmaceutical industries.

[00:11:30] Kiran Mazumdar-Shaw: But then I got an opportunity of leveraging my enzyme technologies for really being seriously involved in pharmaceuticals.

[00:11:42] Kiran Mazumdar-Shaw: And that kind of led to

[00:11:46] Kiran Mazumdar-Shaw: entering into biopharmaceuticals in a serious way.

[00:11:50] Kiran Mazumdar-Shaw: So it wasn't about enzymes.

[00:11:52] Kiran Mazumdar-Shaw: Now, I wanted to use fermentation technology to actually make pharmaceutical molecules.

[00:11:57] Kiran Mazumdar-Shaw: And so the first set of molecules I looked at was, of course, statins and immunosuppressants,

[00:12:02] Kiran Mazumdar-Shaw: because I could leverage some of my enzyme technologies very easily.

[00:12:07] Kiran Mazumdar-Shaw: But the real change or shift or pivot happened

[00:12:12] Kiran Mazumdar-Shaw: when I started developing recombinant human insulin.

[00:12:16] Kiran Mazumdar-Shaw: Now, you know, the 90s

[00:12:20] Kiran Mazumdar-Shaw: and the early part of the millennium, I realized that,

[00:12:24] Kiran Mazumdar-Shaw: you know, there was a huge unmet need when it came to insulin.

[00:12:27] Kiran Mazumdar-Shaw: We were the diabetes capital of the world.

[00:12:31] Kiran Mazumdar-Shaw: And all insulin dependent patients were

[00:12:35] Kiran Mazumdar-Shaw: relying on imported insulin.

[00:12:38] Kiran Mazumdar-Shaw: And that too, because insulin was so expensive,

[00:12:42] Kiran Mazumdar-Shaw: recombinant human insulin, that is, they were actually using animal insulins,

[00:12:47] Kiran Mazumdar-Shaw: you know, porcine and bovine insulins extracted from the pancreases of cows and pigs.

[00:12:55] Kiran Mazumdar-Shaw: I just thought that's absolutely,

[00:12:59] Kiran Mazumdar-Shaw: you know, unacceptable because animal insulins are good.

[00:13:02] Kiran Mazumdar-Shaw: I mean, they work.

[00:13:03] Kiran Mazumdar-Shaw: But the fact is, they are immunogenic because they are not human insulin.

[00:13:08] Kiran Mazumdar-Shaw: And here was a biotechnology which was developing recombinant human insulin.

[00:13:12] Kiran Mazumdar-Shaw: And it was so expensive that we couldn't even afford it.

[00:13:16] Kiran Mazumdar-Shaw: So I just felt I had to do something about that.

[00:13:19] Kiran Mazumdar-Shaw: And interestingly, I had a yeast technology on which I was developing enzymes.

[00:13:25] Kiran Mazumdar-Shaw: And I said, why can't I use that to make insulin?

[00:13:28] Kiran Mazumdar-Shaw: Because you have to be agnostic to when you're making anything out of a recombinant platform.

[00:13:36] Kiran Mazumdar-Shaw: You know, after all, you're developing a protein and an enzyme is a protein.

[00:13:39] Kiran Mazumdar-Shaw: And so is insulin, a peptide.

[00:13:43] Kiran Mazumdar-Shaw: So I said, OK, let me try it.

[00:13:44] Kiran Mazumdar-Shaw: And of course, it worked.

[00:13:46] Kiran Mazumdar-Shaw: And because, you know, India had this huge opportunity to develop its own recombinant human insulin and finally break that kind of monopoly that the Western insulin companies had on India in terms of controlling high prices.

[00:14:05] Kiran Mazumdar-Shaw: I was able to disrupt the business.

[00:14:08] Kiran Mazumdar-Shaw: I mean, this whole model.

[00:14:10] Kiran Mazumdar-Shaw: And I was able to then develop insulin at a fraction, in fact, a tenth of what the multinational companies were at that point offering recombinant human insulin in India.

[00:14:15] Kiran Mazumdar-Shaw: I could price it at a tenth of what the multinational companies

[00:14:19] Kiran Mazumdar-Shaw: were at that point offering recombinant human insulin in India.

[00:14:23] Kiran Mazumdar-Shaw: And the rest is, of course, history because I was the disruptor in the world.

[00:14:28] Kiran Mazumdar-Shaw: I mean, today, if you go to any developing country, the price of insulin is very affordable.

[00:14:35] Kiran Mazumdar-Shaw: And today, because of affordability, access to insulin has been made so easy.

[00:14:41] Kiran Mazumdar-Shaw: And today, nobody in India uses animal insulin.

[00:14:44] Kiran Mazumdar-Shaw: They all can use recombinant human insulin.

[00:14:47] Kiran Mazumdar-Shaw: And of course, based on that insulin platform, I developed insulin analogs, and now I market my insulins globally.

[00:14:55] Kiran Mazumdar-Shaw: I'm really proud that we are the 4th largest insulin company in the world.

[00:15:01] Kiran Mazumdar-Shaw: And of course, we have a presence in the most advanced markets like US and Europe and Japan and Australia and the whole developed world.

[00:15:13] Kiran Mazumdar-Shaw: But we also cater to the developing world, Latin America,

[00:15:17] Kiran Mazumdar-Shaw: Africa, Asia Pacific, and every other part of the world.

[00:15:23] Kiran Mazumdar-Shaw: So I think that's what's really been very exciting for me.

[00:15:27] Kiran Mazumdar-Shaw: I think not too many Indian people realize what is happening here in our own city of Bengaluru.

[00:15:38] Kiran Mazumdar-Shaw: And then, of course, moving on from insulins, I got prompted into

[00:15:41] Kiran Mazumdar-Shaw: into looking at more complex biologics like monoclonal antibodies.

[00:15:47] Kiran Mazumdar-Shaw: And that was a very coveted technology.

[00:15:50] Kiran Mazumdar-Shaw: And again, we basically developed very high-end skills.

[00:15:56] Kiran Mazumdar-Shaw: And again, we've become one of the most respected and recognized players in bringing biosimilar, not only biosimilars, but also novel biologics to global markets.

[00:16:09] Kiran Mazumdar-Shaw: So I think that's what has allowed us to harness the talent, pursue very strategically global opportunities, and try and put India on the map of the world for biopharma by just doing all these things in a way that puts us on par with everyone else.

[00:16:33] Kiran Mazumdar-Shaw: I think that's what's always been my *raison d'etre*.

[00:16:37] Kiran Mazumdar-Shaw: And that's always been my sense of purpose, saying, how do I put India on the map of the world, not as a number two or number three country, but right on top?

[00:16:49] Kiran Mazumdar-Shaw: I think that's been the philosophy and culture in our city that we want to be the best.

[00:16:56] Prashanth Prakash: Kiran, if you kind of just fast forward and see the entrepreneurial ecosystem around biotech and,

[00:17:02] Prashanth Prakash: some common companies that we've all invested in, in the novel biologic space platforms for these molecules, novel molecules.

[00:17:06] Kiran Mazumdar-Shaw: you know, some common companies that we've all invested in

[00:17:10] Kiran Mazumdar-Shaw: in the novel biologics based platforms for these molecules, novel molecules.

[00:17:16] Prashanth Prakash: It has been a challenge, the lack of an ecosystem like just the startup revolution that happened in, let's say, SaaS or e-commerce and some of these other areas.

[00:17:31] Prashanth Prakash: has not been easy to replicate.

[00:17:34] Prashanth Prakash: I think it's because it's more complex, like you said.

[00:17:36] Kiran Mazumdar-Shaw: Much more expensive.

[00:17:37] Prashanth Prakash: Much more expensive.

[00:17:38] Prashanth Prakash: There's maybe a whole ecosystem in Boston that doesn't exist here.

[00:17:43] Prashanth Prakash: You need maybe so many of these other parts.

[00:17:47] Prashanth Prakash: Do you see something we can overcome in the next decade or so to see a lot more successful entrepreneurs like you in the biologics space?

[00:17:56] Kiran Mazumdar-Shaw: like you in the in the biologics space in

[00:18:01] Prashanth Prakash: in a sense, being able to maybe straddle that cross-border innovation pipeline, that has not been easy.

[00:18:09] Kiran Mazumdar-Shaw: Yeah, so I think you ask a very important question, Prashanth, and I think if I was to answer that, I would start with the ecosystem.

[00:18:18] Kiran Mazumdar-Shaw: You keep referring to the US ecosystem.

[00:18:22] Kiran Mazumdar-Shaw: And the US ecosystem is a self-perpetuating virtuous cycle, which is really about having VCs backing ideas.

[00:18:33] Kiran Mazumdar-Shaw: Those ideas being taken to the stock markets very early.

[00:18:38] Prashanth Prakash: I mean, immediately after your phase two.

[00:18:43] Kiran Mazumdar-Shaw: And investors being excited with early stage development.

[00:18:49] Kiran Mazumdar-Shaw: Unfortunately, we don't have that ecosystem.

[00:18:51] Kiran Mazumdar-Shaw: And of course, the government also has played a very important role in making sure that they're part of the ecosystem, because a lot of these early stage ideas are emanating out of academic research.

[00:19:04] Kiran Mazumdar-Shaw: And academic research is always bolstered by a lot of NSF funding, NIH funding, and a lot of the clinical development takes place with a lot of this kind of support.

[00:19:17] Kiran Mazumdar-Shaw: Now, unfortunately, in India, we've kind of made two silos of private research and public research, and that is, I think, very unhealthy.

[00:19:27] Kiran Mazumdar-Shaw: And the private research is viewed with a lot of suspicion and with a lot of resistance, I would say, for funding for government funding.

[00:19:37] Kiran Mazumdar-Shaw: And private public research is basically supported with a lot of funding.

[00:19:52] Kiran Mazumdar-Shaw: So, I think we have to first fix that.

[00:19:55] Kiran Mazumdar-Shaw: Secondly, I think VCs in India and investors in India have been very spoiled by very quick returns in very low-hanging fruit, because they all want to back low-risk ideas.

[00:20:10] Kiran Mazumdar-Shaw: So, services companies do very well because there's no risk of the returns and immediate consumer kind of applications.

[00:20:19] Kiran Mazumdar-Shaw: No, but even in services, if you ask me whether it's a diagnostic center or a research services company, it's about getting more business and that everybody's comfortable.

[00:20:28] Kiran Mazumdar-Shaw: And there's no losses being mounted, right?

[00:20:31] Kiran Mazumdar-Shaw: If you look at novel companies, the investment needs for developing novel molecules is so high that it's like a bottomless pit in terms of investment in the early stage.

[00:20:46] Kiran Mazumdar-Shaw: And you don't see your return for several years, which is not what VCs here are used to.

[00:20:52] Kiran Mazumdar-Shaw: So they want to see quick returns and those quick returns are not visible for the foreseeable future.

[00:20:59] Kiran Mazumdar-Shaw: So what happens is most of these companies finally give up or they basically take their ideas to the US.

[00:21:06] Kiran Mazumdar-Shaw: And then they develop and shape those ideas in the US and they raise capital.

[00:21:11] Kiran Mazumdar-Shaw: And I'll give you an example. I myself spun off a very interesting company based on a very novel asset that we had developed in-house in Biocon.

[00:21:22] Kiran Mazumdar-Shaw: But we realized that developing it in India was not going to be the right thing to do because we would not be able to raise capital.

[00:21:31] Kiran Mazumdar-Shaw: It would hit our P&L and it didn't make sense.

[00:21:35] Kiran Mazumdar-Shaw: So what did we do?

[00:21:35] Kiran Mazumdar-Shaw: We spun off a company in Boston called Bicara Therapeutics.

[00:21:41] Kiran Mazumdar-Shaw: and we parked all this asset and IP in that company.

[00:21:45] Kiran Mazumdar-Shaw: And of course, this company has managed to raise a lot of capital, venture capital.

[00:21:52] Kiran Mazumdar-Shaw: And they're now in series B and their data is looking very good.

[00:21:57] Kiran Mazumdar-Shaw: They did all their development in the U.S., the clinical development, even though the product is being supplied from here.

[00:22:06] Kiran Mazumdar-Shaw: But the fact of the matter is I could not have done it in India.

[00:22:09] Kiran Mazumdar-Shaw: The ecosystem doesn't allow us to do it in India.

[00:22:11] Prashanth Prakash: Yeah, I think that's the playbook is very different.

[00:22:14] Kiran Mazumdar-Shaw: Yes, and Bicara will look at either spinning off the asset or going to the public market very soon, just because the system supports it.

[00:22:28] Prashanth Prakash: So, yeah, so looks like we just have to do things very differently to make this kind of startup.

[00:22:34] Kiran Mazumdar-Shaw: And if you actually look at the opportunity we have in this country to correct all these things, it's huge.

[00:22:41] Kiran Mazumdar-Shaw: We should do it.

[00:22:48] Kiran Mazumdar-Shaw: Without that, you will just have incremental growth.

[00:22:52] Kiran Mazumdar-Shaw: And I think you need to get into innovation like we've seen in the tech space. Right?

[00:22:58] Kiran Mazumdar-Shaw: So I think that's what I'm hoping that can we see some really interesting incentives or ecosystems developing which are led by some new policies.

[00:23:12] Prashanth Prakash: I mean, the example in Glasgow that you have funded, you know, the collaborative cross-disciplinary kind of thing.

[00:23:27] Prashanth Prakash: I mean, something like that can happen between what's happening in the public sector and in the private sector. A research center like that.

[00:23:34] Kiran Mazumdar-Shaw: Well, it can happen. There's nothing that stops it.

[00:23:37] Kiran Mazumdar-Shaw: Do you want to talk a bit about that? What exactly is this?

[00:23:41] Kiran Mazumdar-Shaw: Well, you know, we basically, my late husband and I, we made a philanthropic gift to John's alma mater, which is Glasgow University.

[00:23:51] Kiran Mazumdar-Shaw: Glasgow University is one of the oldest universities in the world.

[00:23:56] Kiran Mazumdar-Shaw: It was in fact founded in 1451. So it's amongst the oldest universities.

[00:24:02] Prashanth Prakash: And that's one common. My son went to Glasgow, so I'll have to put in that.

[00:24:07] Kiran Mazumdar-Shaw: So we made a gift to them and they actually were very kind enough to, you know, they came to us saying that they were creating a new campus.

[00:24:17] Kiran Mazumdar-Shaw: And in the new campus, they were creating this multidisciplinary research center, which was aimed to basically foster new age innovation where you don't do research in silos, but you bring it all together.

[00:24:30] Kiran Mazumdar-Shaw: So, for instance, they have a wonderful part division for AI and all the, you know,

[00:24:38] Kiran Mazumdar-Shaw: latest data science and data analytics that goes with it, along with high end life sciences research,

[00:24:47] Kiran Mazumdar-Shaw: high end, you know, sort of physics, mathematics, you name it.

[00:24:53] Kiran Mazumdar-Shaw: So there are multidisciplinary researchers in that building.

[00:24:57] Kiran Mazumdar-Shaw: It's called the Mazumdar Shaw Advanced Research Center, ARC, they've called it.

[00:25:03] Kiran Mazumdar-Shaw: And it's great to have your name there, you know, in such a wonderful center.

[00:25:08] Kiran Mazumdar-Shaw: And I just went there and you realize what is possible.

[00:25:12] Kiran Mazumdar-Shaw: And that's what makes it very exciting to think that this could happen anywhere if you really thought about it.

[00:25:19] Kiran Mazumdar-Shaw: But I go back to the point, you can create such centers anywhere,

[00:25:23] Kiran Mazumdar-Shaw: but what makes them successful is the thought leadership.

[00:25:27] Kiran Mazumdar-Shaw: So you need very engaged faculty and the director of that center should be a visionary.

[00:25:34] Kiran Mazumdar-Shaw: So that's what you need here. You can, you know, it's not the bricks and mortar that counts.

[00:25:39] Kiran Mazumdar-Shaw: It's really the kind of research that goes on and the kind of people you bring into that ecosystem.

[00:25:45] Kiran Mazumdar-Shaw: And I can tell you, we are beginning to do that because, you know, we are putting up Science Gallery Bengaluru,

[00:25:51] Kiran Mazumdar-Shaw: which is really modeled along the same kind of lines, saying we want to connect science with society.

[00:25:59] Kiran Mazumdar-Shaw: We want to basically make sure that this is a multidisciplinary science, you know, gallery,

[00:26:07] Kiran Mazumdar-Shaw: which basically focuses on making people understand or get interested in science.

[00:26:13] Kiran Mazumdar-Shaw: So evangelizing science in society, bringing the spotlight on new technologies and getting researchers to come,

[00:26:23] Kiran Mazumdar-Shaw: spend sabbaticals in the center and start collaborating with the academic research centers in Bengaluru.

[00:26:33] Kiran Mazumdar-Shaw: Now, what is really important for us to remember is we are blessed because we have so many research centers,

[00:26:41] Kiran Mazumdar-Shaw: academic research centers in the country, in the city. We are the science capital.

[00:26:47] Kiran Mazumdar-Shaw: We are the research capital of this country. OK, we have so many scientific institutions and research institutions.

[00:26:55] Kiran Mazumdar-Shaw: And if you can get them all to talk and we want Science Gallery to be that nodal point where they will all talk and they will take on projects and programs where they all collaborate. That's the intent.

[00:27:08] Kiran Mazumdar-Shaw: So if you can make that happen, it can become an arc. Right.

[00:27:11] Kiran Mazumdar-Shaw: And we have right now very good leadership at the helm of Science Gallery, Janhavi Palke.

[00:27:18] Kiran Mazumdar-Shaw: She is a real thought leader. She's a science historian.

[00:27:24] Kiran Mazumdar-Shaw: And if you listen to her, you get so, you know, inspired because she actually talks about the fact that C.V. Raman,

[00:27:34] Kiran Mazumdar-Shaw: our Nobel laureate, was not as if he, you know, he had a research lab and he did everything by himself.

[00:27:43] Kiran Mazumdar-Shaw: No, he actually, after he graduated, he went to Calcutta and he was actually serving in a government audit body.

[00:27:54] Kiran Mazumdar-Shaw: And he was literally a clerk. He was an audit clerk doing some government accounting.

[00:28:01] Kiran Mazumdar-Shaw: But he was so interested in science that there was a public lab facility in Calcutta.

[00:28:06] Kiran Mazumdar-Shaw: Calcutta was ahead of Bangalore by the time, in the early 1900s, by the way.

[00:28:13] Kiran Mazumdar-Shaw: But the public lab infrastructure that they had created in Kolkata for scientists to come and engage and deliberate and brainstorm was where he also used to spend every evening experimenting with his thoughts in his subject, in physics.

[00:28:33] Kiran Mazumdar-Shaw: And that's what led to the Raman effect.

[00:28:36] Kiran Mazumdar-Shaw: So you can see how these public spaces and public labs actually foster the scientific temper that leads to innovation.

[00:28:44] Kiran Mazumdar-Shaw: And that way I'm very optimistic about Bangalore.

[00:28:49] Kiran Mazumdar-Shaw: We will lead the world in innovation and we are leading the world in many ways in innovative thinking.

[00:28:58] Malini Goyal: You spoke about innovation and large companies in India still aren't investing as much in the R&D.

[00:29:06] Malini Goyal: Biocon does over 10 percent.

[00:29:10] Kiran Mazumdar-Shaw: Yeah, but the problem is, Malini, we are crucified for investing in innovation and R&D.

[00:29:18] Kiran Mazumdar-Shaw: Ask our investors. They keep telling us, why are you wasting so much money in R&D? It's so risky.

[00:29:25] Kiran Mazumdar-Shaw: Right, we are shareholders. Shareholders don't like you to invest in R&D. You're denying us profits.

[00:29:33] Kiran Mazumdar-Shaw: We want dividends. We don't want you to waste your money in R&D.

[00:29:38] Kiran Mazumdar-Shaw: VCs in India and investors in India have been very spoiled by very quick returns.

[00:29:44] Kiran Mazumdar-Shaw: Bangalore is a city of first generation entrepreneurs.

[00:29:48] Kiran Mazumdar-Shaw: So we came with no baggage. I was being told that bribing is just a part of the business.

[00:29:54] Kiran Mazumdar-Shaw: I candidly asked them, I said, is it true that you have to bribe a lot?

[00:29:58] Kiran Mazumdar-Shaw: Now you don't want the usual thing of developing a great road and somebody digging it up.

[00:30:03] Kiran Mazumdar-Shaw: Today, if the government actually wants things done, they come to private sector.

[00:30:07] Malini Goyal: What about you as a woman entrepreneur, Kiran?

[00:30:08] Kiran Mazumdar-Shaw: I never looked at it as being lonely. I looked at it as being unique.

[00:30:14] Kiran Mazumdar-Shaw: I agree the world is not fair, that it's tougher for a woman.

[00:30:17] Kiran Mazumdar-Shaw: I think the world is ready for them.