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Ep.15 - Dr. Stephen Rapundalo of MichBio

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SPEAKERS

Announcer, Ed Clemente, Stephen Rapundalo



Announcer 00:01

Welcome to The Michigan Opportunity, an economic development podcast featuring candid conversations with business leaders across Michigan. You'll hear firsthand accounts from Michigan business leaders and innovators about how the state is driving job growth and business investment, supporting a thriving entrepreneurial ecosystem, building vibrant communities and helping to attract and retain one of the most diverse and significant workforces in the nation.

Ed Clemente 00:28

Welcome to The Michigan Opportunity brought to you by the Michigan Economic Development Corporation. Hello, my name is Ed Clemente. I'm your host today. And today we're fortunate to have Dr. Stephen Rapundalo, he is the President and CEO of MichBio. Welcome to the show. I'll call you Steve. Just so you know, I got permission to call you Steve, right?



Stephen Rapundalo 00:50 Absolutely.

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Ed Clemente 00:51

But you're you actually are a doctor. And before we get to more of your background, MichBio, if you're an inside baseball player, we sort of know what it is from my background with you in the legislature. But what do you tell people don't know anything about MichBio when you first meet him at a party or something?

Stephen Rapundalo 01:10

Yeah, well, so MichBio was short, for the Michigan Biosciences Industry Association. And the way I try to describe who we are, and what we do to my friends and neighbors and others, is I tell them to think of us as sort of a chamber of commerce, or the industry that heals, fuels and feeds the world. And by that, I mean, our industry is very, very broad, very vast, essentially, has sort of six different major sectors that comprise the industry. So most people are probably aware of pharmaceuticals, medical devices, you know, diagnostics and testing of all kinds, not just clinical, but environmental and so forth. We also cover the Ag, the agricultural biotech in the industrial biotech, meaning, think of renewable fuels and renewable chemicals, anything starting with feedstock and ending in a product nutraceuticals. And that kind of thing, food supplements. And then we're the distribution, logistics of all those different product sectors. And then lastly, all the health information technology. So, you know, people probably hear terms like genomics, or they certainly wearable apps and telemedicine and so forth. So you put that all together, and that's kind of our bio sciences or life sciences industry here in Michigan. And we're the group that kind of represents that.

Ed Clemente 02:49

Well, it's funny, when I first met you, I was back in the legislature. But I was so impressed because I didn't know MichBio was and I was like like a freshman legislator. Just when I started hearing that, you know, it's not only the width, but the depth of everything you guys cover. I was just so amazed by it. If you remember, we did a five I think city tour of around Michigan. And I don't know how much of that you might remember. But maybe you do remember

Stephen Rapundalo 03:21

It was a hallmark for sure. And I wish we could do something like that again.



Ed Clemente 03:25

Well, I think one of the interesting, I think you're headquartered in Ann Arbor, correct.



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Ed Clemente 03:31

Yeah. And but the one we did in Arbor was kind of interesting and this ties into you a little bit, that we we did it at the former Pfizer North Campus facility that had just been taken over by U of M. And if you remember who spoke was Ora Pescovitz, who's now the president of Oakland University.



Stephen Rapundalo 03:53 Correct.



Ed Clemente 03:54

And it was but you know, your background with Pfizer goes even further back, right.

Stephen Rapundalo 03:59

Yeah. Well, I came to Ann Arbor in in the mid to late 80s. And was recruiting at the time we were the company was Parke Davis Pharmaceutical Research, which, you know, has had a very storied history here in Michigan because people aren't aware that Michigan was home to the first two pharmaceutical companies in the country. So Parke Davis started in downtown Detroit in 1867. UpJohn came along and Kalamazoo about 20 years later, and then a third company called Perego started in Allegan and also in the about, I think the 1890s so Michigan's had a long history in pharma and I came here in the late 80s. My whole background was in cardiovascular so I helped develop drugs like Lipitor. People see the ads for Eliguis on TV these days while I started that program in the 90s. So I worked in every facet of cardiovascular disease and trying to develop new drugs for, for treating those. And, and you're right. You know, when we first met and had that tour by that point we had merged into Pfizer and then in Pfizer in 2007 decided that they were going to close the research facility. And as you said, it became available and was bought by the University of Michigan, and it's now thriving again. But you know, there was at its peak, there was 2500 people there doing research on every known disease. And, and, and everything in between it was it was quite a remarkable group and operation to be part of.

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Ed Clemente 05:44

And not to tangent to far off, but obviously, Pfizer's doing a lot today as well. And I don't know if you want to touch a little bit about why Michigan was in the news, maybe a little bit in Kalamazoo, right, with Pfizer?

Stephen Rapundalo 05:57

Well, Pfizer, you know, most people think that they left the state, because they closed down their R&D operations in Kalamazoo and in Ann Arbor, but in fact, Pfizer is still around. And in fact, they've grown. There they have that is the Portage facility, just south of Kalamazoo is their world's largest manufacturing facility. And I think it's, it might even be one of the it's probably one of the largest, if not the largest overall pharma manufacturing facility period of anybody. So it's massive, and they do all sorts of different products there. But you know, more most recently, they're, they're known for doing the final fill and finish and packaging of the COVID vaccine. And so and and over the last number of years, they have embarked on investing. I think it's three quarters of a billion that's with a B as in boy, billion dollars into that facility, of which they've already done some expansion and are on, you know, are on track to do more. So it's a it's a key component of the overall industry in Michigan. And it certainly puts Kalamazoo on the map as a life science bio science hub, given all the other types of companies that are in the community.

Ed Clemente 07:26

So maybe that maybe kind of answered the next question. But as an ecosystem, I think you like if you look at like the six, I think he said, six things that you guys kind of represent. But each of those are sort of a unique ecosystem to Michigan. And I think that what you're saying it sounds like what's in Portage, also, an ecosystem is built around just because the manufacturing's there too, right.

Stephen Rapundalo 07:50

Yeah, no, it's an interesting community. But let me just take a step back first, and so talk to you about the whole ecosystem here in the state. So pretty much every state has to one degree or another, you know, a bio science industry, and a group like ours, we differ only by the size and the makeup of that industry. So here in Michigan, pharma has always been large. We're now the 10th largest device, state medical device state in the country. We've been fairly balanced in terms of our sectors. So and overall, we employ 40,000, almost 40,000 people directly, an indirect impact of about 150,000. So we're a big industry. And

that's that's reflected across almost 1800 actually over 1800 facilities around the state and you'd be surprised, it's literally from every from one corner of the UP the furthest corner, the UP down to, you know, Detroit and Southwest Michigan. Kalamazoo is interesting, because it is the only community of its metropolitan size in the country that has a concentration in each of the sectors that I talked about. Yeah, and it's also traditionally probably heavier on the manufacturing side. If you think about the fact that Stryker is there with two divisions as Zoetis, which was for formerly Pfizer Animal Health is there and has its global R&D headquarters, and it's all veterinary medicine. And so, you know, it's it's it Kalamazoo has a unique set of attributes for our industry, and we certainly consider it as a major hub here in the state.

Announcer 09:44

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Ed Clemente 10:00

Talk just a little bit about the other hubs. I know Grand Rapids is a hub for you too now, there's been some big activity with the MEDC, obviously, supporting you can talk about the who just moved back to GR or inside GR if you want.

Stephen Rapundalo 10:15

Yeah, well, you know, Grand Rapids has been a really an amazing evolution and a story that's that sort of unveiled itself over the last 15 years. And the expansion of the so-called medical mile. So, you know, years and years ago, it was obviously, Spectrum was there as a hospital, but that whole campus has grown. The Van Andel Research Institute, you know, built its initial footprint and then doubled it. And then along came Michigan State to put its medical campus, essentially across the street. Of course, during that time, Grand Valley was growing Health Sciences cluster at the other end of Spectrum Health. And now you've got you know, Perego building its North American headquarters. You know, I mentioned Perego earlier, it started in late 1890s. And it's, you know, it's a consumer over the counter drug manufacturer leader in the world. And so yeah, so that's a hub but you know, Grand Rapids also is known for its medical device cluster as well. Those companies tend to be the smaller ones, midsize ones. But you put it all together. And that's that's certainly another hub. Then you've got Ann Arbor, and the Detroit corridor, you've got Lansing, East Lansing, heavily, obviously in, in agricultural biotech, but also, you know,

and animal health diagnostics is in Lansing, and a world leader. And then of course, you have Oakland County and but you'd be surprised what's to the north. All sorts of companies are thriving in northern Michigan and in the Upper Peninsula.

Ed Clemente 12:18

Anyone you want to specify we always like to hear something about the UP.

s Stephen Rapundalo 12:21

Oh yea, well you know, I mean, in Marquette, you have RTI Surgical, which was formerly it was originally born as Pioneer Surgical. Now, RTI is very heavy and into spinal surgery products. You have Able Medical, also in that vicinity. You know, and there's a few others up there Precision Edge up in the Soo. You know, and up in the in the Houghton area, there's a few companies down in northern Michigan, I mean, you've got Thomson Surgical in Williamsburg, not too far outside of Traverse City. Yeah, it's, you know, it's really quite amazing where they are and what they're doing and, and how they're contributing to that ecosystem.

Ed Clemente 13:09

Well, you know, I know on your website, I think you got a map too, don't you sort of that shows us and just from what you've just said, in the last 10 minutes, reminds me of why I was so intrigued and so impressed about, you know, how much is done here in this state. And obviously, it's grown a lot since I used to work with you. And you got to be really proud of the organization you've helped create here?

Stephen Rapundalo 13:35

Well, we certainly, yeah, the industry has grown a lot. There are certainly a lot of new start-ups, you know, as certain programs have been put in place to assist with capital. Growing, you know, access to capital, you start Ann Arbor has sort of emerged as a start-up nation, if you will, mostly in the I would say in the medical device, diagnostics and biotech space. And so, you know, that's good, because you can't just rely on the big companies like the Pfizer's to and the Strykers, to carry the day forever. And so this is, you know, bringing new life in and, and as a result, the overall industry is growing, which is good because we spit out a lot of, we're top 10 in the country for the number of scientists and engineers we spit out. So you know, we want to be sure that we have jobs here for those types of graduates and in our industry is a knowledge based industry. And the average wage in our industry here in Michigan is over \$90,000 I mean, these are, these are

damn good jobs. And the industry as a result is a huge economic driver.

Ed Clemente 15:00

I thought you had told me one time told me that Michigan ecosystem of just your industry or field could be ranked globally, right? As far as what, what compared to some even countries and everything else, right?

Stephen Rapundalo 15:14

Well, we could be we, we were, you know, some 20 years ago, because of certain resources and programs that were put in place by the legislature, and the Governor at the time. I think we have all the right ingredients. I mean, we're, we're top five in the country for our ability to innovate and do research, meaning our three major research universities, Michigan, Michigan State and Wayne State are absolutely world class. And they receive a lot of federal R&D dollars, a lot of federal grants, the bulk of which is dedicated towards our industry. And then the discoveries that come out of that are, are the substrate for new companies forming. And so we've got the right, we've got the right ingredients, we've got good talent. So but they're, you know, there, there are things that we need to be working on to make sure that Michigan really is in that upper most tier, we're still ranked 14th in the country by size. But, but we have work to do to make us a top 10 hub for a global hub for for biotech.

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Ed Clemente 16:32

And I know that you sort of touched on this a little bit, but some of the trends, you're talking about you you've hit a few of them, but obviously the sort of wearable, telemedicine kind of things is, is that, like, what do you think are some of your bigger growth areas that one of them?

Stephen Rapundalo 16:51

Well, absolutely, I mean, that's, that's taken off anywhere and everywhere. And because you know, you don't need a bricks and mortar to create those kinds of products and commercialize those kinds of technologies. And certainly with the heft of our healthcare system, here in Michigan, namely, you know, the various health systems that we have scattered around the state, especially in the Lower Peninsula. Those are hotbeds for, for innovation in the health information technology space. And so we're seeing some nice growth there. And we're certainly that's an area of growth that we see for the organization, as we try to, you know, embrace that, that new sort of area. So, you know, there's a lot of there's a lot of opportunity, but we're seeing a lot of growth and opportunity in the other sectors too, the technologies that are emerging are just just unbelievable, cutting edge, and what they can what they'll ultimately bring to patients and consumers.

Ed Clemente 18:04

If you were to like talk to say, a mini sort of commencement speech for, say, high school kids or even mid career professionals, what would you kind of tell kids to go into nowadays, or mid career people, whatever, you're more comfortable with?

Stephen Rapundalo 18:20

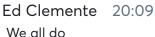
Well, for the, for the younger crowd, I think anything related to data, and data analytics, because that's really, you know, where if you think about it, whether it's medical devices that are generating data, whether it's pharmaceuticals, drugs that are generating data, or certainly the digital health, the wearable apps, the tele medicine, the electronic records, whatever all that is data, and its data about patients, and that's enormously valuable. So whether you're studying population health, whether you're studying medical outcomes, whether you're operating in clinical trials, all that data is key. And so I would, I would stress the importance of knowing how to, to work with data and and apply it in novel ways, you know, for application across, you know, whatever. So and there, you know, the basically, there's so many no longer is it the case that you can have a meaningful career just in the more traditional work your way in the labs and go out, become a professor get some grants or, or go out into a company and do some research. I mean, there's so many other things you can do with science degrees, everything from public policy to regulatory to, you know, many different areas.

Ed Clemente 19:52

So if you find that niche, you just got to figure out how to build a bridge to it right, who is the analytics or whatever right?

Stephen Rapundalo 20:00

Yeah, absolutely. And then the key is to network. I mean, networking is so, so important. I wish I'd learned that earlier in my own career.



Stephen Rapundalo 20:10

The importance of meeting other people and networking with the making is establishing those relationships and then leveraging those relationships for, you know, whatever opportunity presents itself.

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Ed Clemente 20:22

Well, you're going to be surprised. But we're down to our last question. And I'm going to paraphrase this question with you being you used to be a city council member for quite a while in city of Ann Arbor. So my question is, what do you what is your favorite part about living in Michigan? I don't know if you're gonna say Ann Arbor, but you might have some other activities or somewhere up north you like to go or what do you like about Michigan?

Stephen Rapundalo 20:47

Well, I love Michigan, because of the four seasons, there's, there's, you know, a lot of other spots around the country that are that are great, and I love to visit and their weather is is pretty nice, but it's nice all year round. I like variety. And I like you know, growing up in Northern Ontario, I tell people, I'm from the original UP, because that's kind of where I grew up. If you wouldn't have known you wouldn't know the difference. And, and so I like my cold winters. And so Michigan is great. I mean, the scenery, the geography that we have is just phenomenal. So plus, we got all that fresh water. So...

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Ed Clemente 21:27

Wow, that's a good pitch. I want to thank again, Dr. Stephen Rapundalo with us today. He is the President and CEO of MichBio. And my friend Steve, thank you very much for doing this today. We appreciate all the work you do on behalf of Michigan.

Stephen Rapundalo 21:41

Most welcome, most welcome, for thanks for the opportunity.



Announcer 21:45

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